



**Adopting Science of Reading Standards: One Department's Story**

Kimberly A. Davidson  
Duquesne University

Amy Williams  
University of North Georgia

Cristina Washell  
University of North Georgia

Kellie Whelan-Kim  
University of North Georgia

---

**Abstract:** As more states continue to call for reforms of reading education and mandate the adoption of standards aligned with the science of reading, educator preparation programs are reviewing and redesigning their curricula. In this paper, faculty from our Department of Elementary and Special Education share some potential challenges, successes, and insights programs might encounter when accommodating these new requirements. We outline the process and outcomes of reviewing our curriculum as a resource for other programs undergoing similar revisions. The paper concludes with eight tips to support university faculty in educator preparation programs transition to structured literacy standards.

**Keywords:** *Educator preparation, academic standards, science of reading, literacy, dyslexia, elementary and special education, curriculum review*

**Citation:**

Davidson, K.A., Williams, A., Washell, C., & Whelan-Kim, K. (2025). Adopting science of reading standards: One department's story. *Current Issues in Education*, 26(1). DOI: <https://doi.org/10.14507/cie.vol26iss1.2246>

**Accepted:** 01/14/2025

---

### Adopting Science of Reading Standards: One Department's Story

The purpose of this article is to offer a summary of our experiences as faculty members and the department chairperson while adapting our elementary and special education (ESE) certification program at a state university in response to newly mandated P-12 literacy instruction requirements and associated initial teaching preparation literacy standards based on the science of reading (SOR). The process entailed challenges, successes, and insights as we worked to interpret the new teacher preparation standards mandated by the state. By sharing our approach, we hope to offer some guidance to others engaging in similar work.

Undeniably, the professional knowledge and instructional practices of elementary school teachers greatly impacts student learning and can continue to affect literacy outcomes years into the future (Rosenshine, 1987; Konstantopoulos & Chung, 2011). Accordingly, it is essential that educator preparation professionals establish programs that support the development of highly skilled teachers (Hudson et al., 2021). To this end, government regulatory agencies and professional accrediting organizations have developed and disseminated guidelines through standards of practice that are typically based on scientific evidence of effectiveness. However, the research base for what constitutes best practices in literacy education continually evolves and expands. Moreover, academic standards are generally written as guidelines that are open to a certain amount of interpretation rather than specific prescriptions for practice. These factors can cause variations in how the standards are implemented in the classrooms. The latest efforts to increase student literacy outcomes involves reform of literacy standards to encompass a particular view of research and practice which includes a structured approach to literacy education.

Literacy research, also known as the science of reading (SOR), is an area of education that has been the subject of especially contentious debate for over two hundred years (Shanahan, 2020). Recounting the entire history of the so-called “reading wars” is beyond the scope of this paper. However, the changing and sometimes contrary perspectives around what constitutes literacy practices based on evidence from the SOR informs our department's current efforts to reform our educator preparation program (EPP) to meet the new P-12 and corresponding initial teaching preparation literacy standards mandated by our state department of education. Relevant distinctions between previous and newly initiated approaches to educator preparation in literacy are briefly outlined below.

Our department's situation is not unique—many EPPs, like ours, have prepared future teachers to use what is known as the balanced literacy approach to reading instruction, aligned with our state's English Language Arts (ELA) standards that were based upon the Common Core State Standards (CCSS) adopted in 2010. Indeed, for the past thirty years, most published reading curricula available in the United States have incorporated the balanced literacy method of reading instruction, so EPPs and P-12 school districts were literally on the same page (Kurtz et al., 2020). Balanced literacy methods reportedly work for some students. However, despite the best efforts of educators and EPPs, standardized assessment data across the nation has consistently shown that by grade 4, early reading outcomes for more than a third of students remain persistently below proficient levels (Irwin, et al., 2022). These disappointing data, along with parental advocacy for their children with dyslexia (Ga. Comp. R. & Regs. R. 160-4-2-.39, 2022) have led to a top-down overhaul of the ELA standards in 39 states and territories. Proponents of the reforms cite evidence from the SOR indicating that systematic, structured literacy instruction in five foundational reading skills, (phonemic awareness, phonics, fluency, vocabulary, and comprehension), is effective for almost all students and is essential for those

## **Davidson et al.: Adopting Science of Reading Standards**

with reading disabilities (National Reading Panel, 2000). Therefore, public schools and EPPs are adopting literacy standards with a heightened focus on structured, rather than balanced literacy (Schwartz, 2022). Our state legislature, Department of Education, and Professional Standards Commissions followed suit and have called for the alignment of standards, curriculum, instruction, and assessment with structured literacy.

