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Teaching Special Education Credential Candidates to Teach Reading: What California State University Programs Do and how They Do It

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Teaching Special Education Credential Candidates to Teach Reading: What California State University Programs Do and how They Do It

A dissertation submitted in partial satisfaction of the

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Doctor of Philosophy in Special Education

by

Howard David Alpert

2020

ABSTRACT OF THE DISSERTATION

Teaching Special Education Credential Candidates to Teach Reading:
What California State University Programs Do and how They Do It

by

Howard David Alpert
Doctor of Philosophy in Special Education
University of California, Los Angeles, 2020
Professor Connie Kasari, Co-Chair
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Students are not learning to read well in California public schools. This is particularly true for students in special education. If more of California's students in special education are to demonstrate literacy skills to state and national standards, it will require more of their teachers teaching those skills. With the plurality of California special education credentials being earned through California State University (CSU) programs, CSU special education reading instruction courses have an out-sized effect on California's special education teachers and, ultimately, their students. To improve students' reading statewide, we must know more about what CSUs currently do to teach teachers to teach reading. This study describes what credential programs teach and the means they use to teach it by analyzing course documents and interviews with CSU credential program instructors. It finds that reading is taught as component parts and as part of something larger; teaching reading is taught as a cyclical alignment of assessment, planning, instruction, progress monitoring, and reflection; RICA has become an organizing policy and source of teaching materials for the courses; a shared but ill-defined theoretical value is balance; and a key distinction is between learning about teaching reading and learning to teach reading. This knowledge represents one step toward improving CSU's contribution to California's special

education students' reading achievement.

The dissertation of Howard David Alpert is approved.

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2020

Dedication

This work is dedicated to the memory of Gregory Dayhuff. You taught me what I know about tennis, bridge, whiskey, perseverance, and generosity. You gave me food for thought, time to study, and the socks off your feet. School was a fight you could not win. You did good. You deserved better.

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I cannot name all of the classmates and faculty and staff whose support made this possible. A special note of thanks, though, to Amy Gershon of OSS, for knowing and caring; to Karolyn Maurer for thinking and clarity and coding; to Gina and Jenny, invaluable classmates and colleagues whose texting kept me company as we worked together but apart; to Joy Zimmerman, her Viking heart, and her Wonder Woman soul, for perfect moments of procrastination and the illusion that we had all the time in the world; and to Emily Magruder for her close reading, her sharp thinking, and her lunar company. My thanks to the Joint Docs, because we care, we can, and they won't stop us. My people. And my heartfelt thanks to the excellent professors of Cal State LA and UCLA who were so generous with their knowledge and their time. I am fortunate beyond reckoning for having benefited from what you all have given me.

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It is beyond my ability to repay you all for getting me here. Thank you.

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California's students who receive special education services are not learning to read well. Their average standardized test scores are far below performance standards and far below their peers' in general education. On California's primary measure of reading, the English Language Arts/Literacy Test from Smarter Balanced Assessment Consortium (SBAC), only 16% of students who receive special education services met or exceeded performance standards in 2018-2019 (California Department of Education, 2019b); 55% of students in general education did (California Department of Education, 2019c). One might expect students who receive special education services to have lower average academic scores than their peers in general education. But that does not explain gaps in national testing where California's students who receive special education services score below their peers who receive special education services in other states (U.S. Department of Education, 2019a, 2019b). Turning this around will require California's students who receive special education services learning reading skills that make a difference.

Of the innumerable factors that might lead to better outcomes, one indispensable element is within the power of teacher educators to affect: teaching. Every year, California subjects thousands of newly credentialed teachers with scant practice to overwhelming situations: They take responsibility for a classroom full of students without being prepared to teach reading (California State University, n.d.). Worse, students are subjected to novice teachers who are not prepared to teach (Brownell, Bettini, Pua, Peyton, & Benedict, 2018). In this, the students and the teachers both suffer the "tacit standards" Darling-Hammond (2006) cautioned against.

This is where teacher educators come in. Teacher educators are well positioned to propagate more effective teaching. For all the struggles and failures endemic in the first years of teaching, amassing basic competence to teach students to read need not be one. Likewise, for all the worthy priorities a special education credential program must weigh, producing teachers who are ready on day one to teach reading should be paramount. Unlike so many other needs in our education system, teaching teachers to teach reading is something teacher educators can do.

Just as teacher preparation is an indispensable element to improving student outcomes (Brownell et al., 2017), California State University (CSU) programs are indispensable to improving teacher preparation in California. With more than a third of California special education teaching credentials being earned through CSU (California State University, 2018),

CSU special education credential programs have an out-sized effect on California's special education teachers and, ultimately, their students. Courses teaching reading instruction in CSU special education credential programs are uniquely positioned to make a difference.

The content of courses in California special education credential programs is guided by the mandates of California Preliminary Education Specialist Teaching Credential Program Standards (Program Standards) and Teaching Performance Expectations and California Teaching Performance Expectations (TPEs, Commission on Teacher Credentialing, 2018b). But these policies leave room for wide variation among courses in what is taught—which theories, which methods, and the balance among policy, research, practicum, and so forth. Similarly, they leave room for wide variation in the means by which the course content is taught—which texts, tasks, projects, activities, experiences, and assessments. That room for variation means that we do not currently know what is taught in reading instruction courses for special education credential candidates or the means by which it is taught. To improve K–12 students' reading statewide, we must have greater knowledge as to the means by which CSUs currently teach teachers to teach reading.

To describe what special education credential programs' introductory reading instruction courses teach and the means by which they teach it, this study examines course documents and interviews professors who have taught the course.

The next section reviews theoretical, policy, and research sources of content for reading instruction courses and research on teacher preparation. Some terms in this paper could be unfamiliar to its readers or are used ambiguously in related literature. Definitions in the box below are intended to clarify terms' meanings and connections in the context of teaching reading and writing in an alphabetic language.

Definitions

Some terms in this paper could be unfamiliar to its readers or are used ambiguously in research literature. Definitions given here, largely paraphrased from Snow, Burns, and Griffin's (1998) seminal text, are intended to clarify terms' meanings and connections in the context of reading and writing in an alphabetic language.

The **alphabetic principle** is the mapping of sounds to letters, phonemes to graphemes. The alphabetic principle underlies patterns of orthography.

Codes are representations of language. Speech, text, and sign are three common codes.

Comprehension refers to observable indicators of understanding written or spoken passages.

Decoding is identifying written words, especially in the context of their spoken or signed equivalents. Decoding most often refers to analytic decoding—using phonics skills to identify words—though it also refers to identifying words by sight and identifying connected text.

Fluency most commonly refers to the rapid and accurate decoding of connected text. Formal definitions typically include an element of prosody, intonation, or the like, but operational definitions in reading research or assessment seldom do. *Fluency* in reading research can also refer to the rapid and accurate identification of phonemes, letters, words in lists, etc.

Graphemes are elemental language symbols in text. Graphemes in alphabetic languages are letters or sets of letters associated with single phonemes.

Kid watching is a teacher's written classroom observations of students. These notes document student academic growth and inform lesson planning.

Language, in this limited, instructional context, encompasses phonology, orthography, morphology, vocabulary, syntax, semantics, and pragmatics.

Orthography is the written code of a language, e.g., spelling. Orthography is taught directly in phonics.

Phonemes are elemental language sounds. They are the smallest units of speech that can change a word's meaning.

Phonemic awareness is identifying, segmenting, blending, and otherwise manipulating phonemes. Phonemic awareness is a component of phonological awareness necessary for the alphabetic principle. Phonemic awareness is often the prerequisite, corequisite, or early curriculum of phonics.

Phonics is directly teaching skills and patterns to decode unfamiliar words. Phonics relies on the alphabetic principle and emphasizes how phonology and orthography are systematically related. Phonics often refers to a more programmatic curriculum and instruction, what NRP calls synthetic phonics—systematic direct instruction of decoding skills and patterns starting with phonemic awareness, the alphabetic principle, decoding letter-by-letter, and blending the phonemes into words.

Phonological awareness is identifying, segmenting, blending, and otherwise manipulating units of spoken language such as words and syllables. Phonological awareness is a component of phonology taught in phonics.

Phonology is how a language's system of sounds—its **phonemes**—operate.

Rapid automatized naming refers to the rate and accuracy of identifying letters, colors, shapes, etc. Items are generally in arrays; responses are generally aloud. It is sometimes shortened to **rapid naming**.

Semantics refers to how language conveys meaning.

Sight words are words decoded as a whole, without decoding their parts as one would with phonics.

Vocabulary are words included in a context. That context may be defined by sight word recognition, semantics, or otherwise.

Sources of Content for Reading Instruction

Because there is no set curriculum for initial reading instruction courses for special education credential candidates in California, this study will first review the theoretical models, research, and policies likely to inform these courses.

Influential Theoretical Models of Reading and Instruction

The nature of reading and its instruction vary depending on the theoretical model and its attending approach—its assumptions, curricula, and practices. Disputes between adherents of differing approaches have been dubbed the "reading wars." It is sufficient for this study to note that the reading wars shaped and polarized theory, research, policy, and practice of reading instruction as they raged, waned, and flared again throughout the second half of the 20th century (see Barksdale Reading Institute & Institutions of Higher Learning, 2016, for a useful timeline stretching back more than two centuries). Broadly drawn, the combatants in the war have been subjectivists, constructivists, and other proponents of natural language development on one side versus post-positivists, behaviorists, connectionists, and other proponents of systematic instruction on the other side (Castles, Rastle, & Nation, 2018). This study characterizes those opposing camps as student-centered versus teacher-centered theoretical approaches to reading and reading instruction. A third option, the balanced approach, is also considered.

Student-centered theoretical models of reading and reading instruction. *Student-centered* captures approaches with a focus on the student being the source of knowledge and reading being best learned naturally. Inspired by John Dewey, Lev Vygotsky, and Jean Piaget, student-centered approaches to reading emphasize individual meaning-making in social contexts (Altwerger, Edelsky, & Flores, 1987). Teachers create opportunities for students to explore, experience, and reflect to facilitate each student's development in a community of learners. Its flag-bearer in the reading wars for the last three decades of the 20th century was whole language.

Whole Language. An approach to literacy developed from the work of Kenneth Goodman (e.g., 1967, 1986), the whole language view of reading and its instruction differs profoundly from reading and instruction as described elsewhere in this proposal. The sources of

those distinctions include two ideas at the heart of whole language. First, proponents of whole language stipulate that language is whole. As they see it, the unity of language implies that reading is language and language cannot be understood, learned, or assessed as component parts (Altwerger et al., 1987; Goodman, 1986, 1993). The second premise is that language is natural and, therefore, learned naturally. As they see it, "... [because] language (oral or written) is an integral part of the functioning of a community and is used around and with neophytes, it is learned 'incidentally'" (Altwerger et al., 1987, p.145). Goodman (1993) therefore promotes what he calls *natural* child-centered learning that focuses on meaning-making. Teacher-centered instruction is avoided in whole language and considered counterproductive or even harmful (Altwerger et al., 1987; Goodman, 1967, 1993). While whole language per se has fallen out of favor in recent decades, its influence remains significant for reading teachers and their preservice courses (Drake & Walsh, 2020; Salinger et al., 2010).

Teacher-centered theoretical models of reading and reading instruction. *Teacher-centered* captures approaches with a focus on the teacher providing the sources of knowledge and reading being best learned systematically. Its flag-bearer in the reading wars for more than 50 years has been phonics. Teacher-centered views envision reading as the product of its parts. Teacher-centered approaches to reading instruction emphasize *bottom up* learning. Here, elements of the curriculum are rationally sequenced, individually mastered facts, skills, or strategies that are synthesized and generalized into functional wholes (Vaughn, Mathes, Linan-Thompson, & Francis, 2005). Orton-Gillingham (Institute for Multi-Sensory Education, 2019) and DISTAR (McCabe, 2011) might be the canonical teacher-centered reading programs, dating back to the 1930s and 1960s, respectively, and adhering to behaviorist learning principles. Somewhat more modern programs include Lindamood-Bell's phonemic awareness and phonics programs (Bell, 1998; Lindamood & Lindamood, 1998), Voyager Passport (Voyager Sopris Learning, 2020), and Wilson Reading System (Wilson Language Training, 2020). All use small lessons and frequent formative assessments following a prescribed scope and sequence with the goal of mastery learning and integrated application of skills. All center decoding with synthetic phonics as essential curriculum and use direct instruction as a primary instructional method.

Proactive Reading. One experimental (Mathes et al., 2005; Vaughn et al., 2005) teacher-centered reading program that has been published as a commercial program (SRA, 2012) is Proactive Reading. Proactive reading is taught as supplemental instruction in small, homogeneous groups for 40 minutes, five days per week. Built on direct instruction, Proactive Reading's lessons followed a standard sequence of seven to 10 activities. Topics for typical lessons are phonemic awareness; letter-sound correspondences; sounding out and reading words with previously taught letter-sound correspondences; spelling words based on letter-sound correspondences; sight word recognition of irregular words; and reading, rereading, and comprehension strategies with decodable passages.

Lessons are cumulative and iterative, with each reviewing prior lessons and adding a small amount of new material. Beginning lessons focus on the alphabetic principle with little connected text. Later lessons focus on decoding, fluency, and comprehension strategies. By the end, lessons focus on narratives, timed readings, partner reading, retelling, and story grammar. Each activity includes the teacher modeling correct responses, guiding students to correct responses, providing independent practice of correct responses, and rewarding correct responses promptly and informally, as in praise and affirmation from the teacher or the teacher's dog hand puppet, and formally, as with star charts that track progress.

Balanced approaches to reading and reading instruction. *Balanced* captures approaches with characteristics consistent with both student-centered and teacher-centered approaches. In a balanced approach, theoretically opposing characteristics may be thoughtfully reconciled, systematically eclectic, or combined without apparent design. The Reading Recovery program would be one model for a balanced approach in that it embraces a student-centered orientation and methods alongside teacher-centered structure and methods.

Reading Recovery. Reading Recovery maintains constructivist underpinnings and terminology it shares with other student-centered approaches (Scharer, 2019). Its constructivist roots also show in its use of ad hoc individualization for lesson content and its emphasis on literary experiences to support students' conceptualization of English orthography. It emphasizes contextualized authentic reading and writing experiences in social contexts and would generally eschew drills. This despite adopting certain strategies and methods rejected by whole language

but common to teacher-centered approaches. Unlike whole language, for example, Reading Recovery's emphasis on experience-based meaning-making does not exclude specific lessons on specific components of reading (Mathes et al., 2005). So, while Reading Recovery would be loath to teach phonics via direct instruction, it would teach a scope and sequence of phonics skills.

With its looming influence over the field the past several generations, the effects of the reading wars remain in evidence (Castles et al., 2018) and a topic of continuing concern (Hanford, 2020).

Research

Research on reading and reading instruction are also likely sources of curriculum. Scientific research designed for causal analysis of differential effects of instructional strategies, methods, and materials has been more the province of the teacher-centered camp, while the student-centered camp has favored descriptive research of reading processes and patterns (Edelsky, 1994). Though this has changed to some extent in the 21st century, the past two decades of research have done little to move the needle from the conclusions the National Reading Panel (NRP, National Reading Panel & National Institute of Child Health and Human Development, 2000) reached at the end of the 20th century (Castles et al., 2018).

The strongest evidence from the prior century for what we can do to teach reading comes from studies of foundational skills and their instruction (National Reading Panel & National Institute of Child Health and Human Development, 2000), known informally as phonics. That evidence favors programmatic, systematic direct instruction of phonemic awareness, the alphabetic principle, orthography, decoding, and fluency. For students who struggle to decode, evidence favors foundational skills instruction that is even more programmatic, more systematic, more direct, and more intensive (see, e.g., Mathes et al., 2005). Although scientific research comparing interventions' effects on reading outcomes clearly favors systematic direct instruction of foundational skills, similar research only tentatively supports direct instruction of vocabulary and comprehension.

As a government-commissioned evaluation of reading instruction research at the end of the 20th century, NRP has left its mark on reading instruction, policy, and research. NRP divided

reading into five major components: (1) phonemic awareness, (2) phonics, (3) fluency, (4) vocabulary, and (5) text comprehension (National Reading Panel & National Institute of Child Health and Human Development, 2000). The NRP meta-analyses of research from primarily the 1970s, 1980s, and 1990s found support for systematic, explicit instruction in phonemic awareness, phonics, and fluency. Their synthetic reviews of the limited number of studies of vocabulary and comprehension instruction that met their inclusion criteria found tentative support for several instructional methods. NRP's findings have largely held up under the intervening two decades of scrutiny (Castles et al., 2018), remain a solid basis for understanding reading instruction research, and provide the framework for this subsection on reading research.

Phonemic awareness. NRP's meta-analyses found that direct instruction of phonemic awareness improves reading outcomes (National Reading Panel & National Institute of Child Health and Human Development, 2000). Effects of phonemic awareness instruction over control conditions, measured in *Cohen's d*, were significant on measures of phonemic awareness ($d = 0.86$), spelling (ds = 0.49–0.68), and reading comprehension (ds = 0.47–0.58). Effects remained significant at follow up months after intervention. Direct instruction had even bigger effects: Students who were taught phonemic awareness explicitly had larger gains in phonemic awareness and decoding skills than did students in control groups.

NRP, then, recommends systematic, explicit instruction in phonemic awareness from pre-school through sixth grade, but they do not recommend it as equally valuable in all grades.

Phonics. All phonics programs in studies that met NRP's inclusion criteria were systematic, teaching a planned sequence of decoding skills (National Reading Panel & National Institute of Child Health and Human Development, 2000). However, the phonics programs that directly taught the alphabetic principle, decoding letter-by-letter and digraphs, and blending the phonemes into words—programs they labeled *synthetic phonics*—had effects ($d = 0.45$) that trended larger than systematic instruction that was implicit rather than direct, taught spelling patterns or multi-letter subparts of words such as onsets and rimes (ds $= 0.27 - 0.34$), or miscellaneous programs ($d = 0.27$). Broadly, NRP found that systematic phonics instruction had meaningful effects over control or comparison conditions ($d = 0.41$), with effects for systematic phonics

- larger for kindergarten and first grade ($d = 0.55$) than for later grades ($d = 0.27$)
- larger on measures of decoding regularly spelled words ($d = 0.67$) and pseudowords ($d = 0.60$)
- smaller for comprehension measures overall ($d = 0.27$), but still moderate for younger students ($d = 0.51$)
- significant for students deemed at risk for developing reading difficulties in kindergarten ($d = 0.58$) and first grade ($d = 0.74$), but not for similar students in grades 2–6.

Effects held up against all control or comparison groups—basal programs, regular curriculum, whole language approaches, whole word programs, and miscellaneous programs—and at four-month to one-year followup ($d = 0.27$). NRP, then, recommends systematic, synthetic phonics instruction in kindergarten and 1st grade.

