

What Teacher Educators Need to Teach About Evidence-Based Instruction
and Response to Intervention

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Abstract

Recent research has determined the essential components of reading instruction and features of instruction that lead to success for the majority of students. Yet many teachers are not implementing these evidence-based practices, and it could be because these teachers are not receiving information about evidence-based practices in their teacher preparation program. This paper addresses what teacher educators need to be teaching about reading, effective instruction, and response to intervention in preservice programs. Personal observations are included, resources provided, and supporting documents attached.

What Teacher Educators Need to Teach About Evidence-Based Instruction and Response to Intervention

Note: The author has had the opportunity to observe teacher educators teaching candidates throughout the country. She has reviewed syllabi from more than 150 university and alternative certification teacher preparation programs. The observation notes are based on these experiences and do not constitute a definitive study of all teacher education practices.

This paper addresses the essential components of effective instruction and the most efficacious instructional practices that result in most children succeeding in school. Practices that need to be included in preservice teacher education programs will be elucidated. Recent research in evidence-based reading and mathematics instruction converges on several key points and will be discussed in-depth.

Unfortunately, schools of education do not have a stellar reputation in preparing teachers. Too often I hear from beginning teachers that they learned “nothing” in their methods classes to help them instruct their young students from diverse backgrounds. Yet, teachers are the most important variable in student learning; a student’s achievement depends more upon the assigned teacher than upon factors such as class size (Darling-Hammond & Bransford, 2005). Therefore, students must have highly trained and competent teachers. Yet teachers often do not receive high-quality preservice educational experiences (McCombes-Tolis & Spear-Swerling, 2007; Moats, 2003). The role of the teacher educator is to make “abstruse knowledge potentially usable” (Snow, 2005, p. 12). However, a recent study found that only 15 percent of a national sample of education schools provides teacher candidates with even a minimal exposure to the science of reading (Walsh et al., 2006).

The broad areas addressed in this paper include: (1) the Essential Components of Effective Reading and Mathematics Instruction, (2) the Features of Effective Instruction,

(3) Response to Intervention, and (4) Suggestions for Teacher Educators. My personal observations of how teacher educators teach (or do not teach) these essential components are offered for discussion. Resources for activities to teach these skills, a continuum of skills, and a rubric to analyze college reading textbooks are included in the appendixes.

I. Essential Components of Effective Reading & Mathematics Instruction

Reading Research & Instruction

During the last few years, a plethora of converging research about early reading instruction has been published. The research provides guidance on how to teach struggling students to read (Vaughn & Linan-Thompson, 2004; National Reading Panel, 2000; Snow, Burns, & Griffin, 1998). Literacy educators at all levels have been privileged to have access to this research and challenged to improve reading achievement by implementing these findings. Improvement in reading instruction and achievement is needed, particularly among poor and minority students. The National Assessment of Educational Progress (NAEP, 2007) approximates that 33 percent of all students are reading below the basic level, and that number is more than 50 percent for African American and Hispanic children. Children from low socioeconomic families (Hart & Risley, 1995), minorities (International Reading Association, 2003), and English language learners (Hamayan, 1990) are particularly at risk for not learning to read well enough to meet the ever-increasing demand society places on individuals to be literate.

Two reports published within the last 10 years have synthesized how instruction and student achievement in reading can be improved. In 1998, the National Research Council published *Preventing Reading Failure in Young Children* (Snow et al., 1998). Two years later, the National Reading Panel, appointed by the U.S. Congress, published a

synthesis of reading research (National Reading Panel, 2000). Since these two reports were published, there has been additional research supporting these basic findings (Coalition for Evidence-Based Policy, 2003).

These reports emphasize the critical importance of elementary students getting an early and robust start to becoming readers. The statistics about children who do not learn to read well by the end of first grade are alarming—rarely do these children ever catch up to grade level (Juel, 1988). Many of these children are placed in special education classes, although it is doubtful that they all have inherent disabilities. Rather, it is likely they were not taught well in the first place because their teachers did not have the skills, resources, or time to meet the needs of these learners (Holt & Kysilka, 2006; Walsh et al., 2006; Steiner & Rozen, 2004).