Although the new standards apply across grade levels, critical foundational reading instruction begins in the early grades. Therefore, it is crucial that pre-service teachers in our Department of ESE are empowered with the most up-to-date evidence-based practices. Under our new laws, our state Department of Education and Professional Standards Commissions provide the following definition of the SOR:

An evidence-based approach to teaching reading and writing that is rooted in the understanding of cognitive science and its connection to educational outcomes. This method trains educators to teach reading by addressing syllables, morphology, sound-symbol correspondence, semantics, and syntax in a clear, systematic, and diagnostic manner. The approach holistically integrates speaking, listening, reading, and writing by offering explicit, systematic, and tailored instruction in areas such as phonological and phonemic awareness, phonics, syllable patterns, morphology, semantics, and syntax, ensuring a comprehensive and inclusive literacy development experience. (Georgia General Assembly, 2023a)

This conception of the SOR is somewhat at odds with the balanced literacy framework, which teaches phonics incidentally, rather than systematically, for example. The new P-12 structured literacy standards based on the SOR were developed and disseminated first, so even before we received the initial teaching preparation standards, the faculty in our Department of ESE realized our curriculum would require considerable revisions to prepare our future educators to teach their young students to read with structured literacy methods. With this task set before us, faculty engaged in preliminary discussions to agree upon a theoretical framework from which to better revise our literacy curriculum and instruction in the Department of ESE.

### **Theoretical and Conceptual Frameworks**

As a department, we were aware of the impending changes in the reading landscape and wanted to avoid making the mistake of overcorrection by grounding ourselves in a solid theoretical foundation before the call to action was initiated. We began with the Simple View of reading (Gough & Tunmer, 1986; Hoover & Gough, 1990). At its most basic, learning to read can be modeled as a product of two components: language comprehension and word recognition. This conception of reading is sufficiently broad to encompass how we currently were teaching literacy instruction as well as the new perspective we needed to adopt. Many faculty members were familiar with this model of reading, so it seemed like an appropriate starting point. But to undergird our understanding of the new structured literacy framework, we would need to break these components into additional subcomponents that capture the structured literacy framework.

Scarborough's Reading Rope is a visual model that represents language comprehension and word recognition as two intertwining strands comprised of multiple substrands leading to skilled reading (Scarborough, 2001). We adopted this model because the Reading Rope further conceptualizes the Simple View of reading into smaller components. For example, language comprehension is modeled as the interrelation of the following subskills: background knowledge,

vocabulary, language structures, verbal reasoning, and literacy knowledge. In Scarborough’s model, word recognition is depicted as an interweaving of phonological awareness, decoding, and sight recognition. The increased level of detail in this model would enable us to envision how each of the individual strands of literacy already were represented in our curriculum in an initial review prior to receiving the new state initial teaching preparation literacy standards. Furthermore, the International Dyslexia Association (2010) adopted this model when crafting their Knowledge and Practice Standards for Teachers of Reading which would form a foundation for our state’s new structured literacy standards.

Additionally, to support a renewed focus on writing standards and instruction, we adopted Sedita’s Writing Rope (Sedita, 2023) as another guiding model. Sedita’s model features 5 interrelated strands essential for successful writing: critical thinking, syntax, text structure, writing craft, and transcription. Coupling the reading and writing ropes provides a comprehensive theoretical model from which to initially review our curriculum before applying more specific structured literacy standards when we received them from the state.

**Context**

Our university is situated in the southeastern part of the United States. Approximately 20,000 students attend classes offered on five campuses in a range of formats. The Department of ESE is organized by elementary, literacy, and special education courses and corresponding faculty. Within the Department of ESE, there are four elementary, six literacy, and five special education faculty who all hold terminal degrees and are primarily responsible for teaching the 14 courses offered in the undergraduate program (see Table 1). On average, 150 juniors and 130 seniors are enrolled in the undergraduate certification program. Students complete our 127-hour program and earn one degree with a dual major that can lead to certification in both elementary and special education. Historically, students earned a reading endorsement as well, however, the state has now requested that we phase the endorsement out of the initial certification program.

**Table 1**

*Department of Elementary and Special Education Courses by Curricular Area*

---

<b>Curricular Area</b>	<b>Course Name</b>
Literacy Education	Assessing Literacy in Early Childhood Education
	Children’s Literature and Language Arts
	Reading in the Content Areas
	Teaching of Reading and Writing in the Elementary Grades
Elementary General Education	Child Development
	Classroom Management
	Educational Assessment
	Elementary Curriculum, Methods, and Materials
	Language and Cognition
Special Education	Strategies for Supporting Children and Families from Diverse Communities
	Applied Behavior Analysis
	Characteristics of Students with Special Needs
	Educational Assessment of Students with Special Needs
	Instruction of Students with Special Needs

---

We have a history of shared governance, meaning that the creation and implementation of policies and regulations are the joint responsibility of faculty and administrators, alongside the state governing boards. Faculty meet regularly to collectively review data regarding multiple facets of our program, such as: certification assessment data, student performance on institution standardized assessments, retention and completion rates, and program alignment with Council for the Accreditation of Educator Preparation (CAEP) standards. In response to university-led initiatives, and revised international and national education standards, faculty in our department have taken on tasks of examining the program's curriculum on multiple occasions. For example, the department appraised the curriculum's coverage of technology, dyslexia, and mathematics standards, as well as identifying and integrating opportunities for high-impact practices. Our review experiences provided Department of ESE faculty familiarity with the curricular scope and sequence and informed our work with the initial teaching preparation literacy standards. Faculty were able to apply processes that were already in place to the new task we had received.