Fluency. Fluency is used as a broad measure of reading ability (Fuchs, Fuchs, Hosp, & Jenkins, 2001) and considered a vital supporting skill for reading comprehension (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010; Stanovich, 1986; Therrien, 2004; Vaughn et al., 2000). Definitions of fluency generally include rate, accuracy, and prosody of reading connected text aloud (Snow et al., 1998), though operationalizations in NRP's meta-analysis exclude prosody. The language used to discuss fluency is often binary, but it is assessed as rate on a continuous scale, with adequate accuracy assessed against a cut-off of, say, 95% or 98% (Hasbrouck & Tindal, 2006).

Repeated oral reading is a category of methods that emphasize re-reading passages aloud with some combination of criteria for number of re-readings, criteria for reading rate, guidance while reading, and feedback after reading. NRP found repeated oral reading had meaningful effects on decoding words in lists, on flashcards, or the like ($d = 0.55$); on fluency ($d = 0.44$); and on reading comprehension ($d = 0.35$) (National Reading Panel & National Institute of Child Health and Human Development, 2000). Programs that emphasized sustained silent reading, incentive programs, or similar efforts to encourage reading did not provide evidence of improved reading or increased reading.

NRP found sufficient evidence to recommend any of the several variants of repeated oral reading instruction for students who do not read sufficiently fluently. Subsequent meta-analyses (Therrien, 2004) clarified that repeated reading methods with performance criteria—re-reading a passage until a specific reading rate is achieved—has larger effects on practiced and unpracticed passages than methods with criteria for number of re-readings.

Vocabulary. NRP's definition of vocabulary is built on two binary dimensions of word use (National Reading Panel & National Institute of Child Health and Human Development, 2000). One dimension is code—oral or text; the second dimension is direction—receptive or expressive. That definition leads NRP to four broad categories of vocabulary: words that are heard, spoken, read, or written (see Table 1 for an illustration of NRP's model of four types of vocabulary). For any given person at any given time, each of these vocabularies differs from the others. Oral vocabularies tend to be larger than text vocabularies; receptive vocabularies tend to be larger than expressive vocabularies.

Table 1

NRP's four vocabularies

	Code	
Direction	Oral	Text
Receptive	Listening	Reading
Expressive	Speaking	Writing

Note. Two dimensions lead to four categories of vocabulary (National Reading Panel & National Institute of Child Health and Human Development, 2000).

Because each vocabulary is learned differently and used differently, NRP cautions, "Conclusions about some of these different types of vocabularies often do not apply to all; what may be true for one may or may not be true for another" (National Reading Panel & National Institute of Child Health and Human Development, 2000, p. 4–16). They stipulate that words are learned first as heard, then as spoken, third as read, and finally as written. Thus, words that are read but not in a reader's listening lexicon are not, by this perspective, comprehended. Less explicitly, they distinguish vocabularies semantically: One's understanding and use of a given word might be deep, shallow, or negligible.

NRP found no studies of vocabulary instruction that fit its inclusion criteria. In lieu of a meta-analysis, they reported a synthetic review of literature on vocabulary instruction (see Table 2 for a list and descriptions of the categories of vocabulary instruction NRP found in their analysis). They found students learned vocabulary

- when reading or listening to others read
- using computer technology
- with repetition, especially multiple, authentic exposures with interactions over terms in multiple circumstances over multiple days
- when words are front-loaded as keywords for a passage
- when text is specifically structured to teach it
- more easily when the word is concrete, that is, easy to imagine
- more easily when the word is a verb, adverb, or adjective than when it is a noun.

They also found that gains in vocabulary led to gains in comprehension. NRP recommended direct instruction of words and their meaning, multiple exposures to terms in varied contexts with active learning activities, and restructuring text and instruction in response to students' progress. But direct instruction of vocabulary has seldom yielded consistent effects analogous to direct instruction of foundational skills for students deemed at risk, including those who receive special education services (Marulis & Neuman, 2010). Researchers have turned to a variety of instructional approaches: close analysis of text structure, cognitive strategies, and computer-assisted learning (Swanson, Harris, & Graham, 2013); cooperative learning (Vaughn et al., 2000; Vaughn, Klingner, & Bryant, 2001); and methods based on executive function (Elosúa, García-Madruga, Vila, Gòmez-Veiga, & Gil, 2013) to name a few. They have had mixed and mostly disappointing results.

The most promising vocabulary instructional methods combine NRP's recommendations. O'Connor et al. (2019) applied these principles in a study of vocabulary instruction in middle school special education English language arts classes in a district with a large proportion of

Table 2

Five methods of vocabulary instruction found in NRP's synthetic review of the literature

Method of instruction	*in which students . . .*
Explicit	. . . are given definitions, instruction on morphemes, or other attributes of words to learn their meanings
Implicit	. . . are exposed to words or given opportunities to read to learn words' meanings
Multimedia	. . . learn from semantic mapping, graphic representations, hypertext, or American Sign Language
Capacity	. . . practice to make decoding automatic, purportedly freeing cognitive capacity for semantics
Association	. . . draw connections between words they are learning and context or prior knowledge

Note. Methods of vocabulary instruction are cited from National Reading Panel & National Institute of Child Health and Human Development (2000, p. 4–3).

students whose first language was not English. They found gains in forced-choice assessments for the treatment group over the business-as-usual control group at posttest (η^2s $= .54 - .68$) and at follow up four weeks after all treatment was complete.

The difference between O'Connor's study and earlier attempts to teach vocabulary to students who receive special education services might be the pairing of direct instruction with an emphasis on students' using the words in social and academic contexts rather than, say, transcribing a dictionary definition. Or the difference might be simply time on task. The treatment condition allotted 60 minutes of school time to vocabulary lessons each week for 12 weeks that would otherwise have been dedicated to other English language arts work. That is far more than the 10 minutes or so similar classrooms typically spend on vocabulary (O'Connor et al., 2019). Whatever the explanation, the difference in outcomes demonstrates that common methods can result in large effects on vocabulary for students who receive special education services, something not much in evidence in prior decades.

Comprehension. NRP found insufficient consistency in conceptualization and measurement of reading comprehension instruction to conduct a meta-analysis. The research they found on reading comprehension instruction came largely from a cognitive strategies perspective. Cognitive strategies are "the intentional, problem-solving, thinking processes of the reader that occur during an interchange with a text" and "the construction of the meaning of a written text through a reciprocal interchange of ideas between the reader and the message in a particular text" (p. 4–5). They list eight strategies including *question answering, graphic and semantic organizers,* and *comprehension monitoring* (see Table 3 for the eight comprehension strategies and their descriptions). The cognitive strategies perspective is the basis of direct instruction interventions for specific cognitive strategies. Once a strategy is mastered, students are to use it intentionally and independently to overcome any barriers to comprehension.

Counter-intuitive as it may be, the most reliable way to improve reading comprehension for most students who receive special education services is to improve foundational skills. Why? The simple view of reading (Gough & Tunmer, 1986) provides a viable explanation. It posits reading comprehension as the product of decoding and listening comprehension. For most students who receive special education services, reading comprehension is limited by poor decoding. Because decoding can be taught directly, teaching students who receive special education services to decode will, in theory, increase their reading comprehension to approximate their listening comprehension. And indeed, that does pan out when tested (e.g., Mathes et al., 2005; Torgesen et al., 2001, 1999).

But how do we teach the comprehension part of reading comprehension? As with vocabulary, direct instruction of comprehension has seldom yielded consistent effects analogous to direct instruction of foundational skills. A clear alternative has yet to emerge. But an emphasis on background knowledge, vocabulary, and independent reading has gained currency (O'Reilly, Sands, Wang, Dreier, & Sabatini, 2019).

Randomized control trials, experimental, quasi-experimental, and similarly rigorous research focused on differential effects of instructional strategies, methods, and materials tend to best support teacher-centered, systematic, and direct instruction of phonemic awareness, phonics, fluency, vocabulary, and comprehension strategies. Of these, the strongest research support lies

Table 3

NRP's strategies for teaching reading comprehension

Strategy	*in which students . . .*
Question answering	. . . answer the teacher's questions about texts, and the teacher provides feedback
Question generation	. . . ask *who, what, when, where, why, how*, and predictive questions about texts
Story structure	. . . ask and answer *who, what, when, where, why*, and *how* questions about text to analyze its plot, characters, or events
Graphic and semantic organizers	. . . represent texts' structures or associations graphically
Summarization	. . . express texts' or passages' main idea(s) in brief
Comprehension monitoring	. . . check for understanding texts metacognitively, asking themselves explicitly what passages or terms mean in context and what they mean to texts as a whole
Cooperative learning	. . . use specified strategies in pairs or small groups
Multiple-strategy	. . . use two or more strategies flexibly, generally in interaction with teachers

Note. Comprehension instruction strategies are cited from National Reading Panel & National Institute of Child Health and Human Development (2000)

with systematic and direct instruction of foundational skills—phonemic awareness, decoding, and fluency. Research on the most effective instruction for vocabulary and comprehension is less decisive.

Policy

Beyond research, NRP's findings have had wide-ranging influence on policy, including in the law that established California's Dyslexia Guidelines (*Assembly Bill (AB) 1369*, 2015; California Department of Education, 2017). That law specifies that the guidelines emphasize an "evidence-based, multisensory, direct, explicit, structured, and sequential approach to instructing pupils who have dyslexia" (*Assembly Bill (AB) 1369*, 2015). Of the policies that affect California special education credential programs and that overlap reading instruction, two are compulsory:

Program Standards (Commission on Teacher Credentialing, 2018b), which California uses to describe the "level of quality and effectiveness" (p. i) of special education credential programs; and TPEs (Commission on Teacher Credentialing, 2018b), the beginning-level competencies that California requires programs address, assess, and certify for each credential candidate. Other policies are not compulsory but are relevant to reading instruction courses. One is California's exam on reading instruction. California's Reading Instruction Competence Assessment (RICA, *Reading Instruction Competence Assessment (RICA) Content Specifications*, 2009) is required for most first-time special education credentials (*Education Code EDC § 44283*, n.d.). Another relevant policy specifies the academic goals of California's public schools. California Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects (Common Core, California State Board of Education, 2013) guides the goals of reading lessons in K–12 classrooms. Program Standards, TPEs, RICA, and Common Core all have implications for special education reading instruction courses and are discussed below.

Program Standards. Each of the five Program Standards arguably could contribute to a special education credential program's reading instruction course. However, *Standard 1: Program Design and Curriculum* has the most direct contribution. It mandates programs teach candidates "instruction in strategies to develop early literacy skills" (Commission on Teacher Credentialing, 2018b, p. 2). It also mandates programs teach "understanding and analyzing student achievement outcomes to improve learning" and consideration of "the range of factors affecting student learning such as the effects of poverty, race, and socioeconomic status" (p. 2). Teaching credential programs might choose to create separate courses dedicated to assessment and societal factors affecting learning. Alternatively, a program might see their connection to reading instruction as sufficient to include them in a reading instruction course. Note that revised Program Standards were released in 2018; course documents analyzed in this proposed study may reflect the somewhat different organizational structure of prior standards, though few substantive changes pertaining to these courses are apparent.

Teaching Performance Expectations. As with Program Standards, each of the six TPEs must be evident in special education credential programs (Commission on Teacher Credentialing, 2018b). Also like Program Standards, each of the TPEs arguably could contribute

to a special education credential program's reading instruction course. For example, TPE 1's emphasis on language development and progress monitoring is a good fit for lessons on language and assessment, respectively (see Table 4 for the most relevant text from TPEs for a special education reading instruction course). However, relations between TPEs and a reading instruction course are less direct than with Program Standards. As with Program Standards, revised TPEs were released in 2018, though only organizational but not substantive changes that pertain to these courses are apparent.

Table 4

Excerpts of Educational Specialist TPEs with implications for special education reading instruction courses

TPE Title	*in which candidates . . .*
Engaging and Supporting All Students in Learning	"[D]evelop appropriate language development goals within the IEPs . . . ," "Demonstrate knowledge of students' language development across disabilities and the life span," and "Monitor student progress toward learning goals as identified in the academic content standards and the IEP . . . " (p. 9)
. . . Environments for Student Learning	"Develop accommodations and modifications specific to students with disabilities . . . " (p. 9)
Understanding and Organizing Subject Matter for Student Learning	"Adapt, modify, accommodate and differentiate the instruction . . . to develop appropriate goals and accommodations . . . ," "Demonstrate knowledge of disabilities and their effects on learning . . . ," and "Demonstrate comprehensive knowledge of atypical development associated with various disabilities and risk conditions . . . as well as resilience and protective factors . . . and their implications for learning" (p. 11)
Planning Instruction and Designing Learning Experiences for All Students	". . . [U]se assistive technology, augmentative and alternative communication (AAC) . . . to facilitate communication, curriculum access, and skills development . . . ," "use evidenced-based high leverage practices with a range of student needs, and evaluate a variety of pedagogical approaches to instruction. . . ," ". . . create short- and long-term goals that are responsive to the unique needs of the student and meet the grade level requirements of the core curriculum . . . ," and "Use person-centered/family centered planning processes, and strengths-based, functional/ecological assessments . . . that lead to students' meaningful participation in core, standards-based curriculum . . . " (p. 11)
Assessing Student Learning	Use "assessment data to: 1) identify effective intervention and support techniques, 2) develop needed augmentative and alternative systems, 3) implement instruction of communication and social skills, 4) create and facilitate opportunities for interaction; 5) develop communication methods to demonstrate student academic knowledge; and 6) address the unique learning, sensory and access needs of students . . . ." Also, "Demonstrate knowledge of second language development and the distinction between language disorders, disabilities, and language differences" and ". . . administer assessments according to the established protocols [and] implement appropriate accommodations . . . " (p. 12)
Developing as a professional	". . . [C]oordinate and collaborate effectively with paraprofessionals and other adults in the classroom" (p. 12)

Note. TPEs excerpted from Commission on Teacher Credentialing (2018b).

RICA. Special education credential candidates generally must pass RICA to qualify for their credential (*Education Code EDC § 44283*, n.d.). Credential candidates typically take RICA as one of the culminating activities of the program. From 2012 to 2017, 90% of people who took RICA passed (Commission on Teacher Credentialing, 2018a). Only about two-thirds passed on their first try, though, indicating many who take the test are not sufficiently prepared. RICA's first-time fail rate and the pass rate on subsequent attempts might indicate a mismatch between the assessment and the preparatory credential programs' reading instruction courses' curriculum or instruction.

Taking cues from NRP, RICA organizes content into five domains (see Table 5 for the structure of RICA content): (1) *Planning, Organizing, and Managing Reading Instruction Based on Ongoing Assessment*; (2) *Word Analysis*; (3) *Fluency*; (4) *Vocabulary, Academic Language, and Background Knowledge*; and (5) *Comprehension.* Each domain comprises two to five competencies which, in turn, may comprise a number of items and sub-items (*Reading Instruction Competence Assessment (RICA) Content Specifications*, 2009).

Table 5

RICA content structure example: Domain 4

Level	Number	Text
Domain	4	*Vocabulary, Academic Language, and Background Knowledge*
Competency	10	"Understand the role of concepts about print, letter recognition, and the alphabetic principle in reading development and how to develop students' knowledge and skills in these areas."
Item	(1)	"Demonstrate knowledge of the role of vocabulary, academic language, and background knowledge in reading development"
Sub-item	a.	"the role of vocabulary knowledge in the development of word recognition and fluency"

Note. RICA structure and content cited from *Reading Instruction Competence Assessment (RICA) Content Specifications* (2009).

Common Core State Standards. The advent of Common Core has made ongoing skirmishes in the reading wars less relevant in the U.S. as an education policy matter. California,

43 other states, and the District of Columbia (ASCD, n.d.) have adopted Common Core, committing their schools to teaching literacy aligned to a set of grade-level standards with the express intent to assure their graduates are sufficiently literate for career or college. California adopted Common Core with modifications, editing and adding standards to specify content or increase rigor (California State Board of Education, 2013).

Common Core conceives of literacy broadly. Its structure and standards integrate reading, writing, speaking, listening, and language, connecting these with history/social studies, science, and technical subjects (California State Board of Education, 2013, p. 3). It organizes reading into comprehension strands and foundational reading skills strands. Common Core's three reading comprehension strands, *Key Ideas and Details, Craft and Structure,* and *Integration of Knowledge and Ideas*, are for all grades. Text range, complexity, and comprehension demands increase with grade levels (see Table for an illustration of how comprehension standards extend skills from simple to sophisticated across grades). Together, they set high standards for thoughtful reading of informational and literary texts.

Common Core focuses less on foundational skills than on comprehension (Haager & Vaughn, 2013). Its four foundational skills strands, *Print Concepts, Phonological Awareness, Phonics and Word Recognition*, and *Fluency*, are presented as relevant to beginning readers and to be taught in grades K–5 (California State Board of Education, 2013). However, they loom large in K–12 special education because most students who receive special education services struggle to read throughout their school careers, and these strands describe the skills in which they most often need extra instruction. Take as an example phonological awareness, a foundational skill that subsumes phonemic awareness. students who receive special education services often score low on tests of phonological awareness (Furnes & Samuelsson, 2011); phonological awareness is correlated with decoding skills (Melby-Lervåg, Lyster, & Hulme, 2012); phonological awareness is a fundamental building block for phonics and related decoding instruction and remediation (Lindamood & Lindamood, 1998); and teaching phonological awareness leads to better reading scores including comprehension scores (see, e.g., Coyne, Kame'enui, Simmons, & Harn, 2004; Mathes et al., 2005; Torgesen et al., 1999). Nonetheless, the extent of Common Core's phonological awareness standards are one six-part standard in

Table 6

Common Core's standards become more complex with increasing grades: Reading for Information Standard 4

Grade	Content
Kindergarten	"With prompting and support, ask and answer questions about unknown words in a text. (See grade K Language standards 4–6 additional expectations.)" (p. 14)
3	"Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area" (p. 15)
6	"Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings" (p. 51)
9–10	"Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper)" (p. 53)
11–12	"Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines *faction* in Federalist No. 10)" (p. 53).

Note. Standards quoted from California State Board of Education (2013).

kindergarten and a corresponding four-part standard in first grade (California State Board of Education, 2013). Thus, foundational reading standards may deserve more attention in special education reading instruction courses than their limited scope in Common Core suggests.

Curriculum and instruction for initial reading instruction courses for special education credential candidates in California are influenced by some combination of two adversarial models of reading and reading instruction, generally convergent research on reading, and the policies that govern credential programs.

Research on Teacher Preparation

When CSU examines how ready teachers are their first year of teaching, they find that teachers and their principals feel teachers prepared by CSUs are well prepared and better

prepared than their peers prepared by other institutions (Torgerson, Beare, & Spagna, 2016). What, then, are teacher candidates learning?

Kurtz, Lloyd, Harwin, Chen, and Furuya (2020) found that many teachers in the United States are learning a balanced approach to literacy instruction. A clear majority (57%) of "533 postsecondary instructors who indicated that they had taught courses on how to teach students to read" (p. 7) surveyed in fall 2019 chose *balanced literacy* as their philosophy of teaching reading. Even more (68%) of the "674 K–2 and elementary [K–5] special education teachers who indicated that they had taught children how to read" (p. 7) in the same survey chose balanced literacy as their philosophy of teaching reading. By contrast, a survey option that better describes NRP's findings, *explicit, systematic phonics (with language comprehension as a separate focus)* was selected by less than one-fourth of either surveyed group; *whole language* was selected by less than 5% of either surveyed group. These are aggregate results, but no statistical differences were found between general education and special education respondents.

Similarly, a U.S. Department of Education report (Salinger et al., 2010) surveyed and tested credential candidates in general education programs in 24 states. The survey asked the candidates about the focus or emphasis on NRP's five reading components in their course work and, separately, in their field experience. The test measured the candidates' knowledge of NRP's reading components. On the survey, they found mostly below-moderate focus on the components overall in the programs, with stronger focus in field experience than course work. On the test, they found candidates' knowledge of NRP's five components was limited, with 57% of items answered correctly overall. This is in contrast to their self-perceptions, as 80–96% answered *yes* when asked if they had learned "what students need to know and be able to do" for each of the five components. A significant relation was found between program focus and pre-service teachers' knowledge of fluency but not for other components and not overall.

The limited focus and limited knowledge of research-based reading theory and practice might explain poor student outcomes. However, Korthagen (2017b) argues that that is an overly optimistic view. Optimistic because it presumes teacher effectiveness is buoyed by theory and practice candidates are exposed to in their preparation programs. On the contrary, Korthagen argues theory learned during teacher preparation seldom has significant effects on candidates'

teaching behavior because behavior is driven more by prior experience. Brownell et al. (2009) suggests that this is because the domain-specific knowledge teachers gain in pre-service training is not readily put into practice. That is, novice teachers might know nearly as much on the topic of reading as more experienced teachers, but they do not have sufficient experience to use that knowledge with the sophistication required to better teach their students to read.

However, there is evidence (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2009) to suspect experience during teacher preparation can make a difference. If that experience is as a student teacher, then Korthagen (2017b) says a candidate is likely to adopt the lessons of the practicum. That works if the candidate's student teaching is well mentored by a master teacher closely aligned to the program's goals (Darling-Hammond, 2006). More likely, Korthagen says, the candidate's student teaching experience is influenced by school culture or the events and outcomes of their efforts that most speak to their goals, emotions, and sense of competence.

Korthagen's (2017a) calls his solution the *realistic approach*. Candidates learn practical knowledge by praxis, starting with teaching experiences that are small, simple, and closely mentored. Cohorts of candidates mentor each other in a community of practice under the guidance of teacher educators. The program's teacher educators mentor candidates in reflection focused on the essential aspects of experiences—the rational, emotional, and motivational conditions of both teacher and student—to make the underlying causes plain, spur changes in future trials, and practice those changes to the point of automaticity. In this way, teacher education is largely a matter of practice, reflection, and community support. It is usually only late in the program that select theoretical lessons are added.

Research Questions

The questions at the heart of this study are fundamental: When teacher preparation programs teach special education teacher candidates to teach reading, what do they expect candidates to learn, and how do they expect candidates to learn it? This leads to two formal research questions:

RQ1: In initial CSU reading instruction courses for Education Specialist Instruction credential candidates, what is the curriculum?

1. What are students expected to know upon completion of the course?

2. What are students expected to know how to do upon completion of the course?

3. Are there differentiating typologies?

RQ2: In initial CSU reading instruction courses for Education Specialist Instruction credential candidates, what are the means of instruction?

1. What methods are use to teach the curriculum?

2. Who teaches the courses?

3. Are there differentiating typologies?

The answers to these questions describe the broad range and general trends of curriculum and instruction for these courses. They are essential to understanding how well special education credential candidates are equipped as they embark onto teaching reading.

Project Description

This section describes the study's design and conceptual model.

Design. This qualitative descriptive study of one state university system's initial reading instruction courses for special education credential candidates describes what programs expect special education credential candidates to know about teaching reading and how programs expect them to learn it in the contexts of research, policy, and theoretical influences.

The courses of interest, the study's constructs, and their operationalizations are defined next, followed by methodological considerations and the conceptual model that guides the analysis.

Courses of interest. The subject of this study is confined to CSU special education credential programs' pre-service preparation for teaching reading. More specifically, the subject is the program's reading instruction coursework embedded in the introductory reading instruction courses required by their 22 Education Specialist Instruction credential programs. This excludes advanced reading instruction courses and reading instruction courses in undergraduate programs, other special education programs, general education programs, and other departments' programs

except for those instances where the course is also the Education Specialist Instruction credential program's required introductory reading instruction course. This also excludes CSU's Cal Maritime, the one CSU campus that does not have a teaching credential program, and CalStateTEACH, CSU's online teaching credential program, which does not have a special education credential program. These parameters were selected to provide a view of curriculum and instruction in reading for a large proportion (Suckow & Lau, 2019) of California's new special education credential candidates within one overarching institution.

Constructs and operationalizations. Three sets of constructs need some elaboration: (1) Curriculum and instruction, (2) *context*, and (3) *student-centered* and *teacher-centered*. They are defined below, followed by their operationalizations.

Curriculum. Curriculum is the content of the course, what is being taught and, therefore, what students are expected to learn. For example, the curriculum of a course that reflects NRP's findings would contain NRP's components of reading—phonemic awareness, phonics, fluency, vocabulary, and comprehension—and perhaps also contain how and why to teach them. Curriculum was operationalized primarily as evidenced in course syllabi and university course catalog descriptions. To a lesser extent, it was operationalized in statements by instructors during interviews. Course documents were analyzed for references to the content of the course. Typically, evidence from syllabi was embedded in in-class topics, assignment or activity descriptions, or readings. For example, a weekly topic or lecture outlined in a syllabus as *Building Blocks of Comprehension* was taken as evidence of reading comprehension being part of the curriculum, as was an activity identified as *In-class Activity: Using Graphic Organizers to support reading comprehension*, an assignment called *Assessment and Instruction: Comprehension Case Study*, a reading assignment for *Read: -Tompkins, Promoting Comprehension: Reader Factors, Ch. 8*, and an assessment called *Quiz for fluency, vocabulary, and comprehension.* By analyzing course documents to identify such terms, evidence was gathered to describe the courses' curriculum.

Instruction. Instruction is the course's set of strategies, methods, and materials. It is the means by which the curriculum is taught and, therefore, the means by which students are expected to learn. Using the same example of a course that reflects NRP's findings, that course

would assign some combination of readings, writings, lectures, activities, projects, praxis, assessments, and the like to teach each of NRP's components of reading.

Instruction was operationalized as evidenced in course documents and interview transcripts. Using the same examples, a lecture topic outlined in a syllabus as *Building Blocks of Comprehension* would be taken as evidence of the method *lecture*, though a weekly topic alone would not have been taken as evidence of any particular instructional strategy, method, or material. Likewise, an activity called *In-class Activity: Using Graphic Organizers to support reading comprehension* was taken as the method *activity* only because it was sufficiently identified as such. The text *Assessment and Instruction: Comprehension Case Study* was taken as evidence of the method *writing* only because the syllabus' description of the assignment included writing; *Read: -Tompkins, Promoting Comprehension: Reader Factors, Ch. 8* was taken as evidence of reading from a textbook as an instructional method (reading) and material (textbook) *text*; and *Quiz for fluency, vocabulary, and comprehension* was taken as evidence of an *assessment*, a *quiz* in particular. By analyzing course documents to identify such terms, evidence was gathered to describe the courses' instruction.

In sum, course documents and interview transcripts were analyzed for evidence of (1) curriculum to find what CSU expects special education credential candidates to know upon completion of initial reading instruction courses, and (2) instruction to find the means by which CSU expects them to learn it.

Context. Context is an underlying construct in this study. This study uses context to describe and explain the evidence in terms of a source of influence and a theoretical orientation. The elements of context as used for this study are the course, individual priors, institutional priors, policy, research, theory, related fields, and reading wars (illustrated in Figure 1). Descriptions of the elements of the conceptual model follow:

- The *course* in this study is any of the initial reading instruction courses for CSU's 22 special education credential programs.
- Individual priors are the characteristics, conditions, or biases of individuals that influence the course. They might include the instructor, program director, department administrator,

or others. The predilections are influences that amount to individual preferences, interpretations, knowledge, or knowledge gaps of policy, research, theory, and practice. Partisanship in the reading wars would be one such prior, as would a focus on praxis over lecture, decoding over comprehension, or individualized over programmatic teaching.

- *Institutional priors* are the characteristics, conditions, or biases of the institutions that influence the course. They are influences that amount to institutional conditions policy, or practice at the campus, department, or program level. A focus on preparation for RICA over theory would be one such prior, as would the department housing the course, the type of faculty who teach the course, textbook selection, course design, or signature assignments.

- *Policy* refers to federal, state, CSU, and campus laws, regulations, written policy positions, and derivative products and practices. The most relevant of these are described in the Policy subsection.

- *Research* refers to primary or secondary sources of scientific findings. Typically, those findings would be published in peer-reviewed journals, but they might also include such sources as NRP's report to Congress, What Works Clearinghouse, edited volumes, or even unsupported assertions of research basis.

- *Theory* encompasses the premises, reasoning, and conclusions of influential thinkers and derivative beliefs. These include statements made in books, journal articles, and other published sources. As with research, they can also include unsupported assertions of theoretical basis.

- *Related fields* provide ideas that influence a special education credential reading instruction course that are not primarily about teaching students who receive special education services to read. Such topics might come from elsewhere in education, from psychology, human development, special education law, linguistics, English language development, or any number of other fields.

- *Reading wars* are the on-going disputes over the nature of reading and effective approaches to teaching reading. The topic is discussed in the Sources of Content for Reading

Instruction section of the literature review.

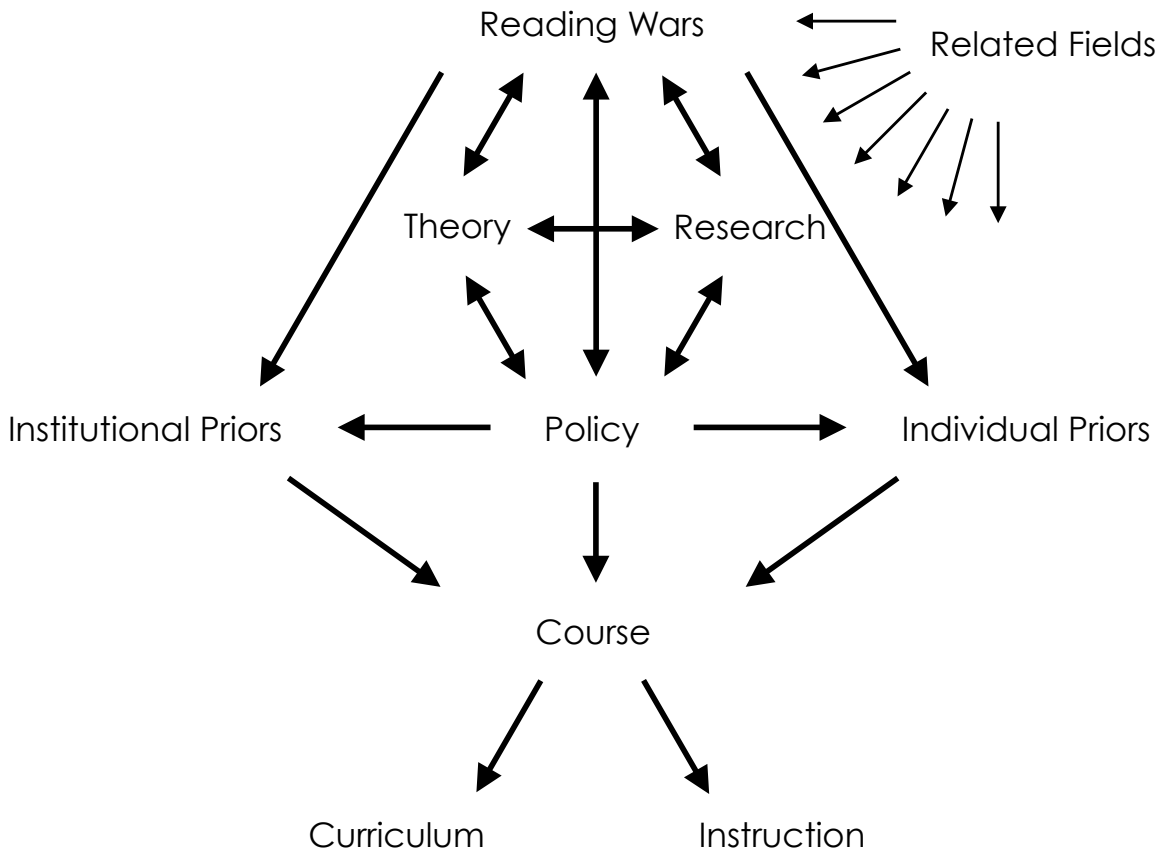


Figure 1. Conceptual model of sources of curriculum and instruction for special education reading instruction courses. Related fields are not specified in this model but include human development, psychology, linguistics, and any other field that influences the other components of the model.

Student-centered and teacher-centered. Two constructs corresponding to the opposing camps of the reading wars have emerged in preliminary coding. The construct *student-centered* captures curriculum, instruction, practices, and assumptions—the approaches—primarily consistent with student-centered authors, theory, and pedagogy. For example, Language Experience Approach is a quintessentially student-centered set of methods in that its purpose and its methods are designed for students to find purpose and meaning in reading and writing with light-handed guidance and encouragement from the teacher. The construct *teacher-centered* captures the approaches primarily consistent with teacher-centered authors, theory, and pedagogy. For example, direct instruction is a quintessentially teacher-centered

method in that it is designed for students to learn facts and skills from the teacher.

Conceptual Model. This study examined specific aspects of a program's reading instruction courses: curriculum and instruction. It conceived of a course's curriculum and instruction as arising from, being influenced by, and occurring in its specific context. It conceived of a course's context as an influence on or a source of the course. Examining curriculum and instruction in light of its context—explicitly expressed or inferred from analysis—clarifies the program's intentions. It shows choices that decision-makers put into the program and what they expected students to get out of it. Conversely, the intentions of a program's curriculum and instruction affect their description. Thus, the conceptual model informs what will be described and how it will be described.

This study's conceptual model depicts the sources of a course and its curriculum and instruction as institutional and individual priors—characteristics, conditions, or predilections that influence the course—as they interact with policy mandates, goals, and incentives. These draw directly or indirectly on research of reading, reading instruction, and special education matters; theories of reading, reading instruction, and education matters; and policy, research, and theory from related fields. The model conceives of these sources of curriculum and instruction in light of and as influenced by historical and continuing effects of the reading wars.

Methods

This qualitative descriptive study answered its research questions by gathering and analyzing course-related documents. In addition, it answered its research questions by interviewing individuals who teach or have taught the courses and analyzing the interview transcripts. This section describes the project and its participants, setting, procedures, and analytic plan.

Document analysis

Documents were gathered and analyzed from the 22 CSU special education credential programs. Course descriptions were gathered and analyzed from all 22, and syllabi were gathered and analyzed from the 16 who responded to document requests. Of the 22 courses, 11 were from

special education programs. In the other 11 programs, special education credential candidates' first course in reading instruction was housed in elementary education, teacher education, or another program (see Table 7 for a list of the courses).

Interview participants

Interview participants were selected for their direct knowledge of reading instruction courses required in CSU special education credential programs and the decision-making processes that went into choosing the curriculum and instruction. That is, interview participants knew what was taught, the means by which it was taught, and why those choices were made. Participants were recruited after text analysis resulted in a typology of reading courses. Participants were selected with a preference for knowledge of reading courses that exemplified identified theoretical types: student-centered, teacher-centered, and balanced.

Recruitment procedures followed the policies of UCLA's Office of the Human Research Protection Program and the protocols approved under the governing IRB (#19-001484). Introductory emails for interviews (reproduced in Appendix B) were sent to instructors and departments at representative campuses. A written information sheet (reproduced in Appendix C) was presented, and oral assent was obtained from participants per IRB protocol.

Of the 10 potential participants contacted, five replied. Three were interviewed, and two others agreed to an interview, though could not be scheduled within the needed timeframe. One of the interview participants was an adjunct who had taught a teacher-centered special education course in Southern California condensed for teachers who are working without and Education Specialist Teaching Credential. The second participant was an assistant professor who taught a student-centered general education course in Northern California for pre-service general education and special education credential candidates. The third participant was an assistant professor who taught a balanced special education course in Central California for pre-service special education credential candidates. All were women. Thus, the participants represent a range of theoretical orientations, locales, program types, and candidate characteristics.

Setting

The reading instruction courses for the 22 Education Specialist Instruction credential programs are part of a single overarching institution, California State University. CSU boasts nearly half a million enrolled students (California State University, 2019–2020) including more than 10,000 students in credential programs (California State University, 2018). CSU issued 6000 (36%) of the 16,500 new teaching credentials in California in 2017-2018 (Suckow & Lau, 2019), including 1500 (38%) of the 3900 new special education credentials (California State University, n.d.).

Procedures

Data collection. Data were collected from course documents and interviews.

Course documents. Documents related to the curriculum and instruction of reading instruction courses in CSU special education credential programs were gathered first by searches of publicly available web sources. Campus websites were searched for the presence of special education credential programs, the programs' course requirements, its introductory reading instruction course number, the program housing the course, and the course's catalog description including the number of units. Syllabi were gathered by direct request to instructors, programs, or departments. The sole exception—the syllabus for Blue6[1]—was because the researcher had access from prior association with the program. Requests for syllabi were sent to at least one person at each campus. For those campuses that did not reply with a syllabus, additional requests were made to the same person and, in some instances, to a different person.

Documents gathered in Microsoft Word documents or PDF formats were imported directly into qualitative data analysis software (see Figure 2 for a screenshot). Documents in other text formats were converted to a compatible format before importing. Documents on paper or image format were transcribed in a compatible document format to the extent useful for analysis and then imported. Documents were tracked with program and course information in a Google Sheets spreadsheet.

[1]Courses are masked to preserve anonymity other than for identifying their inclusion in the study. Pseudonyms were assigned as colors corresponding to their theoretical orientation (see Table 10 for a list of pseudonyms).