### **Our Process**

In response to state standardized reading assessment results, the Georgia Professional Standards Commission (GAPSC) and the Georgia State University System (GSUS) developed a Reading Task Force composed of literacy experts that were asked to make recommendations based on research related to the SOR. In their recommendations the task force identified the necessity of providing pre-service teachers with the knowledge and skills needed to teach reading based on the SOR. The results of these recommendations became the foundation for the adoption of the initial teaching preparation literacy standards in our program.

Although EPPs were aware of the upcoming changes, the GAPSC's *Implementation Guidance* (2023f) document was still pending adoption and there was little information regarding the implementation of the new standards. The GAPSC initially provided *Guidelines* (2023d) that offered a broad overview of the new *Legislation* (Georgia General Assembly, 2023). This document included information regarding individual program requirements, a suggested timeline consisting of three phases of implementation, proposed action plan instructions, and a list of available resources and references. However, there was a limited level of specificity for each of the document's components. Rather than wait for additional clarification, the College of Education leadership advised department heads to review the general *Guidelines* with faculty and lead their respective departments in the development of an action plan to incorporate the new initial teaching preparation literacy standards. So, the Department of ESE conducted a first phase of reviewing our courses using methods we had established in previous reviews. Upon receipt of the more detailed PSC *Implementation Guidance* (2023f) and additional supporting documents, we underwent a second phase of analysis.

We used a multi-step process to analyze the curriculum for aspects of literacy instruction aligned with the new SOR-based initial teaching preparation literacy standards. Within each section of our courses offered, faculty have flexibility around the lessons and learning activities they offer to meet course objectives. However, the courses each have a culminating key assessment, which remains consistent across sections. Literacy faculty began by identifying elements of the initial teaching preparation literacy standards represented across all four literacy courses (see Table 1) and determined the depth to which the standard was taught. For example, a component of a standard may be introduced in one course practiced within another course and

mastered in another. It was important to indicate this level of depth and breadth as standards often contain subcomponents and build on one another.

These data were entered in a faculty-created spreadsheet using a simple color-coding scheme to visually cue the level of representation in each course. Each standard was listed in the first column and additional columns were labeled with the names of reading courses. If a standard was fully met, the standard was highlighted in green and the applicable elements from the key assessments were entered in their corresponding cells. If a standard was partially met, it was highlighted in yellow and the relevant aspects of the key assessments that partially met the standard were entered in the spreadsheet. Finally, standards that were not met at all in a course were designated with red font. Once this stage of review was completed, the elementary and special education faculty completed their reviews in the same manner. With all the courses represented, we were able to see standards and parts of standards that were introduced, taught in depth, and mastered, as well as components that were missing. These initial steps positioned us to undertake the second phase of review after receiving the GAPSC’s *Implementation Guidance* (2023f), *Self-Assessment* (2023e), and *Action Plan Template* (2023c) documents.

The *Self-Assessment* (2023e) document consisted of four components: a) Knowledge-Literacy Acquisition, b) Application- Methods & Assessment (Curriculum and Instruction), c) Application- Methods & Assessment (Assessment and Evaluation), and d) Literacy Professional Dispositions and Practices (see Table 2). Faculty re-evaluated the outcomes of the course syllabus review using this new framework, rating each area on a scale from 0 (no evidence of the component) to level 3. To receive a level 1 rating, courses should contain a reading, modeling, discussion, test, lecture, demonstration, presentation or quiz of the reviewed component of literacy. To attain a level 2, the level 1 criteria should be met in addition to the syllabi containing a case study, project, lesson plan study, observation, project or activity connected to the reviewed component of literacy. For a level 3 rating, at least one item for level 1 and 2 was required, in addition to small group tutoring, student teaching, or a whole group internship. Although the format of the self-assessment tool provided by the GAPSC differed from our self-made spreadsheet and color-coding system, results of the curriculum review we already completed provided an organized resource from which to obtain data. When the *Self-Assessment* was completed, we used our responses to complete the *Action Plan Template* (2023c).

**Table 2**  
*Self-Assessment Components and Ratings*

Component	Rating			
	Level 0	Level 1	Level 2	Level 3
Knowledge-Literacy Acquisition	No evidence of the component	Courses should contain a:	The level 1 criteria should be met.	At least one item for level 1 and 2 is required.
Application-Methods & Assessment (Curriculum and Instruction)		<ul style="list-style-type: none"> <li>• reading</li> <li>• modeling</li> <li>• discussion</li> <li>• test</li> <li>• lecture</li> <li>• demonstration</li> <li>• presentation or</li> <li>• quiz</li> </ul>	In addition to a <ul style="list-style-type: none"> <li>• case study</li> <li>• project or activity</li> <li>• observation</li> <li>• lesson plan study</li> </ul>	In addition to <ul style="list-style-type: none"> <li>• small group tutoring</li> <li>• student teaching or</li> <li>• whole group internship</li> </ul>
Application-Methods & Assessment				

---

(Assessment and Evaluation)	connected to the reviewed component of literacy	connected to the reviewed component of literacy	connected to the reviewed component of literacy
Literacy Professional Dispositions and Practices			

---

The GAPSC’s *Action Plan Template* (2023c) included five elements: Program of Study Adjustments, Standard Alignment and Syllabi, Curriculum and Supporting Materials, Field and Clinical Experiences, Candidate Assessments. Faculty identified areas in which they could improve their courses by changing course content, assessments, resources (textbooks, articles, etc.), and assignments. For each of these elements, we were to address the action steps we would take to change our program. In addition to action steps, we were to report who would be responsible for each item, completion dates, and means for demonstrating successful completion. All ESE faculty had the opportunity to review the Department of ESE’s *Self-Assessment* results and the proposed *Action Plan* before they were compiled and submitted to the COE’s Dean and Associate Dean for final review and integration into the *EPP Action Plan* (2023b). A summary of ratings and examples of changes to the ESE courses and program incorporated in our *Action Plan* resulting from the *Self-Assessment* are provided in the Outcomes section below.