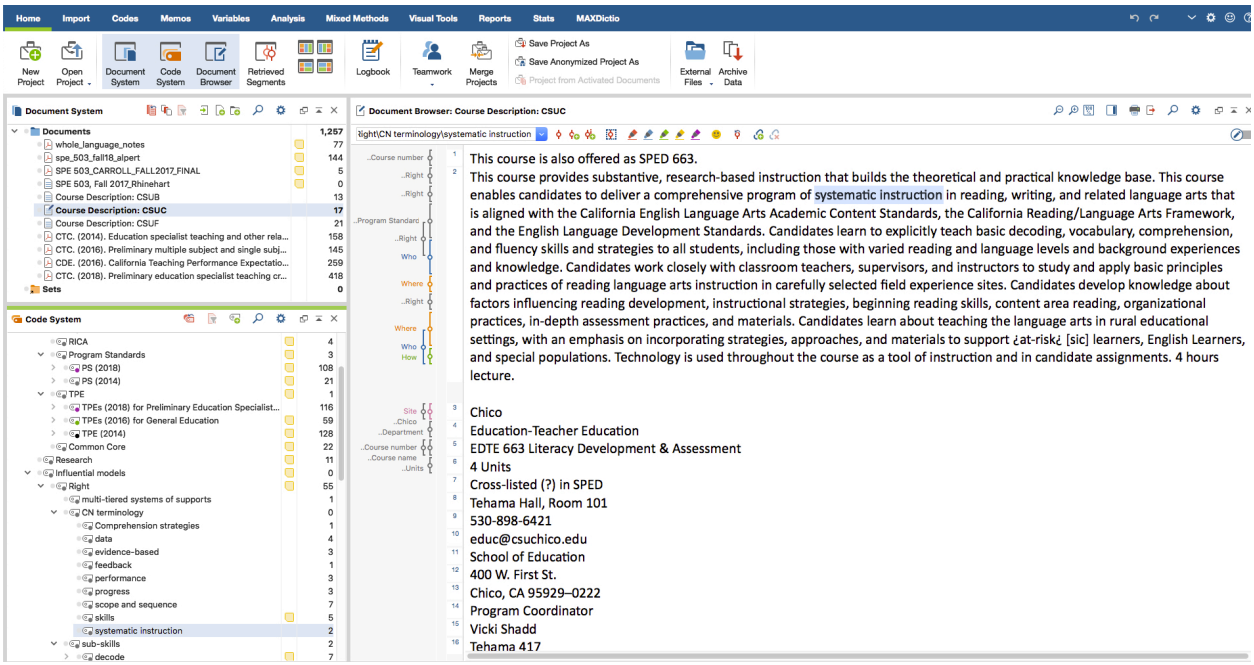


Figure 2. Documents are imported into qualitative data analysis software for coding and analysis.

The response rate varied for courses housed in special education programs compared to courses housed in other programs (but are required for special education credential candidates). Of the 11 courses housed in special educations programs, all 11 syllabi were obtained and analyzed; of the 11 courses housed in other programs, five syllabi were obtained and analyzed but six others were not obtained. The entire period of requesting and receiving syllabi was 18 weeks. The number of requests for syllabi received ranged from one to six with an average 1.75 requests made for each syllabi received.

Interviews. Interviews were semi-structured. Questions were prepared ahead of time (see Appendix D for the outline of the interview) with flexibility for un-planned lines of discussion. The outline of the interviews starts with a professional history

1. the participant's vision of reading
2. the participant's vision of reading instruction
3. how the curriculum was created
4. who else teaches or has taught the course
5. procedures for handing off the class when a lecturer teaches it for the first time

6. the discretion each lecturer has to modify the course

These open-ended questions were followed by a lightning round of brief questions. The lightning round and its scale were modified from the Study of Teacher Preparation in Early Reading Instruction (Salinger et al., 2010), a multi-state survey of schools and credential candidates (see Appendix E for the published protocols). The questions focus on how much each of eight components of literacy were addressed in the course and if it would be more accurate to say candidates learned about that component or learned how to teach that component. Responses were coded as *none, little, moderate,* or *considerable*, and the participants were told so, but they were also told they were free to answer the questions as they saw fit. Interviews concluded with an open-ended offer for the interviewee to say whatever they might wish about the course, reading instruction, or reading in general. They were also asked if there was something they should have been asked that would have better allowed them to express their thoughts their own way.

Interviews were conducted by video conference. Interview participants controlled the extent to which precautions were taken to maintain privacy in the research setting. Interviews were recorded and transcribed. Transcriptions were imported into qualitative data analysis software.

Analysis

To answer the research questions, course documents and interview transcripts were coded and analyzed using MAXQDA (VERBI Software, 2020). MAXQDA is a qualitative data analysis tool designed to facilitate coding, memoing, synthesizing codes into themes, and producing analytical documents. The codebook in Appendix A is one such document produced by MAXQDA from those themes, memos, and codes. It is based on, in this case, analyses of policy-, research-, theory-, and course-related documents.

Qualitative data were collected and analyzed to describe special education reading instruction courses across the 22 CSU campuses with special education credential programs. The primary method was text analysis. Syllabi and course catalog descriptions were analyzed for the courses' curriculum. Syllabi were analyzed also for the courses' instruction. Additionally, semi-structured interviews were conducted and analyzed to provide a fuller picture. Interviews

focused on Research Question 2 and questions raised by or insufficiently answered by the analysis of course documents. Interviews also sought insight into the sources and decision-making behind the courses.

The theoretical thematic analysis followed a six-step process: "Familiarizing yourself with your data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, producing the report" (Braun & Clarke, 2006, p. 87). Texts associated with the reading wars plus two broad frameworks found in preliminary coding were the sources of *a priori* themes and the starting points for further analyses of course documents and interview transcripts. Initial themes were further developed in iterative cycles: texts were coded, synthesized into themes, and codes and themes were revised while coding subsequent texts and re-coding previously coded texts.

To answer Research Question 1, course documents were analyzed for indications of curriculum. Analyses began with the initial themes reflecting the policy, research, and theory contexts of courses. Additional codes and themes were sought to further describe the curriculum for each course (see Figure for an illustration of the coding scheme). That is, words, phrases, and passages in syllabi and university course catalog descriptions were coded as they described the content of the course and those codes were synthesized into themes. As with initial analyses, the coding and theme development were iterative.

Text answers a research question	Text states (or coder infers) an influence	Coder attributes a theoretical orientation to text
Curriculum (Phonemic Awareness)	Research	Teacher-centered
Curriculum (Three-cuing)	Theory	Student-centered
Instruction (RICA activity)	Policy	Balanced
Instruction (Article)	Undetermined	Undetermined

Figure 3. The coding scheme resulted in three-level codes: Text relevant to Research Question 1 or 2, the evident or inferred source of the influence for that text, and the theoretical orientation the coder attributes to that text.

Consider as an example this passage outlining Session 2 from Purple5's syllabus:

Topic: Beginning Reading

- Chapter Discussion:
    1. What six areas must teachers be proficient to foster reading instruction?
    2. What role do you play in constructing student learning/reading?
    3. Describe Roshenshine's variables of academic success related to direct instruction.
    4. What were the findings of the National Reading Panel? What is the impact of the findings on literacy instruction?
    5. Many comprehensive core reading programs will need modifications to meet the needs of at-risk students. List six common problems that will require modification.
- Class Lecture: Effective Reading Instruction
- In-class Activity: Acadience Learning (formerly DIBELS Next) Overview and structure
- Assigned Reading: Chapters 1-3

To describe Session 2's curriculum, *Lines 1* and *2* were coded "teaching" for "foster" and "constructing"; *Line 3* was coded "method" for "direct instruction"; *Line 4* was coded "research" for NRP and "teaching" for "instruction"; *Line 5* was coded "differentiation" for "modification"; the lecture was coded "teaching" for "instruction"; and the activity was coded "assessing" for "Acadience." To describe the instruction, "Chapter Discussion" and its subpoints were coded "discussion"; the lecture was coded "lecture"; the in-class activity was coded "activity"; and the assigned reading was coded "textbook." Next, the source of influence for Session 2 was coded "research" due primarily to the reference to NRP. And finally, the theoretical orientation of Session 2 was inferred to be "teacher-centered" due to the references to NRP, direct instruction, and Acadience Learning, and despite the use of the more student-centered terms "foster" and "constructing."

After coding all of the syllabi, the evidence and its coding were synthesized to describe the range and trends of curricular and instructional decisions made among the courses and to describe the courses as a whole.

To answer Research Question 2, course documents and interview transcripts were analyzed for indications of instructional strategies, methods, and materials. As with analyses of curriculum, analyses of instruction began with the initial themes reflecting the policy, research, and theory contexts of courses. That is, words, phrases, and passages in those documents were coded iteratively for indicators of instruction—the methods used to teach the curriculum.

To inform typology, course documents and transcripts were coded for themes that emerged in preliminary and subsequent analyses. For example, data were analyzed in terms of policy. That is, elements and passages from course documents or transcripts were coded for typology as they refer to or reflect California Credential Program Standards, Common Core, RICA, and related documents. Data were analyzed in terms of research, theory, and other emerging themes. Thus, data were coded for typology as they refer to or reflect extant themes.

Final analyses focused on analytic generalization. That is, in the interest of external validity, analyses were in terms of processes, principles, or constructs applicable to these courses and programs and generalizable to other special education credential courses and programs.

Reliability. Transparency is the key to reliability, as Yin (2018) emphasizes, and documentation is the key to transparency. This study therefore maintained clear records of evidence, their sources, their uses, and their contributions to findings.

The author was the primary coder. A second coder was used for a subset of the evidence. The second coder was recruited for her extensive experience with reading instruction and her familiarity with reading theory. The second coder reviewed the codebook and syllabi before re-coding. The primary and second coder independently and jointly re-coded four of the 16 available syllabi. Among attributes coded were the theoretical orientation of the text and source of influence on the text. For every portion of text, we compared decisions about whether the text should be coded and, if so, with which codes. Likewise, for each syllabus as a whole, we compared decisions on what theoretical orientation to attribute and what primary influence was evident. Differences were discussed when encountered. Differences that were not resolved quickly were noted and reconsidered after the remainder of the syllabus was reviewed. We calculated reliability on independent codes and resolved any differences by consensus codes.

Inter-rater reliability (IRR) of coding for influence and theoretical orientation was

calculated as percent agreement of coding of the 25% of syllabi coded by both the primary and second coder. The following IRR formula was used:
$IRR = (number of agreements \div total number of agreements + disagreements) \times 100\%$. Differences that were not resolved were counted as disagreements. Where there were disagreements, consensus codes were used in analysis. In the one instance that was not resolved, the first coder's code was used in analysis. The inter-rater reliability for this study was established at 98%.

Findings

Seven themes emerged in the 16 syllabi and three interviews analyzed in this study. The themes are

1. Reading as a construct made of component parts
2. Reading as a part of a larger whole
3. Teaching as a cyclical alignment of assessment, planning, instruction, progress monitoring, and reflection
4. RICA as an organizing policy for course goals and outlines
5. RICA as a source of course materials and assignments
6. Balance as a theoretical value
7. Distinguishing between learning about reading, learning about teaching reading, and learning to teach reading

The first four themes are discussed as they pertain to Research Question 1, curriculum. Those themes are reading as a construct made of component parts; reading as part of a larger whole; teaching as a cyclical alignment of assessment, planning, instruction, progress monitoring, and reflection; and RICA as an organizing policy for course goals and outlines. The fifth and sixth themes are discussed as they pertain to Research Question 2, instruction. Those themes are RICA as a source of course materials and assignments; and distinguishing between learning about reading, learning about teaching reading, and learning to teach reading. The theme of balance as

a theoretical value will be discussed separately, as it transcended both research questions as a matter of theoretical orientation (see Figure 4 for an illustration of the codes, subthemes, and themes).

Relevant to ...	Themes	Examples of Subthemes	Examples of Codes
Research Question 1	Reading as a construct made of component parts	decoding	phonemic awareness
		comprehension	vocabulary
	Reading as part of a larger whole	reading as part of literacy	writing
		reading as part of other academics	related fields
	Teaching as a cyclical alignment of assessment, planning, instruction, progress monitoring, and reflection	assessing	for instruction
		assessing	informal reading inventory
Research Question 2	RICA as an organizing policy for course goals and outlines	policy	RICA
		topic	RICA
	RICA as a source of course materials and assignments	assessment	RICA
		read	RICA
Transcending Research Questions	Distinguishing between learning about reading, learning about teaching reading, and learning to teach reading		practicum
			present
			lecture
	Balance as a theoretical value	theoretical orientation	student-centered
			teacher-centered

Figure 4. Codes, themes, and subthemes that emerged in the analysis

The findings reported focus on course outlines, assignments, readings, and assessments from syllabi. The findings were triangulated with the analysis of interviews that provided a more

in-depth view of what was presented in the syllabi. Analyses excluded course descriptions and other front matter—mission and vision statements, student learning outcomes, and the like—found in syllabi except where otherwise stated.

Research Question 1: Curriculum

The first research question asked, what is taught in initial reading instruction courses taken by special education credential candidates? The variations in curriculum largely included reading and writing instruction and assessment. The four themes that emerged from analysis of curriculum are presented below.

Reading as a construct made of component parts. Most courses described reading in terms of component parts much as is found in NRP and RICA (see Table 8 for a partial list of components and their relations to NRP, RICA, foundational skills, and comprehension). The set of components was not universal, but all of the syllabi described components to some extent. The prominence to which they presented each component varied (see Table 9 for evaluations of component focus). Phonological awareness, for example, got varied treatment in the courses in which it is addressed. Blue2 and Purple5 featured it in their readings, their classroom activities, and their assignments. Blue7 and Purple6 mentioned phonological awareness only in their front matter. Red1 was unique in that it made no mention of phonological awareness or phonics. Thus, while the set of components is not universal, all of the syllabi described components of reading.

Reading as a part of a larger whole. All of the syllabi situated reading as part of something bigger, at least in their front matter. All of the syllabi except for Purple6 situated reading as part of language arts, that is, some combination of listening, speaking, reading, and writing. In addition to language arts, courses commonly described reading as part of some other facet of education, culture, or family life. Tying reading to broader literacy, including technological literacy, was common, as was tying reading to other academic content areas.

Purple6's syllabus had the best examples of tying reading to other academics. They assigned three content area lesson plans using principles from universal design for learning (UDL). The first was a math lesson based on a case study scenario describing a general education class with a student with learning disabilities. The lesson required "the UDL principle *representation*

embedded to address learning standards, instructional goals, planning, materials, and evaluation of learning in Math and Literacy content." The second was similar but was for a science lesson plan and the UDL principle *expression*. The third lesson plan was different and was what made this focus on content areas special. The syllabus dedicated two class periods to collaborative lesson planning with credential candidates from a general education social studies methods course. Small groups wrote a "lesson plan to engage and support students with special needs through incorporating the principles of Universal Design for Learning (UDL), formative assessment, and differentiated instruction." Beyond academics, Purple1's "sociocultural and politically conscious framework" was evident throughout the syllabus. One of its required readings emphasized diversity; multicultural resources were prominent in its recommended website list; the class topic for Week 4 was "Organizing Balanced & Comprehensive Culturally Sustaining Literacy Instruction"; a requirement for the Writing Unit assignment was "Unit integrates culturally and linguistically sustaining pedagogy (reflects attention to students' backgrounds/ interests/experiences and languages)"; and a requirement for the Lesson Plan assignment was "The lesson plan reflects appropriate scaffolding accommodations, and consideration of needs of culturally and linguistically diverse students and students with special learning plans (e.g. 504, IEP)."

The broadest view of literacy came in an interview with the associate professor who keeps[2] Red2's course. She described "literacy at large" as an effort "to make meaning and to better understand ourselves and each other in the world, to understand the messages that have been crafted by authors or creators or song writers or whomever is putting their, you know, is expressing something that they're putting out into the world."

Teaching as a cyclical alignment of assessment, planning, instruction, progress monitoring, and reflection. General instructional practices applied to reading were common curricular topics, while reading-specific instructional practices such as repeated reading or mapping story grammar were not. A theme that emerged in many syllabi was "teaching in a cycle." This theme was comprised of several sub-themes that comprised the cycle: "assessment,"

[2] *Keep* is a term two interview participants used to describe their role as being responsible for assuring the course complies with their program's policies. For example, if the program specified that their course would address TPE 3.1, it would be their responsibility to design lessons that address it and to assure that it is in fact addressed whether they teach it or supervise others who teach it.

including the codes of initial screening and placement assessments, "planning," including the codes of goals and lesson planning that were based on the initial assessments, subtheme of "teaching," "formative assessments" for progress monitoring, and lessons based on those formative assessments. The fullest and most explicit example of this was laid out Blue6's Assessment and Instruction signature assignment, used below to illustrate four of the elements of the cycle (see Figure 5 for an illustration of the structure of codes, subthemes, and themes).

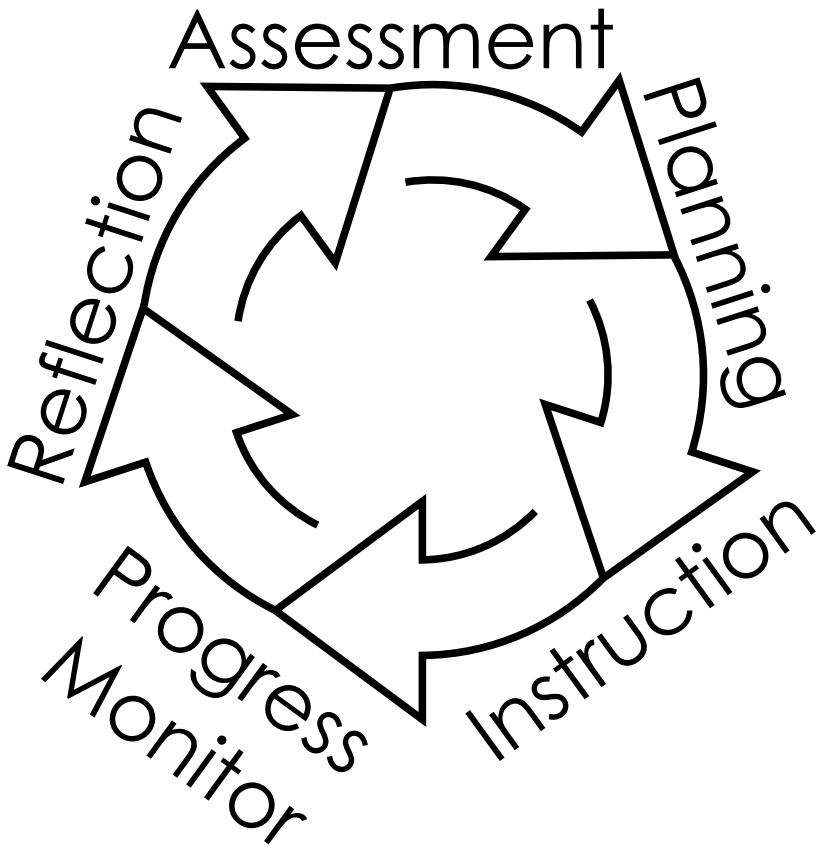


Figure 5. The teaching cycle aligns an initial assessment, planning, instruction, progress monitoring, and reflection as an iterative process.

Assessment. Assessment was referenced in all 16 syllabi. Assessments were commonly part of case study signature assignments, and were generally used to guide lesson planning. Blue6's was typical in that it required an analysis that specifies the student's strengths and an educational need that can be met with a subsequent lesson (see Figure 6 for an example from Blue6).

Part 2: Assessing
Provide a copy of the actual student assessment (please mask the name). Provide a 3-4 paragraph summary and analysis of results. Assessment included curriculum-based assessments, running records, and informal reading inventories.