### Outcomes of Curriculum Review

With a clear understanding of the depth and breadth of coverage of initial teacher preparation literacy standards in place from our initial Department of ESE review, we focused on evaluating our courses using the ratings and four components in the GAPSC’s *Self-Assessment* document (see Table 2). Within each component, we compared course elements to individual sub-standards of teacher preparation literacy standards and accounted for which courses covered standards strongly, moderately, weakly, or not at all. In addition, we identified courses where additional standards could potentially be incorporated. Where differences of opinion occurred, we continued to discuss and clarify ratings until consensus was reached.

### Knowledge: Literacy Acquisition

Overall, a rating of Level 2 was demonstrated in our program on this component. All Level 1 criteria in this component were addressed through the four literacy, four special education, and two of the general elementary education courses (see Table 1). An example of how Level 2 was achieved can be found in our Assessing Literacy in Early Childhood Education course. This course includes a Case Study Key Assessment wherein our teacher candidates demonstrate knowledge of evidence-based approaches to literacy acquisition by designing and implementing literacy instruction to a student 1: 1 based on the results of literacy assessments they have administered in a P-5 field placement setting. To achieve a Level 3, literacy instruction would need to be provided in a small group, whole group, or student teaching context. The review of this component resulted in redesigning the Teaching of Reading and Writing in Elementary Schools course to focus on six additional standard elements that would strengthen the use of a structured literacy approach. In addition, faculty found some standards pertaining to teaching the cognitive characteristics and aspects of language development that form the foundation for reading were an immediate fit with the Language and Cognition and Child

## **Davidson et al.: Adopting Science of Reading Standards**

Development courses. The faculty agreed that the Case Study Key Assessments in both courses could potentially be adapted to include elements of the new literacy guidelines related to cognitive and language development. The faculty also identified some overlap between the two courses, so further collaboration will ensure that the cognitive and language development concepts can be appropriately introduced, reinforced, and mastered.

### **Application: Methods & Assessment (Curriculum and Instruction)**

For this component, our program achieved a rating of Level 2. Level 1 criteria were evidenced through four reading courses and one special education course (see Table 1). For instance, integration of literacy skills across subject areas, with a focus on informational text, is emphasized in the Reading in the Content Areas course. To receive a Level 2 rating, faculty considered the Unit Plan Key Assessment from the Children’s Literature and Language Arts course. The Children’s Literature and Language Arts course is aimed at upper elementary grades (3 – 5) and traditionally focuses more on literature than foundational structured literacy skills. Teacher candidates in this course critically examine and select high-quality multimodal texts and develop interdisciplinary thematic text sets incorporated into a coherent, integrated, motivating literacy program for all learners. A Unit Plan and Digital Teacher’s Guide are developed that incorporate the text set and meet a Level 2 criterion.

The development of curriculum and instruction in foundational reading and writing skills is primarily addressed in the Teaching of Reading and Writing in the Elementary Grades course, taken by first semester juniors in the program. However, analysis of this component uncovered a pronounced need to include additional content related to written expression to fully address standards that were not being adequately addressed. As noted previously, the content of this course will be integrating several standards that fall under the Literacy Acquisition component. To avoid overburdening one course with too much content, it was determined that standards addressing the developmental progression of writing, teaching of written expression and genres, and elements of handwriting could be appropriately incorporated into the Children’s Literature and Language Arts course in a modified Key Assessment.

### **Application: Methods & Assessment (Assessment and Evaluation)**

For this component, faculty observed criteria meeting a Level 2 rating overall. Level 1 criteria were met through course material in three reading courses, two special education courses, and one general education course (see Table 1). For instance, dyslexia modules were embedded into the Characteristics of Students with Special Needs course. This was done in part to satisfy the state’s *Knowledge of Dyslexia (Ga. Comp. R. & Regs. R. 160-4-2-.39, 2022)* requirements, but also to ensure that students are taught the fundamentals of scientifically based research related to literacy assessment and instruction early in the program. Similarly, in the Educational Assessment of Students with Special Needs course explicit reading instruction, screening and diagnostic tests for reading difficulties, with an emphasis on characteristics of dyslexia are covered in depth. To illustrate attaining a Level 2 rating, faculty noted the Assessing Literacy in Early Childhood Education course focuses on using methods of literacy assessment for a variety of purposes and the use of assessment data for instruction. As noted previously, this assignment is administered 1:1, rather than in small or whole groups or as a part of student teaching, which would bring the rating up to Level 3.