- Assess ONE Kindergarten or 1st grade student using ONE developmentally appropriate assessment tool and analyze the results of the assessment in a narrative.
- What information did this assessment give you about the child's reading in terms of strengths and weaknesses?
- What does the student know, and not know?
- What evidence (students' behaviors and responses) supports this information?
- Synthesize the results. Overall, what where [*sic*] the strengths and weaknesses?
- Provide a copy of the student assessment (please mask the name) and your analysis.
- Choose ONE identified need from the assessment to plan your lesson.

Figure 6. Assessment. Blue6's case study's assessment requirement includes an analysis that produces one need that can be addressed in subsequent lessons.

Instructional Planning. Planning was found in each syllabus, though for Blue5, it was mentioned only in the front matter. Blue6's case study's planning requirement does not specify the lesson format, but it does tie the lesson to the prior assessment, Common Core, a subsequent formative assessment, differentiation, and reflection (see Figure 7 for an example from Blue6).

Instruction. Instruction in the teaching cycle is based on a plan which was based on an analysis of the assessment. Blue6's case study assignment is actually two assignments. One is to teach phonemic awareness or phonics. The other is to teach reading comprehension. More on the *how* of instruction in Research Question 2 Findings. Blue6's case study assignment does not elaborate on instruction. It merely directs candidates to implement their lesson plan "if possible." Purple5's Demonstration Field Testing assignment is more detailed and provides a better illustration (see Figure 8 for an example from Purple5).

Progress Monitoring. Twelve syllabi referred to progress monitoring—ongoing formative assessments that guide lesson planning. Most were session topics with little elaboration. Blue6's emphasized formative assessments that align with the student's needs and the lesson's goals and also provides guiding information for subsequent planning (see Figure 9 for an example

Part 3: Planning & Discussion
Provide a Lesson Plan using a Blue6 format, or your own school's format (1-3+ pages) Provide 5-6 paragraphs of discussion, including citing high-quality published work. Lesson Plan (1-3+pages):

- Choose a setting for your planned lesson (whole class, small group, one-on-one) and develop a standards-based reading lesson plan using the Blue6 format or one from your school.
- Create an original differentiated lesson plan based on the results from the assessment.
- If you must use an adopted program, the lesson must include enhancements in the engagement, instructional sequence and application. If you are adapting a lesson, include the source of the original lesson plan. It must be written in your own personal style and indicate accommodations for English Learners and students with special needs.
- Lesson Plan must provide a way to collect student work (outcome measure) that can provide evidence for this student's understanding of the standards you would be covering in the lesson. In Part 4 you will create a rubric or criteria chart to analyze students' performance with respect to the standards/objectives.

Discussion (4-5 paragraphs):

- Describe/explain why you designed the lesson the way you did. Make sure that you talk about how your lesson is based on current research/best practices in reading. Cite at least 3 reading researchers and recent research studies. Connect everything to the assessment, standards, and the needs of the student. How did the sequence of activities align with the standards? When you think about the needs of the student, think about their language, developmental levels, interests, and learning styles.
- Remember to include how you might consider the proficiency levels of the student as an English Learners and/or student with special needs when you design your lesson.

Figure 7. Planning. Blue6's case study's planning requirement includes an original lesson, accommodations, and measurable student outcomes.

from Blue6).

Reflecting. Twelve of the 16 syllabi refer to written reflections in their lessons. Those that elaborated on what was required for a reflection varied widely. Blue6's case study assignment's reflection required responses to questions about the success of the lesson and what the candidate learned from it (see Figure 10 for an example from Blue6).

Although Blue6's syllabus was the most complete and explicit exemplar of the theme "Teaching as a cyclical alignment of assessment, planning, instruction, progress monitoring, and reflection," it was also an example of how incomplete the descriptions of its component subthemes and codes were in the syllabi. The syllabus is not the place to find descriptions of every important

You are to teach and video record a 15-minute teaching lesson to students with special needs in an inclusive class, resource center, or self-contained class. You will use a co-teaching model between two teachers who will share the responsibility of the following tasks:

- teaching content,
- attending to student's needs,
- asking guiding questions without giving away the answers,
- modeling how to ask higher-level thinking questions,
- modeling "think aloud", and
- use UDL-embedded strategy to provide the SWDs and Els a meaningful access to the content.

SWDs is defined elsewhere as "students with disabilities." *Els* is defined elsewhere as "English learners," or students in an English language class whose home language is not English.

Figure 8. Instruction. Purple5's Demonstration Field Testing assignment is the culmination of a series of planning and teaching exercises. It requires co-teaching a brief reading comprehension lesson that includes UDL principles.

element of the curriculum, but alignment, in particular, stood out as needing more clarity than the syllabi provided.

RICA as an organizing policy for course goals and outlines. Of all the sources found in this analysis, most evident influence on syllabi came from a single policy, RICA (*Reading Instruction Competence Assessment (RICA) Content Specifications*, 2009). Much of the curriculum was explicitly informed by RICA. All but three of the syllabi—Purple3, Blue8, and Purple5—mentioned RICA.

Purple2 said in its course description and student learning outcomes that it prepares students to pass the RICA examination. One of its learning outcomes was for students to "Acquire an in-depth knowledge of RICA domains that are correlated to the teaching of reading and writing." Additionally, it devotes its two signature assignments and an additional assignment to RICA-style case studies. Every session of Blue1's course outline included RICA. A homework module consisting of "a variety of readings and activities related to language arts instruction ... [that include] identifying examples of instruction related to RICA areas" were due each session starting on Session 1. Assignments due the final session included "review for rica." Additionally, its required texts include a RICA test preparation book and RICA Content Specifications (*Reading Instruction Competence Assessment (RICA) Content Specifications*, 2009).

Part 4: Assessment (Evaluating the outcomes of your lesson)
One page for the rubric and sample of the outcome measure (if possible), and 2-3 paragraphs to describe it. The Assessment of Student Learning illustrates how you diagnose student mastery and ongoing student learning needs through your analysis of student work. It provides evidence of your ability to 1) select or create an assessment tool and criteria that are aligned with the learning outcomes of your lesson; 2) analyze student performance on an assessment in relation to student needs and the identified learning objectives; 3) provide feedback to students; and 4) use the analysis to identify next steps in instruction for the whole class and individual students.

- Create a rubric or criteria chart that connects to the objectives of the lesson. The rubric or chart should detail differences in student performance in order to see patterns of achievement or patterns of misunderstanding.

Figure 9. Progress Monitoring. Blue6's case study's progress monitoring requires an assessment of performance on the lesson objectives that reveal patterns of performance.

Part 5: Reflecting
Provide a 2-3 paragraph reflection. Think back on the assessment, planning, and (if possible) implementation of the lesson. How do you know if you were successful? How did you know if the student met the learning outcome? What would you do differently next time? What new knowledge have you constructed about the students and about your teaching?

Figure 10. Reflecting. Blue6's case study's reflecting requirement had candidates think back, think ahead, and consider what was learned.

Purple2's course outline did not follow RICA domains. Rather, it followed NRP's components. Blue6's outline followed RICA's domains almost exclusively. Purple4's did, too, though RICA domains were a smaller portion than in Blue6's.

Influence on curriculum from policy, research, and theory. Analysis included coding for three sources of influence on curriculum: policy, research, and theory.

Policy. In addition to RICA, syllabi were influenced by a wide variety of policies, some of which came under the rubric of the Individuals with Disabilities Education Act (IDEA, *Individuals with Disabilities Education Act*, 2004), the federal law that establishes special education, including its categorical disabilities. However, most of the policies that influenced the courses were products of California Department of Education, the Commission on Teaching in particular. Program Standards and TPEs (Commission on Teacher Credentialing, 2016, 2018b) addressed by the courses were often detailed in the front matter. K–12 content standards and frameworks were common readings, though rarely required readings. These include *English Language Arts/English Language Development Framework for California Public Schools:*

Kindergarten Through Grade Twelve (California State Board of Education, 2015), Common Core (California State Board of Education, 2013), *California Dyslexia Guidelines* (California Department of Education, 2017), *California Arts Standards for Public Schools: Prekindergarten Through Grade Twelve* (California Department of Education, 2019a), *California English Language Development Standards: Kindergarten Through Grade 12* (English Learner Support Division, California Department of Education, 2012), and the superannuated English-Language Arts Content Standards, Reading/Language Arts Framework for California (California Department of Education, 1997).

While no other policy had as much evident influence on curriculum as RICA did, the associate professor who keeps and teaches Purple5's course explained how other policies might have had significant influence behind the scenes. She described the effect of TPEs on course curricula throughout the program in this exchange about the discretion she had to shape her course:

> Professor: Of course, there are the gods and goddesses of CTC. So they dictate what's the boundary. They actually draw up gigantic parameters. . . . So we have to chunk it, say, "OK, this course should adopt this skill. That class should adopt that." So we, as the course keepers, we adopt what things should be [in the bubble of our course]. I need to deliver what I promise is in that bubble. If I teach more, that's fine. But I cannot teach less than I promise. Otherwise, there will be a gaping hole in our program. So that's our . . . You ask me, how [much] flexibility do I have? I say, I have limited flexibility because I need to understand my role in the greater scheme.
>
> Interviewer: These are based on program standards? TPEs?
>
> Professor: Yes, yes. TPE, yes . . .

So, while TPEs and other policies make few appearance outside front matter and optional readings, their effects on the courses may be significant without being apparent in the syllabus.

Research. The influence of research was evident in 15 of 16 syllabi. The influence of research was not evident in one course for which the syllabus was analyzed, Purple3, which had an overall balanced approach. Blue1's reference to research was in its front matter only. Blue1

had an overall teacher-centered approach. General references to research-based or evidence-based instruction or assessment were common, especially in portfolio and case study assignments. Purple6 was more specific, requiring candidates "Recommend research based instructional intervention(s)" in its Literacy Case Study assignment assessment report (see Figure 11 for Purple6's research-based requirement).

Your task is to familiarize yourself with the websites listed below and choose an intervention with moderate to strong evidence of effectiveness that may support your target student's literacy learning...

- What Works Clearinghouse, (https://ies.ed.gov/ncee/wwc/)
- Best Evidence Encyclopedia, (http://www.bestevidence.org)
- Promising Practices Network, (http://www.promisingpractices.net)
- Center on Response to Intervention (http://www.rti4success.org/instructiontools)

Figure 11. Purple6's Literacy Case Study assignment assessment report required research-based intervention recommendations.

Thus candidates at Purple6 were to search reliable sources of research-based interventions and choose one of the interventions based on their student's needs.

Theory. Curriculum came in a range of theoretical orientations from student-centered to teacher-centered with little theoretical orthodoxy and several flavors of balance. For example, Red2's syllabus was decidedly student-centered. It pointed to language as the heart of teaching and learning, reading and writing workshops as instruction, mentor texts to teach phonics, miscue analysis and kid watching for assessment, and, above all, the centrality of meaning-making in reading. Blue4's course was clearly teacher-centered, influenced by direct instruction and NRP's component model of reading. It cited NRP early, gave each of its five components a week or more of class time, and addressed "strategic, explicit teaching." Most courses struck some sort of balance. Perhaps the best example was Purple5's. It cited NRP early, addressed its components at a finer-grained level than other examined syllabi and featured direct instruction and data-based progress monitoring, all indicating a teacher-centered approach to reading. But it also featured more student-centered curriculum and instruction such as literature-based lessons, mini-lessons, and methods for promoting students' construction of meaning. Similarly, where a strictly teacher-based course would have a signature assignment that features direct instruction, Purple5

had candidates co-teaching comprehension mini-lessons in placement classrooms. Together, the teacher-centered and student-center elements amount to a balanced approach to teaching reading.

This leads to the four themes for curriculum:

1. Reading as a construct made of component parts
2. Reading as a part of a larger whole
3. Teaching as a cyclical alignment of assessment, planning, instruction, progress monitoring, and reflection
4. RICA as an organizing policy for course goals and outlines

Research Question 2: Instruction

The second research question asked, by what means is the curriculum taught in initial reading instruction courses taken by special education credential candidates? Analysis of instruction indicates a rich blend of methods. Readings from textbooks and articles were common, as were writing assignments that focused on lesson planning or reflections on readings or major assignments. Those major assignments included practicums in which candidates typically recruited a K–12 student, assessed the student, planned a lesson, unit, or treatment based on that assessment, and, for some, taught the lesson to the student and assessed their progress. Two themes emerged from analysis of instruction regarding the role of RICA in instruction and the nature of what is being taught.

RICA as a source of course materials and assignments. Analysis included coding for three sources of influence on instruction: research, policy, and theory. Courses were influenced by a wide variety of policies, most of them specifically products of California Department of Education and the Commission on Teaching. With one exception, the influence of policy on instruction was limited to readings and requirements for using standards in some lesson plans.

The exception was RICA, which influenced readings, writings, projects, and exams. Many listed a RICA test preparation book such as *Ready for RICA* (Zarrillo, 2017) as required or recommended reading. Instruction also included RICA-style case studies, such as Purple2' Rica [*sic*] Case Study assignment. Eight syllabi had RICA practice exams as assignments or exams

including Blue5, which dedicated Week 11 to RICA's multiple choice section, Week 12 to RICA's essay section, and Week 13 to RICA's case study section.

Influence on instruction from policy, research, and theory.

Influence on instruction from research. Little direct evidence of research's influence on instruction appeared in these syllabi.

Unique among the syllabi analyzed in this study, portions of Purple5's course were part of a research project. The research project, called the Demonstration assignment, reduced, recast, and added more modeling, guided practice, and feedback for candidates to what was otherwise a fairly typical case study assignment with planning, teaching, and reflecting. Purple5's Demonstration assignment was mandatory, but candidates were free to choose whether or not to opt in to the research with informed consent.

Influence on instruction from theory. The influence of theory on instruction was less apparent than was the influence of theory on curriculum. Nonetheless, influences could be inferred.

The influence of constructivist pedagogy could be found in the structure of Red2's Diverse Children's Literature Circle Book Groups and Presentation assignment:

> During the course, you will engage in literature circle discussions of a chapter book that you are exp [*sic*] with a small group of your peers. The books read for this assignment will represent a variety of texts that students would interact with either through independent reading, shared or guided reading, or read aloud. You will have the opportunity to choose the book you are most interested in after hearing them described in a "book talk" format. . . . All of the selections will fall into the realistic fiction genre. This is another method of connecting to the lived experience of students, i.e. reading about characters with issues that our students may also face. . . . Each literature circle group will present their novel to the class and engage classmates in an activity related to the text. . . . This presentation may take a variety of forms - skits, artistic activities, games, music, etc. . . . Collaboration and cooperation is essential to making this experience successful. . . .

The social format in which students make meaning from literature, the classroom uses proposed

for the texts, the rationale for the texts chosen, the expression of student-generated knowledge in lively presentation, and the emphasis on choice and collaboration throughout—all of these are familiar from whole language.

Blue6's syllabus had little evidence of theory influencing instruction, but what it had pointed toward teacher-centered pedagogy. The interview with the part-time adjunct professor who taught the course for four years supported that inference. Her description of think-pair-share indicated that the candidates are not the source of knowledge. Rather, the candidates' task was to take knowledge from her and generalize that knowledge when answering a practice question for RICA:

> I give them time after I teach the lesson on vocabulary. They have the PowerPoint, lots of strategies for teaching vocabulary. I give them that RICA short answer question: "OK, you're a teacher, how are you going to teach vocabulary of trees in California," or something like that. Then they have time to work on it independently and time to pair with a person next to them. And then we come together as a class and talk about . . . what is a good strategy? . . . What would be a really good score on the RICA for answering this question? I bought some study books for the RICA and I use some of those practice questions.

The influence of post-positivist pedagogy could be found in the structure of the Purple5 Demonstration assignment. The lesson started in class with modeling, then guided practice with feedback, and finally independent practice. This teacher-centered structure is familiar from direct instruction. The influence of student-centered pedagogy could be found in the same lesson. The topic of the literature-based lesson was language development in terms of listening comprehension, reading comprehension, emotional vocabulary, and "higher-level thinking questions." The techniques candidates are to use include asking guiding questions without giving away answers and modeling thinking aloud. The emphasis on comprehension, language development, and techniques to elicit student thinking and expression put the emphasis on the student as the source of knowledge.

Balance as a theoretical value. Those examples, the wealth of concurring examples, and the absence of contradictory examples in the syllabi may have been sufficient to conclude that

those who designed and taught the courses were influenced by one predominant theory and made a point of having that theory influence their course. However, the interviews told a different story. The interviews told a story of balance.

The associate professor who keeps Red2's student-centered course believes in balance. Asked about her vision of what reading is, she spoke about fusing "the humanities aspect of reading" with the linguistics and brain science:

> So again, the very technical sort of scientific aspects, but also this vehicle for making meaning and sometimes for transformation and liberation and all the things that can come with reading, but . . . literacy at large. But certainly reading as part of that. I think it's pretty fascinating. So, trying to help my students as teachers think about both sides of that. But . . . getting too technical—if we're thinking about word lists and . . . without connecting to literature and messages . . . We want to contextualize it, to say all of our efforts to recognize and identify words and letters and sounds that build . . . phonological awareness . . . It's all an effort to make meaning. All of those things are wrapped up in that. So that's my view of it.

The part-time adjunct professor who taught Blue6's teacher-centered course also paints a picture of balance. Philosophically, she said she is motivated by Paulo Freire and his focus on social justice, a social philosophy associated with student-centered approaches. More directly related to teaching reading, student-centered approaches are represented as much as teacher-centered approaches when asked what students need to learn in a K–12 classroom:

> You are working with a student with some sort of . . . dyslexia or reading challenge, they're also going to be focused on the word-based . . . Even for students that are more typical, they're older students, they are going to be focused on a lot of morphology and learning new words and growing their vocabulary. And then . . . it's also broadly develop a love of reading. There's no possible way we can read enough books—or I can as an ex-English teacher assign all the good books to read—so I want to . . . develop a love of reading in my students. And I hope that the teachers there would do that as well so that . . . they have to be reading independently, they can't just read in class.

The associate professor who teaches the course at Purple5 uses the implementation of direct instruction to illustrate why, in her view, the gulf remains between student-centered and teacher-centered approaches:

> But unfortunately, the disciples of direct instruction oversimplified it. They say, "Here's the script," and they never talk about the *how* and the *why*. They say, "If you can read it you can teach that." And people start cutting corners in the place where they should not cut corners. That's one side. The constructivism, they think, "No you cannot teach language and comprehension using direct instruction." So both sides, they are not talking to each other. And so, that's the point. You need to have people who are well versed in both and try to build a bridge to make it make sense and it is not happening yet.

These affirmations of balance from the professors behind a fundamentally student-centered syllabus, a fundamentally teacher-centered syllabus, and a thoughtfully balanced syllabus all point toward a convergence of values. Those values are embodied in balancing considerations from both sides of the reading wars, though they are not necessarily embodied in a convergence of curriculum or instruction.