## Davidson et al.: Adopting Science of Reading Standards

Faculty observed an opportunity to incorporate additional standards related to assessments and evaluation in two Special Education courses. In the Applied Behavior Analysis course, students discuss how behavior may impact academic achievement, in the Functional Behavioral Analysis and Behavior Intervention Plan Key Assessment. This Key Assessment could be modified to specifically address assessment of behavior and its impact on reading and writing. Likewise, in the Instruction of Students with Special Needs course, the Key Assessment includes elements of the standards related to interpreting assessments and using them to inform instruction. Discussions and readings in the course could be extended to include demonstrations for literacy assessments and interventions.

### Literacy Professional Dispositions and Practices

A rating of 3 was obtained in this component. Evidence in all four reading courses and two of the special education courses supported a Level 1 rating. For example, in the Assessing Literacy in Early Childhood Education and Characteristics of Students with Special Needs courses the assignments, materials, and assessments focusing on dyslexia and its impacts on literacy address seven sub-standards of this component. The rating of 3 was supported by evidence from several courses. Juniors and seniors in our program spend three full days per week for 12 weeks per semester in field placements or student teaching. During these placements, teacher candidates design literacy (and other) lessons as part of their courses using a template we provide and implement them with P – 5 students. Opportunities for professional reflection are integrated in the Department of ESE lesson plan template used in every class that has a field experience. In addition, teacher candidates complete self-ratings of their dispositions and receive ratings by their university supervisor and mentor teacher throughout the program. Finally, the standards aligned with this component reach a Level 3 through completion of an ethics exam during the student teaching experience in our program.

Overall, the results of our *Self-Assessment* indicated that our program includes many strengths. In three of the four components, we are meeting the new initial teaching preparation standards based on the SOR to at least a moderate (Level 2) degree. The Professional Dispositions and Practices component is represented especially well in our courses and connected field experience opportunities. However, the review also allowed us to uncover some aspects of our courses that could be amended to better address the new literacy standards and better prepare our teacher candidates to instruct their students using evidence-based, structured literacy practices.

The results of our *Self-Assessment* became the basis for our Department of ESE Action Plan. We formulated action steps based upon areas of need uncovered through the review and transferred them to the template. Faculty from each curricular area were identified to take a lead role on modifying existing courses, adapting syllabi, creating new assignments and Key Assessments, acquiring textbooks, articles, and other curricular resources based on familiarity with courses and content expertise. Once the *Self-Assessment* and Department of ESE *Action Plan* reports were submitted, the authors dedicated time to intentionally reflect on the process and outcomes of the review to distill challenges, successes, and considerations for future curricular reviews in our department.

## Challenges

The transition to initial teaching preparation literacy standards based on the SOR was not without complications. Logistics, implementation guidance, course composition, reporting methods, background knowledge, and ideological viewpoints all presented certain challenges during the process.

### Timing

Most of the work that was required at the department level was conducted during the summer and early fall semesters. Given that all faculty in the Department of ESE were on 10-month contracts, it was especially difficult to schedule a time for groups to meet during the summer months when many faculty members were unavailable.

### Clarity

After reading the *Legislation* (Georgia General Assembly, 2023) and *Guidelines* (2023d) documents, it was clear that there was insufficient information for the Department of ESE to complete the action planning process. Even after the *Implementation Guidance* (2023f), *Self-Assessment* (2023e), and *Action Plan Template* (2023c) documents were shared, there were many gray areas left open to interpretation. For example, the level of details expected in the *Action Plan Template* was not specified. Our program was left to determine the amount of information that needed to be included in this document. Questions emerged regarding this process that could not be answered without further guidance from the GAPSC. For example, could the program modify our action plan once it was submitted to the GAPSC or was this plan final? The lack of procedural clarity presented an initial obstacle to incorporating the new initial teaching preparation literacy standards in our curriculum.

### Curricular Content

Along with the gaps in our literacy courses related to structured literacy, the larger review of curriculum in ESE required faculty teaching courses that do not specifically emphasize reading to re-evaluate their syllabi to potentially encompass components of the new standards. Some of the components, such as cognitive and linguistic developmental factors and assessment methodology, were a logical fit, while others were more difficult to incorporate. Essentially, our faculty was required to look at our entire curriculum through a structured literacy lens. This new lens seemed unnecessarily restrictive to some faculty who are experts in their fields and would prefer to maintain autonomy over the substance of their courses.

### Organization

EPPs, departments, and faculty expertise groups have different cultures, goals, and ways of organizing systems and information. For example, faculty in the Department of ESE reported the benefits of using the color-coded spreadsheet as an organizational tool to help them review the alignment between course curricula and *Legislation* (Georgia General Assembly, 2023) standards. However, this organizational tool did not align with the GAPSC's *Self-Assessment* (2023e) and *Action Plan Template* (2023c) tools that we were required to use to submit our results and final reports. The transfer process between formats was time-consuming and difficult

## **Davidson et al.: Adopting Science of Reading Standards**

because faculty included non-essential information that was not transferable given the template limitations.

### **Educational**

The educational background of the faculty in our program is paramount in providing quality learning experiences for our students. Each of our faculty members holds a terminal degree in a field related to the courses they teach, so to incorporate content not necessarily explicitly related to our fields or the methods included in our doctoral programs presents a challenge. Certainly, our professional experiences provide further expertise from which to draw, and most topics are at least tangentially, if not directly, related to the skills and knowledge required to teach in an elementary or early childhood setting. So, in making the shift to embedding the science of reading approach into all aspects of our curriculum, our faculty have continued their commitment to lifelong learning to broaden their expertise.

Some of the faculty in the Department of ESE lacked training in the SOR. The expectations associated with the *Legislation* (Georgia General Assembly, 2023) calls for a shift in what literacy and other faculty teach and how they teach it. Although there were a few exceptions, most ESE faculty recognized that they needed additional training to effectively understand how to support pre-service teachers' development of literacy skills and understandings. This lack of understanding and experience with the SOR had a profound impact on the self-assessment and action planning process. After all, it is hard to know what you need to modify in your courses if you do not have the necessary background knowledge to fully understand the new expectations.

### **Philosophical**

Since faculty have expertise in the specific courses, and content, methods, and strategies are predominantly agreed upon, there is often a tendency to develop a territorial connection to the curriculum and content that has been created. When there is a requirement to incorporate different standards or elements that cross content areas, there is sometimes a natural tendency for faculty to be protective over the content and methods in which they strongly believe or have been implementing for an extended period. Curriculum review sessions in the context of mandated initiatives have required a shift to a more collective approach and broadened view of the overall curriculum across content areas.

### **Successes**

While the initial shifts in the curriculum and methods presented several challenges, there were also ancillary benefits gained from the process. As a result of revising our literacy program, positive growth was realized in areas of communication and knowledge.

### **Communication**

Our previous consistent, collaborative efforts in curriculum review served us well as we evaluated the curriculum related to the new reading standards. We met according to our expertise areas first in order to determine how the standards could meaningfully be incorporated into the existing content. As the faculty discussed the standards, channels of communication across the ESE program opened, as well, to see the bigger picture of content being addressed in other,

## **Davidson et al.: Adopting Science of Reading Standards**

related courses. Our faculty engaged in monthly curriculum meetings prior to the whole group consideration of the action plan for the new standards. In those meetings, faculty met in mixed small groups to look at the overall landscape of the curriculum and discuss the specific content introduced, emphasized, and evaluated in courses throughout the program. This process provided a more thorough awareness for all faculty of content, methods, and strategies taught in other courses, as well as the specific areas of expertise of each of our faculty.

### **Broadened Knowledge**

To engage in the process of incorporating the new *Legislation* (Georgia General Assembly, 2023) and SOR standards, it was necessary for faculty in all expertise areas to conduct some level of research and receive opportunities for training and discussions on various topics. In the years preceding the deadline for adopting the new standards, the faculty received training on dyslexia and a pre-packaged structured literacy program. Those training sessions, in addition to discussions with faculty who had more expertise in specific aspects of the new standards, served to strengthen the knowledge base of our faculty. Remaining current on best practices for reading benefits the faculty and allows us to present a comprehensive curriculum to our students throughout their program.

### **Considerations**

Mandates can be complicated to integrate and enact at times due to any number of reasons, whether related to the requirements of the mandates themselves or the personnel involved in implementing them. We have learned a few key lessons that may be helpful to others who are integrating initial teacher preparation literacy standards based on a structured literacy approach in their programs or may be doing so in the future.

#### **Tip 1. Review Courses on an Annual Basis**

We recommend at least a yearly review of the alignment of standards and content taught across courses. Not all universities regularly allocate time to course standard review. Because our faculty was familiar with analyzing and adjusting course content based on initiatives no less than annually, faculty had a familiarity with the expectations and the process. Faculty members who analyze course content routinely will find the task less cumbersome. Moreover, frequent curriculum review provides an opportunity to develop shared communication and processes.

#### **Tip 2. Get Organized and Figure out What Works for Your Program**

Facilitate open communication, establish guidelines, and align formats for review and reporting across departments and expertise areas. When initiatives such as incorporating the SOR standards are mandated, there is no single “right way” to accomplish the task. For example, other departments in the COE at our university approached the process differently from the Department of ESE. However, operationalizing important terms and agreeing to uniform procedures will help avoid issues of incompatibility and misunderstanding later in the process.

#### **Tip 3. Change and Growth are the Name of the Game**

## **Davidson et al.: Adopting Science of Reading Standards**

Being open to change and growth is paramount to the process. It can be challenging to adapt, but it is an expectation that educators pursue continual improvement. While faculty may feel like they are providing excellent instruction, it may be that the content, methods, and materials in their courses could benefit from adjustments to meet the standards more frequently than assumed. Approaching your review with a growth mindset will enable you to see the inherent challenges as potential opportunities to improve yourself and your program.

### **Tip 4. Start with a Comparison of Standards**

A good starting point for faculty integrating the SOR Educator Preparation standards is to look for similarities with the professional standards already aligned with their courses. For example, our literacy courses are aligned to International Literacy Association (ILA) Standards for the Preparation of Literacy Professionals. Likewise, special education courses are aligned to the Council for Exceptional Children's (CEC) Professional Preparation Standards. Consider creating a crosswalk of relevant standards you already use with the new the professional standards to help you determine where standards are already addressed.