Distinguishing between learning about reading, learning about teaching reading, and learning to teach reading. This theme distinguishes instruction that emphasizes a transfer or exchange of information—lectures, readings, discussions, and the like—from instruction that emphasizes praxis, activities, or assignments in which candidates teach or assess reading (Korthagen, 2017a). If a course is teaching phonemic awareness, for example, there is a substantial difference between, on one hand, reading about, writing about, talking about, or listening to lectures about phonemic awareness versus, on the other hand, teaching or assessing phonemic awareness. There is also a broad middle ground that includes either an exchange of information about teaching-related skills or a praxis of teaching-related skills short of reading instruction. Here, that middle ground is referred to as *learning about teaching reading.*

Learning about reading. All of the syllabi addressed reading, per se. Candidates were taught about reading in the same ways they might be taught about history or sociology. Sometimes syllabi specified lectures, such as the nine Red1 listed or Blue6's six PowerPoint

presentations. Other times syllabi specified discussions or readings, but the means of instruction frequently was not specified.

Learning about teaching reading. Syllabi specified some combination of readings, writing assignments, lectures, discussions, projects, and presentations.

Blue7 had candidates present teaching strategies. Red2's Professional Book Club (Writing Focus) assignment culminated in presentations. It used readings, discussions about those readings, and presentations arising from those discussions to teach about teaching writing. The assignment had small groups of candidates "read (outside of class) and discuss (in class)" one of two writing workshop books. The book club culminates in each group's "informal presentation (5 to 7 minutes), [in which] each group will share key points, quotes, and teaching ideas" plus an "overall critique and recommendation" While the topic of the book clubs was writing, the book club was a means of teaching the candidates to use book clubs to teach reading comprehension.

Online modules on reading and teaching reading were in seven syllabi. Blue7, Purple6, and Purple5 used two or three modules from IRIS, a center at Vanderbilt University that produces resources on education-related topics (Center, 2020). Purple4 used CEEDAR's module on RTI, UDL, and direct instruction in lieu of Session 4.[3] The source and nature of Blue1's eight online modules were not stated, but each was associated with readings, activities, and a writing assignment linking the module to RICA. The source and nature of Red2's modules are unclear, though the topics seem to touch on second language learning; critical, visual and other literacies; and RICA. The source of Blue2's family literacy module was not stated.

Purple5 used readings and discussion to teach about teaching reading:

> Topic: Beginning Reading Chapter Discussion:
>
> - What six areas must teachers be proficient to foster reading instruction?
> - What role do you play in constructing student learning/reading?
> - Describe Roshenshine's variables of academic success related to direct instruction.
> - What were the findings of the National Reading Panel? What is the impact of the findings on literacy instruction?

[3]CEEDAR, which stands for "Collaboration for Effective Educator Development, Accountability, and Reform," is a center at University of Florida focused on professional development in the service of students with disabilities.

- Many comprehensive core reading programs will need modifications to meet the needs of at-risk students. List six common problems that will require modification.

The only reading and reading instruction textbook required in more than one syllabus was *Creating Literacy Instruction for All Students* (Gunning, 2020). One version or another of the Gunning textbook was the main text for Blue2, Blue6, Blue3, and Blue5. The book was rated "Core – Acceptable" by National Council on Teacher Quality (NCTQ, National Council on Teacher Quality, n.d.), a research and advocacy organization that rates reading instruction texts. Gunning is largely a teacher-centered text. A RICA test preparation text, Zarrillo (2017), was a required, supplemental, or recommended book for five syllabi: Blue5, Purple1, Blue4, Blue7, and Blue1. NCTQ rated an older edition "Supplemental – Not Acceptable."

The range of instructional methods to teach candidates about teaching reading shows how resourceful these syllabi can be.

Learning to teach reading. The courses taught candidates to teach reading with three categories of instructional methods: practica, in-class demonstrations, or in-class practice activities.

Purple5's practicum had an exceptionally thoughtful design (see Figure 12 for a description). Five additional courses—Blue2, Blue6, Blue3, Purple4, and Purple3—taught candidates to teach reading with practicum assignments. However, it is not clear they taught all candidates to teach reading, except, perhaps, introductory lessons to a subset of skills. The part-time adjunct professor who taught Blue6's course for four years explains why when asked about phonemic awareness:

> Interviewer: So lightning round style, how much phonemic awareness is addressed in this course?
>
> Professor: Moderate, where I spent about two full classes on it. Two out of 10, so a fifth of the course.
>
> Interviewer: Is it more accurate to say that students learned about phonemic awareness or that they learned how to teach it?

> Professor: I would say both, but we didn't spend too much time on [learning to teach] it. On the case study they could've made that something they taught, but if they didn't, then I wouldn't really know for sure that they knew how to teach it.

So even in cases in which a course assigns a practicum, a candidate may not practice teaching skills that are essential for their students' success.

For the candidate's student-teaching placement, candidates taught and video recorded a 15-minute lesson planned with UDL principles, sharing enumerated tasks with a co-teacher. What made it exceptional was the extent to which it provided modeling and guided practice before requiring independent practice. Candidates started with writing a brief reading comprehension lesson plan on an assigned childrens' literature book. Writing began in class with the professor providing modeling and guided practice. At a subsequent session, candidates presented their lesson in small groups. While one candidate presented, the others provided structured positive and corrective feedback. Their second lesson plan was more complex and more technically specific. As with the first, it was presented in small groups and received structured feedback from peers. The last in-class practice added a wrinkle: Pairs of candidates partnered in role-playing the lesson. One partner played the role of teacher and the other played the student whose learner profile they devised together. The partners chose the book and wrote the lesson together. In class, the teacher taught and the student responded with planned partially correct answers to provide the teacher the opportunity to demonstrate specific "high-leverage practices" such as UDL principles, asking guiding questions, and thinking aloud. Their peers again provided structured feedback. Only after these multiple rounds of modeling, planning, practice, and feedback did the candidates plan and teach actual K–12 students. With the co-teaching requirement, even that independent practice was not without support. So, while the Purple5 Demonstration assignment was technically demanding, its demands were taught and practiced with feedback before going live.

Figure 12. The Purple5 Demonstration assignment culminated in an exercise similar to those in the other practicum assignments that taught candidates to teach reading. Unlike others, it provided guided practice with feedback in class before independent practice with K–12 students.

Red1 taught candidates to teach reading with their Lesson Studies assignment. It had small groups collaborate to plan and teach two lessons using "one specific literacy instructional strategy," though the assignment description does not indicate the involvement of K–12 students. Blue1 taught candidates to teach reading with their Literacy Instruction Strategy assignment, in which candidates demonstrate an instructional strategy and write a report on it and the strategies they've seen demonstrated in class.

Whether and by what means other courses taught candidates to teach reading is less clear. Blue7, for example, had a requirement in their Portfolio assignment for "Proposed Practicum & Verification," but there is no indication whether the practicum is otherwise associated with the course. Similarly, Blue5's Week 1 topics include "Reading Camp" but otherwise does not specify

an association with the course. It is possible that there are teaching requirements associated with all of the courses, but the requirements were not found in the syllabi. However, this analysis found at least six syllabi for reading instruction courses did not provide evidence that the course taught candidates to teach reading.

This leads to the two themes for instruction:

1. RICA as a source of teaching materials
2. the distinction between learning about reading, learning about reading instruction, and learning to teach reading

Discussion

A premise of this qualitative descriptive study was that to improve K–12 students' reading statewide, we must have greater knowledge as to how CSUs currently teach teachers to teach reading. This study's primary finding is that in CSU's initial reading instruction courses for special education credential candidates, most CSUs do not teach teachers to teach reading. This finding comes from the theme "distinguishing between learning about reading, learning about teaching reading, and learning to teach reading."

Distinguishing between learning about reading, learning about teaching reading, and learning to teach reading

The three means of teaching candidates to teach reading found in syllabi are practicum, demonstration, and participation. Practicum is the most direct. It is the praxis of teaching reading to one or more K–12 students. Practica that required the entire teaching cycle—assess for baseline, plan, teach, assess for progress, and reflect—were teaching candidates to teach reading. Even where there were shortcuts that bypassed one of the assessments or the reflection, such an assignment was a substantial step in learning to teach reading. Blue7's Strategic Literacy Support Cycle series included readings, in-class overviews, a trial run, debriefing, video recorded teaching, and reviewing videos in class. Their cycle was not described in sufficient detail to know how it compares to the teaching cycle, but clearly it involves teaching reading and candidates are practicing it with K–12 students.

The second means of teaching candidates to teach reading was in classroom demonstrations. Candidates prepared lessons and demonstrated teaching the lesson to their classmates. Blue2 s' Strategy Presentation, Blue3's Group Literature Activity, and Purple4's in-class practice all fit this category. The Purple5 Demonstration assignment fits this category and the practicum. As such, it provides a model for integrating guided practice and independent practice in digestible increments.

The third was participatory. Candidates participated in activities for the course that use the same methods they would use as teachers. Candidates at Red2 and Purple2 participated in book clubs while candidates at Red1 presented posters as book reports. These assignments might be short of teaching reading, but they do provide experience enacting methods the course expects candidates to use when teaching reading.

Practicum, demonstration, and participation are all meaningful incremental steps in teaching candidates to teach reading. Courses that stop short of this are not courses that teach students to teach reading. They are teaching background information.

Teaching as a cyclical alignment of assessment, planning, instruction, progress monitoring, and reflection

It is easy for new teachers to be so overwhelmed with new demands that they can do little more than focus on the lesson they need to teach at the moment. This is all the more true for novice special education teachers (Brownell et al., 2018). Structuring curriculum can help (Jackson & Makarin, 2018). Teachers and students can better manage small lessons grouped into larger units designed to take students from their baseline to their academic goal. This is the logic behind the teaching cycle. The initial assessment places students within the scope and sequence of the curriculum. With the assessment results and the curriculum in mind, the teacher plots out short- and long-term goals. Teachers plan the path to the goal with small lessons within larger units. They assess students' response to each lesson, and those assessments are food for thought as they reflect and plan again.

RICA as an organizing policy for course goals and outlines; RICA as a source of course materials and assignments

Policy makers of 25 years ago may be surprised that RICA is today the source of curriculum and materials for reading instruction courses. There is a visceral aversion in education circles to teaching to the test (Nathaniel, Pendergast, Segool, Saeki, & Ryan, 2016), and yet RICA has taken a prominent place in a prominent course. That aversion is most understandable when the test misses the mark. But when the test is thoughtfully constructed and the content and skills it measures are valuable, the aversion is not well placed. RICA is such a test. Candidates could do worse than having its domains be the organizing principles for a curriculum, as it is in Blue6's syllabus.

As a paper-and-pencil style test, though, RICA has limitations that are ignored only at the risk of failing to teach candidates to teach reading. RICA can test a candidate's knowledge of reading theory, and it can test their analyses of case studies and the propriety of the prescriptions candidates propose from those analyses. But that is not teaching reading (Brownell et al., 2009). The value RICA brings to reading instruction courses risks overshadowing the value of praxis. The disproportionate time spent on practice tests, as in Blue5's syllabus, demonstrates that risk.

A second risk to the prominence of RICA is the extent to which it crowds out research, theory, and other policy influences. Common Core, for example, got short shrift. Common Core is the basis of curriculum and IEP goals teachers are responsible for, but few syllabi mentioned Common Core outside of front matter. Might RICA's topics be addressed as well or better with their research basis rather than framed as items on a test?

Reading as a construct made of component parts; reading as a part of a larger whole

Each syllabus described reading in terms of component parts. There is no reading in an alphabetic language without phonemes, graphemes, words, and the logic that gives them meaning. Syllabi from Blue2 and Blue6 were the only two that showed a strong focus on all five of NRP's components (see Table 9 for evaluations of component focus). On the other hand, Red1, Blue7, and Purple6 made no mention of phonological awareness, a serious oversight for candidates who will teach beginning reading or reading to students who struggle to read (National Reading Panel

& National Institute of Child Health and Human Development, 2000). Likewise, only six of the 16 syllabi documented strong or moderate focus on all five components.

Balance as a theoretical value

The appeal of balance appears to be widespread. A single prevailing definition of balance is not. Eight of the syllabi explicitly espoused a balanced approach or were inferred to represent a balanced approach in their curriculum, instruction, or overall. Two catalog descriptions were explicitly balanced and one more was inferred to be balanced out of the six courses for which a syllabus was not available. Finally, all three interviews depicted balanced approaches to literacy.

The common embrace of balance did not correspond to a common embrace of either curriculum or instruction. Take two of the interviews as a case in point. In one, a constructivist embraces a balanced approach; in another, a post-positivist embraces a balanced approach. Would they agree on an approach to teaching reading, though? As long as the constructivist leans on mentor texts and mini-lessons to teach phonics and the post-positivist leans on direct instruction of comprehension strategies, it is hard to imagine they embrace the same meaning of *phonics* or *comprehension*, let alone *balance*.

Limitations

This study is one attempt at describing the initial reading instruction courses for special education credential candidates as they are today. The response rate difference—100% for special education programs and 50% for other programs—stands out, if for no other reason, for the constraints it put on analysis of the CSU as a whole. It cannot be known how the inclusion of missing syllabi might have affected findings.

While the interviews were generally consistent with the syllabi, it cannot be said that syllabi represent the course in full. They do not, for example, provide detail on coinciding practica. Course documents are not always written by the person who teaches the course, and a course with multiple sections may have curricula or instruction that differ from one section to the next. In fact, the syllabi for Blue2, Blue6, Blue5, and Blue3 have no professor's name attached. At Red2, the associate professor who keeps the course oversees its instructors but no longer

teaches it regularly. When asked who wrote her syllabus, the adjunct professor who taught the course at Blue6 said, "A Committee, some grant that . . . I think whatever grant funded the program. My understanding was that . . . they sent a syllabus along with the grant. It got approved so we needed to use the syllabus . . . ." How was the course handed off to her? The prior adjunct shared materials. The scope of this study does not allow for evaluating the authority and expertise of each name on the syllabi.

The small number of interviews is also a limitation. While they represent a range of theoretical orientations, lacales, program types, and candidate characteristics, they do not represent an exhaustive range. Additional interviews may lead to further insight into the research questions, including more detail on who teaches the course.

Interview participants were selected for their direct knowledge of reading instruction courses required in CSU special education credential programs and the decision-making processes that went into choosing the curriculum and instruction. That is, interview participants knew what was taught, the means by which it was taught, and why those choices were made. Participants were recruited after text analysis resulted in a typology of reading courses. Participants were selected with a preference for knowledge of reading courses that exemplified identified theoretical types: student-centered, teacher-centered, and balanced.

Likewise, this study examined only the initial reading instruction course for each program. This may not represent all of the courses in a program that teach reading instruction. Finally, course documents are not written to be self-evident to a researcher. Interpretation for the purposes of this study was often impossible. As one means of describing how CSUs teach special education candidates to teach reading, though, this study has shown programs' considerable strengths and meaningful needs.

Implications for Teacher Education

While it might be reasonable to expect candidates to learn something important about reading from an exchange of information about reading—an assigned text or lecture or discussion—it would not be reasonable to expect them to learn how to teach reading that way. Nor would we expect candidates to learn how to teach reading exclusively from learning about

teaching reading. If the goal is for candidates to learn how to teach reading, clearly curriculum and instruction must focus on precisely that—teaching teacher candidates to teach reading.

Consider Korthagen's (2017b) argument that teaching behavior is driven more by prior experience than by theory, and that the way a program can shape a teacher's behavior is through guided practice. By that logic, most of the syllabi analyzed in this study are missing an opportunity. The first reading instruction course a candidate takes is a prime opportunity to influence a teacher. Rather than loading up with even the best of theoretical background, candidates would be well served to be taken by the hand into a wading pool of many low-stakes one-to-one assessment and teaching experiences. This would be less overwhelming for them than being thrown into the deep end of a classroom later with a backpack laden with theory. Korthagen's (2017a) *realistic approach* is a practical model for such hand-holding. Just as we would want candidates to set their students up for success, programs can set their candidates up for success with smaller, simpler, and closely mentored teaching experiences early on. Mentored by the program's teacher educator and supported by their community of practice (Brownell, Ross, Colón, & McCallum, 2005), candidates will be better prepared to be more independent by the time they take on more complex classroom experiences. They will also be less susceptible to defaulting to counterproductive practices learned in prior experiences or to being unduly influenced by mentor teachers who may not be sufficiently aligned with the program's curriculum.

Even if a program is correct in their beliefs that the master teachers in their student teaching placements are excellent mentors and are closely aligned to the program's reading goals, that leaves a lot of room for things to go wrong. Because even if the master teacher is aligned with the program, that does not mean the candidates' placement experience is aligned with their program experience. The associate professor who keeps the Red2 course explained that such misalignment was what she found when she was given responsibility to revise the course:

> And so, one of the pieces of student feedback that I guess had been pretty consistent from the old program was that our students always took 463 and then 464 regardless of the grade level placement they were in. So, you could be student teaching in second grade and taking a course about third through six grade or in kindergarten, taking a course about third through six grade and not really, you know . . . Finding yourself in a

> situation where you have to kind a hold onto that knowledge because you're not seeing it directly applied.

A program cannot reasonably expect their candidates to learn the program's curriculum about reading or about teaching reading and hold on to it until they eventually practice teaching reading.

Teachers should expose students to a wide variety of genres and purposes (California State Board of Education, 2013). Similarly, they should take seriously the value of highly varied background information, especially background information from the students' interests and identity groups and groups not as familiar. Referring to Rudine Simms Bishop (Chenoweth, 2019), the lecturer of Blue6's course evoked an apt metaphor for this:

> The purpose of reading is to build, in my opinion, to build empathy for other people's situations. You need to expose the students to a lot of . . . mirrors, where they are reading about themselves and their own culture and also windows and sliding glass doors where you can kind of enter into someone else's life and build empathy for someone that has a different experience from you.

That background information must also come from the academics they will be exposed to in the coming lessons or coming years of school (California State Board of Education, 2013). They should create a language-rich environment in which students do the bulk of the reading, writing, and speaking, but the teacher models purpose and teaches to enriched possibilities of comprehension.

Comprehension, too, should be taught directly. Evidence remains less clear about which strategies, methods, or materials have large effects on language comprehension. This leaves much more room for teachers' judgment about the needs and responses of the students in their classes. That judgment should take seriously such methods as thinking aloud to model problem-solving and meta-cognition, having students ask questions of the text, and asking students higher order questions (Elosúa et al., 2013). Finally, though research is fairly early, there is evidence to support instituting instructional routines akin to O'Connor et al.'s (2019) *Creating Habits That Accelerate Academic Language of Students* as a way to introduce high-value words into students'

working vocabulary for lifelong use.

Teacher educators should teach reading instruction—especially foundational skills—as components that must be taught directly, and systematically, and to mastery. This is the most efficient way to teach decoding to students who are quick to learn to decode, and it is the only reliable way to teach most students to decode before decoding proves to be a barrier to learning (Mathes et al., 2005; National Reading Panel & National Institute of Child Health and Human Development, 2000; Torgesen et al., 2001, 1999).

Teaching as a cyclical alignment of assessment, planning, instruction, progress monitoring, and reflection is a model of instruction teaching programs can use to provide coherence to the many practices of teaching and continuity across topics. Whatever skills a program expects its candidates to learn, the program should be designed to teach those skills. In part, that means baseline assessments, planning more and smaller lessons in a rational scope and sequence based on assessment results and program goals, progress monitoring, and reflection before adjusting the curriculum or instruction.

Even courses that do teach candidates to teach reading should do it more. Purple5's syllabus shows it did a lot and so does Blue7's. Purple4's shows more practice in class than others. It is unclear whether most of the practica come with any modeling or guided practice in the course. To increase the effect the program has on candidates' teachiing, they all should (Korthagen, 2017a, 2017b). It is not currently known what the active ingredients of that practicum would have to be to address the goal of improved K–12 student outcomes, though work from in-service professional development provides some indications (Brownell et al., 2017). Teacher educators are well positioned to do the research necessary to answer such questions, as Purple5's Demonstration assignment attests. Let that be the start of a widespread effort in CSU in pursuit of better practica for better-prepared credential candidates and, therefore, K–12 students who learn how to read better.

Conclusion

This study is one step along the path to better reading outcomes for California's students who receive special education services. The path starts with recognizing the problem, but it does

not end there. The steps from there include further describing what we do now, envisioning what we should be doing, planning for institutional change, and implementing that plan.

The questions out-number the answers at this point: How do other courses teach teacher to teach reading? Do some courses produce better teacher outcomes or K–12 outcomes than others? What are the key ingredients that drive those outcomes? As a system, what is CSU's or California's vision of success? How will we get there? And what roles do teacher educators play in the change? These questions and more are ripe for research.

Whatever answers are found, if California's vision of success is one where K–12 students learn better, read better, and achieve more, then success rests on the collaboration of two groups: CSU leadership at every level, and the cohort of teacher educators who teach candidates to teach reading. Improved teaching is the *sine qua non* of improved reading, and teacher preparation is our best shot at improved teaching. What teacher educators are doing now to prepare teachers is not producing adequate results for California's students receiving special education services. This is neither a revelation nor a condemnation. Every stakeholder wants better results.

So, how does CSU teach special education credential candidates to teach reading? Mostly its many programs teach candidates something about what they need to know to pass RICA, something about one flavor or another of balanced literacy, something about a teaching cycle. Maybe there is a bit of praxis. Maybe there is a student teaching placement where a master teacher teaches the candidate to teach reading, whatever that might mean in a given instance. But on the whole, at least in initial reading courses for special education candidates, the CSU is missing its opportunities teach teachers to teach reading.

Appendices

Table 7

The 22 initial reading courses at CSUs that special education credential candidates generally must take.

Campus	Course	Term	Title
CSUB	EDEL 5100	Fall 2019	Literacy and the Arts for Diverse Learners
CI	EDUC 538	Fall 2019	K–12 Literacy: Multicultural & Multilingual
Chico State	EDTE 663	-	Literacy Development & Assessment
CSUDH	**SPE 503**	Fall 2017	Reading and Language Arts Instruction for K–12 Students with Disabilities
CSUEB	TED 508	-	Curriculum and Instruction: Reading
Fresno	LEE 146	-	Teaching Reading in K–3 Classrooms
CSUF	**SPED 433**	Spring 2020	Language Arts and Reading Instruction in the Public Schools
HSU	**SPED 707**	Fall 2019	Curriculum and Instruction Reading / Language Arts
CSULB	EDEL 452	-	Teaching and Learning Reading, K–8 (RICA)
Cal State LA	**EDSP 4050**	Spring 2019	Instruction to Support Students with Disabilities in Core ELA Curriculum
CSUMB	ED 634	Fall 2020	Literacy for Linguistically Diverse Learners
CSUN	**SPED 406**	Summer 2018**	K–12 Literacy Instruction for Diverse Learners with Disabilities
CPP	EDU 5100	-	Introduction to Literacy Instruction
Sacramento	**EDSP 221**	Spring 2019	Language and Literacy in Inclusive Classrooms II
CSUSB	**ESPE 613**	Winter 2020	Literacy Learning for Students with Disabilities
SDSU	TE 930	Fall 2020	Teaching Reading and Language Arts in the Elementary School
SFSU	**SPED 775**	Spring 2020	Curriculum and Instruction in Elementary Special Education
SJSU	**EDSE 216A**	Spring 2020	Teaching Reading and Language Arts
Cal Poly SLO	EDUC 546	-	Reading and Language Arts Instruction in Special Education
CSUSM	**EDMX 521**	Fall 2019	Elementary Literacy for Education Specialists
SSU	EDMS 463	Fall 2018	Teaching Language and Literacy in the Elementary School
Stanislaus	**EDSE 4210**	Fall 2019	Teaching Reading/ELA in Special Education

Note. Courses housed in special education departments appear in **bold**. - = no syllabus, ** Revision date.

Table 8

Foundational and comprehension components of reading and writing

Component	NRP	RICA	Foundational	Comprehension
Phonological awareness	✓	✓	✓	
Print concepts		✓	✓	
Alphabetic principle		✓	✓	
Phonics	✓	✓	✓	
Spelling		✓	✓	
Sight words		✓	✓	
Fluency	✓	✓	✓	✓
Oral Language		✓	✓	✓
Vocabulary	✓	✓		✓
Comprehension	✓	✓		✓
Writing		✓	✓	✓

Note. Phonological awareness subsumes phonemic awareness. *Foundational* refers to component skills basic to the process of decoding or encoding text. *Comprehension* refers components necessary to understand what is read or, conversely, to write comprehensibly, given adequate foundational skills.

Table 9

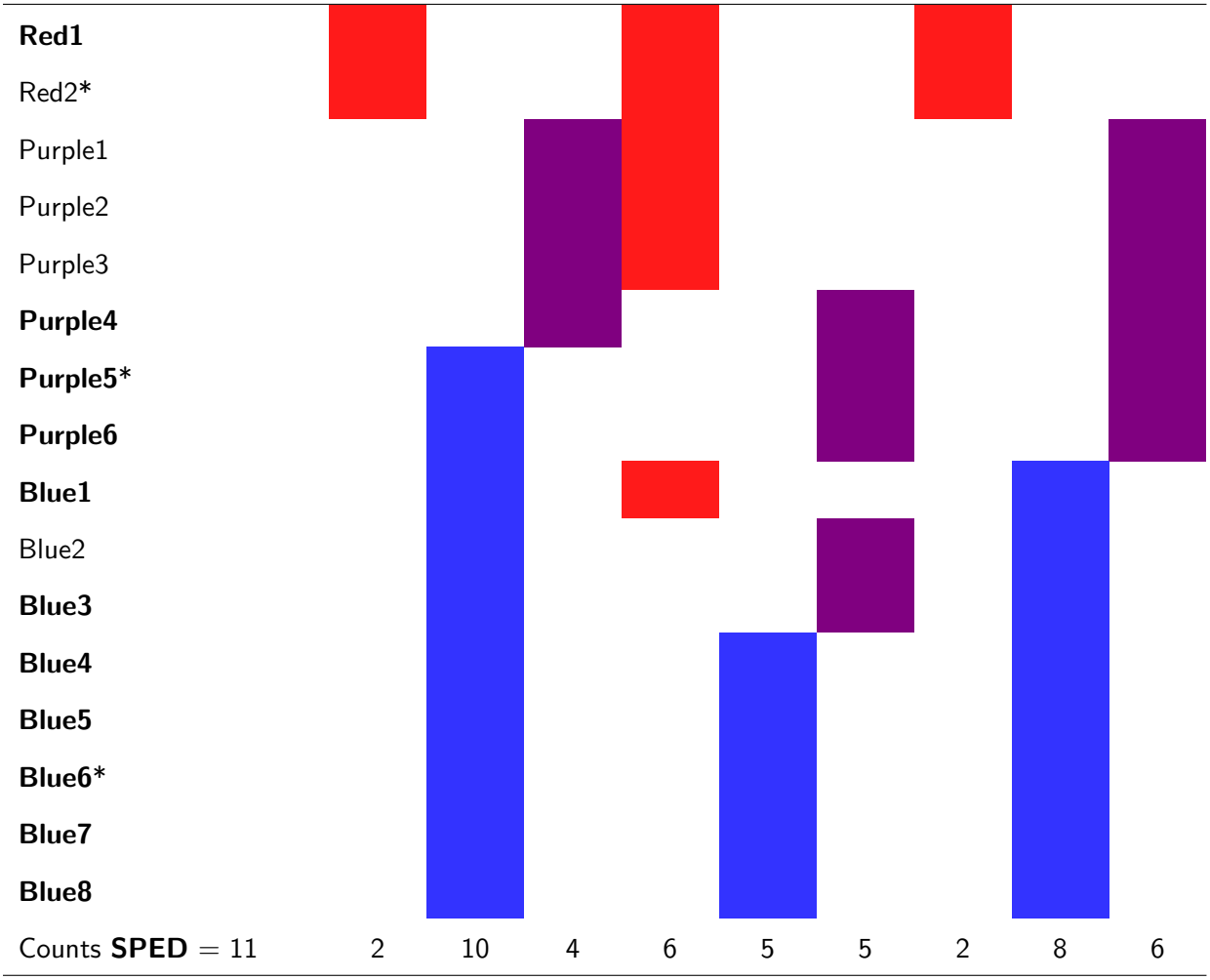
Strength of course focus on NRP components of reading

Component	Phonological awareness	Phonics	Fluency	Vocabulary	Comprehension
Red1	none	none	moderate	strong	strong
Red2*	weak	moderate	weak	weak	weak
Purple1	weak	strong	moderate	strong	strong
Purple2	moderate	strong	strong	strong	strong
Purple3	weak	weak	moderate	weak	weak
Purple4	strong	strong	strong	moderate	strong
Purple5*	strong	strong	moderate	strong	strong
Purple6	none	weak	weak	weak	weak
Blue1	weak	weak	weak	weak	strong
Blue2	strong	strong	strong	strong	strong
Blue3	moderate	moderate	weak	moderate	strong
Blue4	moderate	moderate	weak	moderate	strong
Blue5	moderate	moderate	moderate	moderate	moderate
Blue6*	strong	strong	strong	strong	strong
Blue7	none	weak	none	weak	weak
Blue8	moderate	strong	strong	moderate	strong

Note. Course focus on a component was evaluated on the basis of its prominence in the readings, topics, activities, and assignments. References to a component in frontmatter were disregarded. The scale *weak*, *moderate*, or *strong* follows Salinger et al.'s (2010) survey of pre-service teachers' evaluation of their program's focus on essential components of early reading instruction. As a rule of thumb, focus was deemed moderate here if one class session was dedicated to it. Courses housed in special education departments appear in **bold**.
* = Interviewed.

Table 10

Orientation of courses for curriculum, instruction, and overall



Note. Color coded cells indicate theoretical orientations for courses with an analyzed syllabus. **Red** indicates student-centered curriculum, instruction, or course overall. **Blue** indicates teacher-centered curriculum, instruction, or course overall. **Purple** indicates balanced curriculum, instruction, or course overall. Courses housed in special education departments appear in **bold**.
* = Interviewed.

Appendix A

Codebook

Codebook

Teaching credential candidates to teach reading

December 2020

Code System

- Curriculum
  - language
    - comprehension
      - vocabulary
    - Oral
      - phonemic awareness
    - L2
    - language arts
    - language development
    - literacy
    - morphology
    - text
      - decoding
        - alphabetic principle
        - phonics
        - sight words
        - fluency
      - print concepts
      - Information
      - literature
      - writing
        - spelling
  - assessing

- DIBELS
- for instruction
- diagnose
- Informal Reading Inventory
- portfolio
- teaching
  - planning
  - strategies
    - differentiating
    - independent reading
    - Language Experience Approach
    - MTSS
    - UDL
  - methods
  - materials
  - remediation
- practices

Instruction

- implement
- demonstration
- activity
- assess
  - diagnose
  - observe

- analysis
- IRI
- case study
- discuss
- lecture
- peer
- practicum
- project
- read
  - article
  - policy text
  - textbook
- slides
- speak
- teach
- video
- write
  - professional
  - reflect

Assessment

- exam
- quiz
- write

Influence

policy

English–Language Arts Content

Standards

for California Public

English Language Development

Standards

Reading/Language Arts Framework

for California

Common Core

ELA/ELD Framework

RICA

IDEA

disability

IEP

goals

Program Standards

TPE

undetermined

research

theory

Direction

Related fields

Site

Department

- Not SPED
- SPED

Course Descriptions

- Grade
- Course number
- Course name
- Units

Bakersfield

Channel Islands

Chico

Dominguez Hills

East Bay

Fresno

Fullerton

Humboldt

Long Beach

Los Angeles

Monterey Bay

Northridge

Pomona

Sacramento

San Bernardino

San Diego

San Francisco

San José

San Luis Obispo

San Marcos

Sonoma

Stanislaus

Curriculum

Refers to topics addressed in the course. Does not imply means of addressing them.

For example, "lesson plan" under "Curriculum" means there is a reference to lesson plans as a topic; it does not imply that students read, wrote, discussed, or taught from a lesson plan.

Curriculum >> language

Refers to language or language development as course curriculum

Curriculum >> language >> comprehension

Curriculum >> language >> comprehension >> vocabulary

Lexicon in terms of meaning: semantics. Also, code here for "academic language" because, while that could refer to pragmatics and syntax, it commonly refers to vocabulary.

Often paired with "background knowledge."

Curriculum >> language >> Oral

Curriculum >> language >> Oral >> phonemic awareness

Text refers to phonemic awareness, phonological awareness, or skills associated with them, e.g., segmenting, blending, eliding, etc.

Curriculum >> language >> L2

Curriculum >> language >> language arts

Text refers to language arts in addition to or instead of reading per se. Includes the set of "reading, writing, speaking, and listening".

Curriculum >> language >> language development

Text refers to English Language Development or language development.

Curriculum >> language >> literacy

Text refers to literacy in addition to or instead of reading per se.

Curriculum >> language >> morphology

Curriculum >> language >> text

Used for "literacy rich environment" and the like, even though non-text aspects of literacy might be implied

Curriculum >> language >> text >> decoding

encompassing all skills, knowledge, and processes for converting written language into spoken language

Curriculum >> language >> text >> decoding >> alphabetic principle

Curriculum >> language >> text >> decoding >> phonics

Curriculum >> language >> text >> decoding >> sight words

Text refers to reading by sight, high frequency words, irregular words, word recognition, word identification, or automaticity of these (unless there is evidence in the text that it refers to phonics, analytical decoding, word analysis, or the like)

Curriculum >> language >> text >> decoding >> fluency

Curriculum >> language >> text >> print concepts

Curriculum >> language >> text >> Information

Reference to expository text as teaching material or curriculum of K–12 instruction.

May need to be split for reading in other academic fields, e.g., reading for science

Curriculum >> language >> text >> literature

Reference to literature as teaching material or curriculum of K–12 instruction

Curriculum >> language >> text >> writing

Curriculum >> language >> text >> writing >> spelling

Curriculum >> assessing

Curriculum refers to assessing

Curriculum >> assessing >> DIBELS

Curriculum >> assessing >> for instruction

Refers to assessment leading to instruction or instructional decisions. Includes progress monitoring, formative assessments

Curriculum >> assessing >> diagnose

Refers to diagnosing a student's condition, status, development, or the like

Curriculum >> assessing >> Informal Reading Inventory

Curriculum >> assessing >> portfolio

Curriculum >> teaching

Curriculum refers to teaching

Curriculum >> teaching >> planning

Text refers to planning, organizing, or designing lessons or larger units of curriculum

Curriculum >> teaching >> strategies

Curriculum >> teaching >> strategies >> differentiating

Including accommodations and modifications for curriculum, instruction, and assessment

Curriculum >> teaching >> strategies >> independent reading

Curriculum >> teaching >> strategies >> Language Experience Approach

Curriculum >> teaching >> strategies >> MTSS

Multi-tiered systems of support including RTI

Curriculum >> teaching >> strategies >> UDL

Universal Design for Learning. Multiple means of representation, multiple means of expression, and multiple means of engagement

Curriculum >> teaching >> methods

Instructional methods or techniques

Curriculum >> teaching >> materials

Curriculum >> teaching >> remediation

Curriculum >> practices

Refers to the practice, procedures, or activities of the profession.

Does NOT refer to praxis or practicum or the practice of a lesson.

Instruction

Refers to instructional strategies, methods, materials, or work in the course---the means of addressing the curriculum.

For example, because "lesson plan" under "Instruction" is under "writing", that means that students were to write a lesson plan. It specifies what the students in the class do or experience.

Instruction >> implement

Instruction >> demonstration

Instruction >> activity

Refers to a learning activity

Instruction >> assess

Student assesses someone---typically a case study or classmate

Instruction >> assess >> diagnose

Teacher candidates assess for the purpose of diagnosing the condition of a student (or practice-proxy for a student)

Instruction >> assess >> observe

Refers to observing a student for the purpose of understanding something about the student

Instruction >> assess >> analysis

Coursework has candidate analyze a case study, student work, assessment results, or the like as a means of assessing a student

Instruction >> assess >> IRI

Instruction >> case study

Learn to apply knowledge with a specific case. The case might be a person, or the case might be presented via a text description, video, set of assessment protocols, or the like.

The student would do some combination of describe, assesses, prepare a lesson plan for, and teach the person.

Instruction >> discuss

Instruction >> lecture

The instructor or other (not a teacher candidate) presents a lecture to the candidates

Instruction >> peer

Text refers to students interact with peers in this course (not K--12 students interacting with peers). That would encompass peer-led discussions, work groups, group projects, reading peers' writing, leading a (course work) lesson for peers ...

Instruction >> practicum

Text refers to field experience, praxis, and the like

Instruction >> project

Instruction >> read

Instruction >> read >> article

Instruction >> read >> policy text

Instruction >> read >> textbook

Instruction >> slides

Instruction >> speak

Credential candidate speaks to the class, presents a lecture, leads a discussion, or the like.

Does not include simply participating in discussion.

Instruction >> teach

Student teaches someone a reading lesson---typically a case study or classmate.

This applies only to reading (or related literacy) lessons, not to course work lessons.

Instruction >> video

Refers to credential candidates watching a video (e.g., Youtube). Does not refer to a credential candidate making a video

Instruction >> write

Instruction >> write >> professional

Refers to writing a lesson plan, assessment report, IEP goal, PLoP, or other professional document

Instruction >> write >> reflect

Assessment

Refers to means of assessing students in this course.

Assessment >> exam

Assessment of knowledge and understanding typically more extensive and less frequent than a quiz. E.g., midterm and final. May include forced choice, short answer, and essay questions. Typically proctored.

Assessment >> quiz

Typically brief, periodic assessment of knowledge. Might include assessment of understanding.