### **Tip 5. Seek Elements of Standards in all Courses**

It is important to examine all courses in a program rather than only the literacy courses. There may be opportunities for including standards in courses that were not previously recognized. Throughout our experience, it was evident that components of the standards could be found across the ESE program. Although you may not envision literacy as a component of your course, the process of review will help build a better understanding of strengths and gaps in the curriculum overall. As a result, you may find natural opportunities for the components of the SOR professional standards in your content.

### **Tip 6. Develop a Specific System Related to Standard Coverage**

It is helpful to categorize whether standards or parts of standards are introduced, practiced, or mastered in each course. One way to record this information is to determine if a standard is a) not addressed, b) addressed but not assessed, c) addressed and assessed (formatively), d) addressed and assessed (summatively), or e) addressed, assessed, and applied. This systematic approach can help faculty determine the appropriate courses for introducing concepts as well as appropriate courses for developing proficiency or mastery of the concept.

### **Tip 7. Develop Course Assignments and Assessments Last**

Only after strengths and gaps have been identified through your program review, is it time to consider assignments and assessments within courses. Suggesting and debating course content too early in the review process pulls focus from the task at hand. Consider taking a backward design approach to course design by fully distributing standards across courses first to ensure comprehensive coverage and mitigate redundancy. Faculty can then adapt or create content to address them in unique ways or move well-designed assignments to other courses that better align with the content.

### **Tip 8. Provide Professional Development**

Formal training for faculty is central to realizing successful outcomes of reform efforts. While faculty routinely attain professional development and seek evidence-based practices, the SOR standards may diverge from the types of educational opportunities faculty have previously acquired. Ideally, faculty should obtain professional development specific to the SOR in advance of curriculum review. However, if the implementation timeline is brief, professional development should be provided as soon as possible to support faculty through the processes.

#### **Potential Areas for Future Work**

Although we have completed the review of our program and integrated the initial teaching preparation literacy standards to meet the requirements of SOR structured literacy, the work is ongoing. As we continue to refine our program, we will request input from our stakeholders. For example, we will request that faculty reflect upon how the changes are working in their courses and whether they have suggestions for further revisions. Aside from minor adjustments, we will gather two cycles of data as evidence before entering another major phase of reform that might include the elimination, consolidation, or creation of courses.

Another area of future work would be to examine whether there are any potential causal relationships between our graduates' scores on professional certification exams and the integration of the new standards in our program. Further, it could be illuminating to survey our alumni and examine whether there are any meaningful differences in their feelings of preparedness to teach reading and writing based on whether they graduated from our program before or after the shift in our alignment from balanced to structured literacy.

Ultimately, the literacy outcomes for students in P-12 settings will determine if the programmatic reforms have been successful in the long-term. As we begin to accumulate standardized testing data from other states and our own, it can provide another rich opportunity for future research. Researchers should determine if there are significant differences between literacy outcomes for students in states who have adopted SOR-informed, initial teaching preparation literacy standards compared to states who have not. In addition, data from states who have adopted SOR literacy standards should be analyzed to identify possible moderators and mediators of success.

More than just a catchphrase, “continuous improvement” in education has important implications in our profession. Systematically collecting evidence and evaluating our programs’ strengths, challenges, and opportunities for growth will better position us to meet the evolving needs of our students and society.

#### **Conclusion**

The urgent push to ensure elementary teacher candidates acquire and develop more in-depth knowledge and skills using a structured literacy approach to the foundations of reading required not only integration of new initial teacher preparation literacy standards, but also major shifts in the curriculum and methods used in the Department of ESE program. Our program’s literacy courses were based on a balanced literacy approach, including some elements of teacher-led instruction but emphasizing shared and guided reading and exploring the workshop model. These models were also being implemented in many of our partner schools, so there had been consistency between what teacher candidates were learning in class and observing in action in

their placements. The change to the more explicit SOR model and its implementation has been a collective change experienced by our department, the COE, and our partner schools and stakeholders. Although this widespread change has presented some challenges, it has also paved the way for new opportunities for our faculty, program, and most importantly future elementary teachers and their students.