Typically uses forced-choice and short answer items.

Assessment >> write

Influence

Influence >> policy

policy

Text refers to (or reference is inclusive of) governmental or institutional policy.

For example, text refers to IDEA, RICA, Program Standards, TPEs, or Common Core.

Influence >> policy >> English–Language Arts Content Standards

for California Public

Pre-cursor (2000) to CCSS

https://www.cde.ca.gov/be/st/ss/documents/elacontentstnds.pdf

Influence >> policy >> English Language Development Standards

California Education Code (EC) Section 60811 requires the State Board of Education to approve standards for English language development (ELD) for pupils whose primary language is a language other than English. These standards shall be comparable in rigor and specificity to the standards for English language arts, mathematics, and science.

ELD Standards Designated–Integrated ELD Integrated ELD Professional Learning Resources Legal Citations

California English Language Development Standards: Kindergarten Through Grade 12

California English Language Development Standards (PDF)

The California English Language Development Standards (CA ELD Standards) amplify the California State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects (ELA/Literacy). English learners need to have a purpose for using language (social function), know how to use the language meaningfully, and know how to access resources to be knowledgeable of language in order to be precise in language use to convey exact meaning.

The CA ELA/Literacy and CA ELD Standards both integrate reading, writing, speaking, listening, and language as expressed in key themes of Meaning Making, Language Development, Effective Expression, Content Knowledge, and Foundational Skills.

The CA ELD Standards support English learners to use English purposefully. They support English learners to use language to interact meaningfully in school and beyond. They also

support English learners to be knowledgeable about English and utilize language as a resource for communicating and learning.

https://www.cde.ca.gov/sp/el/er/eldstandards.asp

Influence >> policy >> Reading/Language Arts Framework for California

Influence >> policy >> Common Core

Text refers to California Common Core State Standards: English Language Arts \& Literacy in History/Social Studies, Science, and Technical Subjects or other Common core standards

Influence >> policy >> ELA/ELD Framework

English Language Arts/English Language Development Framework for California Public Schools: Kindergarten Through Grade Twelve.

Influence >> policy >> RICA

Text refers to Reading Instruction Competence Assessment.

Influence >> policy >> IDEA

Text refers to (or reference is inclusive of) IDEA.

For example, text refers to FAPE, IEPs, LRE, or qualifying disability categories.

Influence >> policy >> IDEA >> disability

Influence >> policy >> IDEA >> IEP

Influence >> policy >> IDEA >> IEP >> goals

Influence >> policy >> Program Standards

Reference to Commission on Teacher Credentialing Preliminary Education Specialist Teaching Credential Program Standards.

Influence >> policy >> TPE

Reference to Commission on Teacher Credentialing Preliminary Education Specialist Teaching Performance Expectations

Influence >> undetermined

Insufficient evidence to determine an influence

Influence >> research

Text refers to research, research-based practices, or evidence-based practices.

For example, text refers to the use of research as the basis for curriculum or instruction.

Alternatively, text refers to specific research or reporting on research (e.g., NRP).

Does not apply to "best practices". Does not apply to students (or others) doing research (unless systematic, i.e., with a specific methodology)

Influence >> theory

Direction

Text refers to (or reference is inclusive of) an influential model or theory of reading instruction or to one of its distinguishing authors, elements, or terms.

For example, text refers to whole language (or Goodman or three-cuing) or direct instruction (or Engelmann or "I do, we do, you do" lesson format).

Related fields

Text refers to (or reference is inclusive of) a field related to but not specifically reading instruction for special education. Alternatively, text refers to one of its distinguishing topics, authors, elements, or terms.

For example, text refers to Piaget, child development, or the concrete operational stage of cognitive development.

Used in second coding as one of the sources of curriculum or instruction

Site

Documents associated with specific campus or institution or location. "Where"

Site >> Department

What department or program lists the course, e.g. "special education" or "elementary education"

Site >> Department >> Not SPED

Refers to a department other than the university's special education department or credential program other than its special education credential program

Site >> Department >> SPED

Refers to university's special education department or special education credential program

Site >> Course Descriptions

Descriptions and related information from university course catalogs

Site >> Course Descriptions >> Grade

Refers to the range of grades the course is intended to prepare candidates for.

That grade range might be K–12, TK–2, elementary, etc.

Site >> Course Descriptions >> Course number

Number of the course, e.g., "SPED 6100"

Site >> Course Descriptions >> Course name

Course catalog name for the course, e.g., "Literacy Arts for Diverse Learners in Special Education"

Site >> Course Descriptions >> Units

Number of units for the course. Semester units unless otherwise specified.

Site >> Bakersfield

Text associated with California State University Bakersfield

Site >> Channel Islands

Text associated with California State University, Channel Islands

Site >> Chico

Text associated with California State University, Chico

Site >> Dominguez Hills

Text associated with California State University, Dominguez Hills

Site >> East Bay

Text associated with California State University, East Bay

Site >> Fresno

Text associated with California State University, Fresno

Site >> Fullerton

Text associated with California State University,

Site >> Humboldt

Text associated with California State University, Humboldt

Site >> Long Beach

Text associated with California State University, Long Beach

Site >> Los Angeles

Text associated with California State University, Los Angeles

Site >> Monterey Bay

Text associated with California State University, Monterey Bay

Site >> Northridge

Text associated with California State University, Northridge

Site >> Pomona

Text associated with California State Polytechnic University, Pomona

Site >> Sacramento

Text associated with California State University, Sacramento

Site >> San Bernardino

Text associated with California State University, San Bernardino

Site >> San Diego

Text associated with San Diego State University

Site >> San Francisco

Text associated with San Francisco California State University

Site >> San José

Text associated with San José State University

Site >> San Luis Obispo

Text associated with California State Polytechnic University, San Luis Obispo

Site >> San Marcos

Text associated with California State University, San Marcos

Site >> Sonoma

Text associated with Sonoma State University

Site >> Stanislaus

Text associated with California State University, Stanislaus

Appendix B

Interview introduction email

From: **HOWARD ALPERT** howalpert@g.ucla.edu
Subject: Interview for Study of Reading Instruction Courses
Date: August 22, 2019 at 6:54 PM
To: prospective participant (null)
Cc: Jennie Grammer grammer@ucla.edu

HA

Dear (prospective participant)

You were selected as a possible participant in this study of reading instruction courses in CSU special education credential programs because of your knowledge of (specific course at specific CSU campus). Your participation in this research study is voluntary.

The purpose of this study will be to describe (1) the content taught and (2) how that content is taught in reading instruction courses systemwide.

Your participation in the study would entail an interview. I will ask about the development, content, and instruction of (specific course at specific CSU). You may answer or decline to answer any or all questions and may withdraw from the study at any time without repercussions. Your knowledge and experience would be an important source of data.

An information sheet is attached, and I will gladly answer any questions you have. Please reply to this email or call or text me at 310-713-6744.

Many thanks,

How Alpert
Special Education

UCLA

Joint Doctoral Student
Graduate School of Education and Information Studies, UCLA
Charter College of Education, CSULA

Reading_Course
_Study...eet.pdf

Appendix C

Interview information sheet

UNIVERSITY OF CALIFORNIA LOS ANGELES

STUDY INFORMATION SHEET

Teaching teacher candidates to teach reading: What California State University special education credential programs do and how they do it

How Alpert and Jennie Grammer, PhD, from the Department of Education at the University of California, Los Angeles (UCLA) are conducting a research study.

You were selected as a possible participant in this study because you are a stakeholder in reading instruction courses in California State University (CSU) special education credential programs. Your participation in this research study is voluntary.

Why is this study being done?
The purpose of this case study will be to describe (1) the content taught and (2) how that content is taught in reading instruction courses at CSU special education credential programs.

What will happen if I take part in this research study?
If you volunteer to participate in this study, the researcher will ask you to do the following:

- Share your knowledge on the development and design of a reading instruction course in a CSU special education credential program.
- Be interviewed to share this knowledge.
- Recordings are a part of the research. You may review, edit, and erase the recordings of your research participation.
- Your name, phone number, email address, and other identifying information may be recorded. Confidentiality will be maintained. Any request for anonymity will be respected.
- Your data will be to be stored for future use by the research team.

How long will I be in the research study?
Participation will take a total of about one hour.

Are there any potential risks or discomforts that I can expect from this study?

- Discussions may involve controversial professional and theoretical views.
- You will maintain the right to choose whether and how to express any given view.

Are there any potential benefits if I participate?
You will not directly benefit from your participation in the research.

The results of the research may be a necessary step toward improving those courses and their effects on teachers and their students.

Will information about me and my participation be kept confidential?
Any information that is obtained in connection with this study and that can identify you will remain confidential. It will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of password protected devices and secure network storage. Paper documents will be stored in a locked file cabinet.

What are my rights if I take part in this study?

- You can choose whether or not you want to be in this study, and you may withdraw your consent and discontinue participation at any time.
- Whatever decision you make, there will be no penalty to you, and no loss of benefits to which you were otherwise entitled.
- You may refuse to answer any questions that you do not want to answer and still remain in the study.
- If you request anonymity, any personally identifying information linking you to the research will be destroyed.

Who can I contact if I have questions about this study?

- **The research team:**
  If you have any questions, comments or concerns about the research, you can talk to the one of the researchers. Please contact How Alpert and Jennie Grammer at 310-713-6744 or howalpert@ucla.edu.
- **UCLA Office of the Human Research Protection Program (OHRPP):**
  If you have questions about your rights as a research subject, or you have concerns or suggestions and you want to talk to someone other than the researchers, you may contact the UCLA OHRPP by phone: (310) 206-2040; by email: participants@research.ucla.edu or by mail: Box 951406, Los Angeles, CA 90095-1406.

Appendix D

Interview questions

The topic of this interview is reading, reading instruction, and preparing special education credential candidates to teach reading.

I have a lot of prepared questions. I'm interviewing you because I suspect you will have answers to some of them that will give me insight into my research questions. I do not expect you to have deeply considered answers for all of them or to have all of the relevant facts at hand. I'm just looking for your honest views and understanding of things.

You are free to answer in any way you see fit, and you are free not to answer at all. You are also free to stop at any time and for any reason. There is no penalty whatsoever.

Any questions or concerns before we start?

First, origin stories always interest me. **Tell me something about yourself.**

1. Where did you go to school?
2. What did you study?
   (a) What brought you there?
   (b) How did you choose that?
3. What is your position here?
   (a) How did you end up with this position?

Before we get into particulars about a course, we'll start much broader. I'll start by asking about your view or vision on the broader topics of reading and reading instruction. So, on the broad topic of reading, **What is your view of what reading is?**

1. Some courses focus on "literacy" or "language arts" or other contexts for reading per se. How do you situate reading in broader contexts?

On the broad topic of reading instruction, **What is your vision of reading instruction in K–12 classrooms?**

1. What do you see as the appropriate content—the curriculum—for reading instruction?

(a) What do K–12 students need to learn?

i. in school

ii. about reading

(b) What do they need to know how to do?

i. in school

ii. about reading

2. What do you see as the appropriate instructional approach for reading instruction?

(a) Strategies

i. authenticity

A. purpose

B. literature

C. meaning

ii. direct instruction

A. teaching phonics to children in a systematic way, with a series of skills and activities

(b) Methods

(c) Materials

(d) Planning

i. RTI

ii. UDL

iii. Making instructional decisions based on screening and progress monitoring

A. e.g., assessments of oral reading fluency

3. **Would this vision of reading instruction be the same or different if we were talking about general education vs. special education?**

So considering your broad visions of reading and reading instruction, what is your vision of preparing credential candidates to teach reading?

1. What do you think candidates should learn?
    (a) Facts
    (b) Understandings
    (c) Policies
    (d) Dispositions
2. What do you think candidates should learn how to do?
    (a) Skills
    (b) Procedures
    (c) Practices
3. How do you think candidates should be taught?
    (a) Strategies
    (b) Methods
    (c) Materials
    (d) Experiences
4. To what level of expertise?
5. What went into this vision?
    (a) Policy
    (b) Research
    (c) Theory

Now think about this one course, **ABCD 1234**. It focuses specifically on reading and literacy.

What does this class teach about reading?

1. Theory
    (a) What is taught about theory and reading?

(b) How is theory taught?

2. Research

   (a) What is taught about research and reading?

   (b) How is reading research taught?

3. Policy

   (a) What is taught about policy and reading?

   (b) How is reading policy taught?

4. Assessment

   (a) What is taught about assessment and reading?

   (b) How is reading assessment taught?

5. Lesson planning

   (a) What is taught about planning and reading?

   (b) How is lesson planning taught?

6. Instruction

   (a) What is taught about instruction and reading?

   (b) How is reading instruction taught?

      Distinctions and roles (purposes) of independent reading, shared or guided reading, or read aloud?

      What role does RICA play in the course's curriculum or instruction? ("Vocabulary and Academic Language Development in Reading and Writing—practicing vocabulary learning with our RICA terms; Review of elements of reading—phonics, vocabulary, comprehension, etc. in relation to RICA exam")

What does this class teach about related matters?

1. Disabilities x reading

   (a) Dyslexia

2. Language

   (a) English as L_2

   (b) Writing

3. Cognition

4. Instruction

   (a) Collaboration and co-teaching

   (b) RTI

   (c) UDL/individualization/accommodation/modification

5. Inclusion

6. Assessment

7. Families

8. Law, policy, practice

   The next questions are less about the curriculum of the course or its instruction and more about how it came to be—who and what shaped and influenced it:

How was the curriculum created? (Who designed this course?)

1. How was the curriculum selected?

2. Who designed the curriculum?

3. Did it get input from others?

   (a) Was there coordination or consultation with others?

   (b) Did it require approval from others?

4. What are the broader influences on curriculum for this course?

(a) Your experience

i. What experience was influential?

(b) Policy

i. Program standards

ii. TPEs

iii. RICA

iv. Common core

(c) Research

(d) Theory

(e) Textbook

5. What are the sources of instruction (strategies, methods, materials) for this course? (How are strategies, methods, and materials selected?)

(a) Your experience

i. What experience was influential?

(b) Built on extant syllabus?

i. program's

ii. similar course you took or taught?

(c) Textbook

(d) Policy

i. Program standards

ii. TPEs

iii. RICA

iv. Common core

(e) Research

(f) Theory

I've asked about the *what* and *how* and *why* of ABCD 1234. Now I'm asking about the *who*:

Who [or who else] teaches the course?

1. Position
    (a) Tenured
    (b) Adjunct
2. Number of lecturers over the past three years
    (a) For different semesters
    (b) Sections
    (c) Turnover
3. What is their focus/expertise/qualifications?
    (a) What is their experience teaching reading to students in special education?
4. **How is the class handed off from one lecturer to another?**
5. **What variations/discretion does the department allow?**

We are nearing the end. But before we do, a lightning round to help characterize the amount the course focuses on various elements of instruction that I found in some but not all syllabi. Answer these as you'd like, of course, but I'll be coding *none, little, moderate,* or *considerable.* Also, I'll ask whether it is more accurate to say candidates learned about that element or that they learned how to teach that element.

Lightning round

1. How much is phonemic awareness addressed in this course?
    (a) Is it more accurate to say candidates learned about phonemic awareness or that they learned how to teach it?
2. How much is phonics addressed in this course?
    (a) Is it more accurate to say candidates learned about phonics or that they learned how to teach it?
3. How much is fluency addressed in this course?
    (a) Is it more accurate to say candidates learned about fluency or that they learned how to teach it?
4. How much is vocabulary addressed in this course?
    (a) Is it more accurate to say candidates learned about vocabulary or that they learned how to teach it?
5. How much is comprehension addressed in this course?
    (a) Is it more accurate to say candidates learned about comprehension or that they learned how to teach it?
6. How much is awareness of print addressed in this course?
    (a) Is it more accurate to say candidates learned about awareness of print or that they learned how to teach it?

7. How much is spelling addressed in this course?

    (a) Is it more accurate to say candidates learned about spelling or that they learned how to teach it?

8. How much is writing addressed in this course?

    (a) Is it more accurate to say candidates learned about writing or that they learned how to teach it?

Scale:

In this course, this topic was ...

None: ... not addressed in this course.

Little: ... addressed briefly in this course.

Moderate: ... addressed over several class periods in this course.

Considerable: ... the focus of major lessons, readings, activities, assignments, or assessments.

OK, that's the end of my prepared questions We covered a lot of ground, but mostly I was asking and you were answering. So before we call this done, what would you want to say about this course, reading instruction in K–12 special education, or reading in general? What should I have asked that would have let you express your thoughts more your own way?

Table D1

How much is this element of reading instruction addressed in this course?

Component	None	Little	Moderate	Considerable	About	To do
Name						
Campus						
Position						
Phonemic awareness	☐	☐	☐	☐	☐	☐
Phonics	☐	☐	☐	☐	☐	☐
Fluency	☐	☐	☐	☐	☐	☐
Vocabulary	☐	☐	☐	☐	☐	☐
Comprehension	☐	☐	☐	☐	☐	☐
Print awareness	☐	☐	☐	☐	☐	☐
Spelling	☐	☐	☐	☐	☐	☐
Writing	☐	☐	☐	☐	☐	☐

Note. In this course, this topic was ...
None: ... not addressed in this course.
Little: ... addressed briefly in this course.
Moderate: ... addressed over several class periods in this course.
Considerable: ... the focus of major lessons, readings, activities, assignments, or assessments.
Is it more accurate to say candidates learned about it or that they learned how to teach it?

Appendix E

Protocols from *Study of Teacher Preparation in Early Reading Instruction (Salinger et al., 2010)*

The protocols from Salinger et al. (2010) include these six items:

- Teacher perception of overall exposure to early reading components
- Exposure: phonemic awareness: focus on and manipulate phonemes in spoken words?
- Exposure: phonics: associate letters and the sounds they make to identify words?
- Exposure: fluency: read orally with appropriate speed, accuracy, and expression?
- Exposure: vocabulary: understand the meanings of words and learn new words?
- Exposure: comprehension: understand what they read?

The end of my interview protocol is outlined similarly:

- How much are teacher candidates taught about phonemic awareness?
- How much are teacher candidates taught about phonics?
- How much are teacher candidates taught about fluency?
- How much are teacher candidates taught about vocabulary?
- How much are teacher candidates taught about comprehension?

They asked the same questions several times to address teacher candidates' preparation to teach reading, modified each time to address their exposure in coursework, their exposure in fieldwork, and their sense of preparedness. The following are from the survey on coursework: "Next, think about courses you took in your current degree program that focused specifically on *reading and literacy*. Please rate the degree of emphasis that your program placed on the strategies listed below. Keep in mind that you will have the opportunity to rate the emphasis on these strategies in your Field Experiences next. Use the following scale to rate the emphasis in your coursework:"

None: This was not addressed in any of my courses.

Little: This was addressed briefly in one course.

Moderate: This was addressed over several class periods in one or two of my courses.

Considerable: I took a course entirely devoted to this topic.

And then they asked about a number of reading-related topics.

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