### **References**

- Common Core State Standards Initiative. (2010). *Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects*. CCSSO & National Governors Association.
- Ga. Comp. R. & Regs. R. 160-4-2-.39 Original Rule entitled "Dyslexia Identification and Support" adopted. F. Aug. 25, 2022; eff. Sep. 14, 2022. Retrieved from <https://rules.sos.state.ga.us/gac/160-4-2-.39?urlRedirected=yes&data=admin&lookingfor=160-4-2-.39>
- Georgia Early Literacy Act, H.B. 538, 2023-2024 Session (2023)  
<https://www.legis.ga.gov/legislation/all>
- Georgia Professional Standards Commission. (2023a). *Educator Preparation Rule 505-3-.03, The Foundations of Reading, Literacy, and Language*.  
<https://www.gapsc.com/Rules/Current/EducatorPreparation/505-3-.03.pdf?dt=%3C%2>
- Georgia Professional Standards Commission. (2023b). *EPP Action Plan for Implementation of Rule 505-3-.03 and Other Reading-related Requirements*. <https://www.gapsc.com/EducatorPreparation/Resources/Downloads/GaPSC%20Foundations%20of%20Reading%20Implementation%20Guide%20for%20EPPs%20v1.2%20July%202023.pdf>
- Georgia Professional Standards Commission. (2023c). *Foundations of Reading Action Plan Template*. <https://www.gapsc.com/EducatorPreparation/Resources/Downloads/GaPSC%20Foundations%20of%20Reading%20Implementation%20Guide%20for%20EPPs%20v1.2%20July%202023.pdf>
- Georgia Professional Standards Commission. (2023d). *Foundations of Reading, Literacy, and Language Implementation Guide for Educator Preparation Providers*.  
<https://www.gapsc.com/EducatorPreparation/Resources/Downloads/GaPSC%20Foundations%20of%20Reading%20Implementation%20Guide%20for%20EPPs%20v1.2%20July%202023.pdf>
- Georgia Professional Standards Commission. (2023e). *Foundations of Reading Self-Assessment for Elementary (P-5), Special Education General Curriculum/Elementary, and Middle Grades Reading Programs*. <https://www.gapsc.com/EducatorPreparation/Resources/Downloads/GaPSC%20Foundations%20of%20Reading%20Implementation%20Guide%20for%20EPPs%20v1.2%20July%202023.pdf>
- Georgia Professional Standards Commission. (2023f). *Guidance for Program Approval Standards*. [https://www.gapsc.com/EducatorPreparation/Resources/Downloads/IHE/Guidance\\_for\\_Georgia\\_Standards\\_2023\\_TAPS\\_rev.pdf](https://www.gapsc.com/EducatorPreparation/Resources/Downloads/IHE/Guidance_for_Georgia_Standards_2023_TAPS_rev.pdf)
- Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7(1), 6-10.

## Davidson et al.: Adopting Science of Reading Standards

- Hoover, W. A., & Gough, P. B. (1990). The simple view of reading. *Reading and Writing*, 2, 127-160.
- Hudson, A. K., Moore, K. A., Han, B., Wee Koh, P., Binks-Cantrell, E., & Malatesha Joshi, R. (2021). Elementary teachers' knowledge of foundational literacy skills: A critical piece of the puzzle in the science of reading. *Reading Research Quarterly*, 56, S287-S315.
- International Dyslexia Association. (2010). Knowledge and Practice Standards for Teachers of Reading. Baltimore, MD. Author.
- Irwin, V., De La Rosa, J., Wang, K., Hein, S., Zhang, J., Burr, R., Roberts, A., Barmer, A., Bullock Mann, F., Dilig, R., and Parker, S. (2022). *Report on the Condition of Education 2022* (NCES 2022-144). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2022144>.
- Konstantopoulos, S., & Chung, V. (2011). The persistence of teacher effects in elementary grades. *American Educational Research Journal*, 48(2), 361-386. <https://doi.org/10.3102/0002831210382888>
- Kurtz, H., Lloyd, S., Harwin, A., Chen, V., & Furuya, Y. (2020). Early reading instruction: Results of a national survey. *Editorial Projects in Education*.
- National Reading Panel (U.S.) & National Institute of Child Health and Human Development (U.S.). (2000). Report of the National Reading Panel: Teaching Children to Read: An Evidence-based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction.
- Rosenshine, B. (1987). Explicit teaching and teacher training. *Journal of Teacher Education*, 38(3), 34-36.
- Scarborough, H. S., Neuman, S., & Dickinson, D. (2009). Connecting early language and literacy to later reading (dis) abilities: Evidence, theory, and practice. *Approaching Difficulties in Literacy Development: Assessment, Pedagogy and Programmes*, 10, 23-38.
- Schwartz, S. (2022, July 20). *Which states have passed 'science of reading' laws? What's in them?* Education Week. <https://www.edweek.org/teaching-learning/which-states-have-passed-science-of-reading-laws-whats-in-them/2022/07>
- Sedita, J. (2023). *The writing rope: A framework for explicit writing instruction in all subjects*. Brookes Publishing
- Shanahan, T. (2020). What constitutes a science of reading instruction? *Reading Research Quarterly*, 55, S235-S247

### Authors' Notes

Kimberly A. Davidson

ORCID: <https://orcid.org/0000-0002-2826-234X>

Duquesne University, Department of Instruction and Leadership in Education

[davidsonk2@duq.edu](mailto:davidsonk2@duq.edu)

## Davidson et al.: Adopting Science of Reading Standards

Amy Williams  
University of North Georgia  
[amy.williams@ung.edu](mailto:amy.williams@ung.edu)

Cristina Washell  
University of North Georgia  
[cristina.washell@ung.edu](mailto:cristina.washell@ung.edu)

Kellie Whelan-Kim  
University of North Georgia  
[kellie.whelankim@ung.edu](mailto:kellie.whelankim@ung.edu)

We would like to acknowledge the many vital contributions of our colleagues in the College of Education at the University of North Georgia to the curriculum review and adoption of the science of reading standards.



More details of this Creative Commons license are available at <https://creativecommons.org/licenses/by-sa/4.0/>. **Current Issues in Education** is published by the Mary Lou Fulton Institute and Graduate School of Education at Arizona State University.