Phonemic Awareness

Phonemic Awareness is the ability to distinguish the sequence of sounds in words. The most sophisticated skill under the general area of phonological awareness phonemic awareness refers to the ability to recognize and manipulate individual phonemes, or sounds. Typically children master this skill by the age of 5 or 6. They can, for example, determine which words start with the same sound, provide rhyming words, and create alliterate sentences (Armbruster, Lehr, & Osborn, 2001). Segmenting and blending phonemes in one syllable words is predictive of later reading success.

Observations in College Classrooms

When observing college classrooms, I often see teacher educators confusing phonemic awareness with phonological awareness or phonics. Sometimes the instructor does not pronounce the letter sounds correctly, adding the schwa sound to letters such as b /buh/ and d /duh/. Another common confusion is the misconception that young children must be able to segment multisyllabic words into individual phonemes. If children can segment and blend 3 and 4 phoneme one-syllable words, they typically are ready to understand the alphabetic principle (sounds have symbols) and then progress to the next big idea, phonics.

Phonics and Word Study

A solid background in phonics and word study is absolutely necessary for effortless reading. Typically, two years of instruction is sufficient for students to master phonics if the instruction is both systematic and explicit. Solid phonics skills provide children with tools to decode unknown words they see while reading independently. This ability is essential because learning to read involves everyday encounters with words children have never before seen in print. Application of the alphabetic principle (phonemic analysis and phonics) provides the most important single clue to the identity of unknown words in print. Teaching students such things as the six types of syllables, morphemic analysis, and other decoding strategies facilitates the development of independent word recognition.

Observations in College Classrooms

Unfortunately, teaching prospective teachers these syllable types and how to use them to decode is not common practice in teacher preparation programs. I have personally presented all over the country to faculty members, college students, and teachers. I can count on one hand the number of people who answered correctly when I asked them to tell me the types of syllables. This informal feedback is supported by research (Moats, 1999; Spear-Swerling, 2007; Joshi et al., in press) that indicates that the vast majority of reading teacher educators do not know some of the fundamental phonics concepts, concepts that make understanding the English language less difficult and more predictable.

Fluency

Fluency is the ability to read effortlessly, at an appropriate rate, with accuracy and prosody. Reading quickly with prosody, or with expression and an awareness of punctuation and phrasing, correlates highly with reading comprehension. Most struggling readers do not develop reading fluency because they are reluctant to read text that is difficult for them, thus they read less, develop less of a world view, and learn fewer vocabulary words than their peers. Stanovich (1986) calls this the “Matthew Effect,” in which the rich get richer (better readers read more and thus become even better readers) and the poor get poorer (struggling readers read less and fall further behind their peers).

Observations in College Classrooms

Some teachers and teacher educators confuse reading fluency with reading as fast as one can. We must continue to model reading with prosody and encourage students to illustrate their comprehension of the text by reading with appropriate phrasing and reaction to punctuation. Reading is not a race, but automatic decoding does facilitate reading for comprehension.

Vocabulary

Vocabulary instruction needs more attention in our classrooms (Biemiller, 2001; Hart & Risley, 1995). Teachers can learn how to teach students phonemic awareness and decoding skills and to read with fluency, but teaching students new vocabulary and how to learn new words independently, in context, is a challenge. There are so many words students must learn that it is often difficult to even choose which words on which to concentrate (Beck, McKeown & Kucan, 2002).

Observations in College Classrooms

I have observed teachers and teacher educators using graphic organizers, word maps, and other effective strategies to learn new vocabulary. However, teacher candidates need more instruction on how morphemic analysis and word origins help determine the meaning and correct use of new words.

Comprehension

The ultimate goal of reading is to understand what is being read. Teachers have mastered the art of asking students questions to ascertain their comprehension of the material; however, teaching students to master comprehension strategies and use them independently is challenging. Students need to know a few before-, during-, and after-reading strategies, and they need to know when and how to use the strategies as well as how to evaluate their effectiveness (Jacobs, 2002). Strategies such as “Get the Gist” (Klingner et. al, 2001) provide a systematic way for students to comprehend text.

Observations in College Classrooms

Teacher educators expose teacher candidates to many comprehension strategies, including before, during, and after reading strategies. However, I have observed little instruction in systematic and explicit comprehension strategies that students are required to implement independently using a variety of text. Teacher candidates need to learn how to teach students to select and evaluate their own comprehension strategies.

Mathematics Research & Instruction

Research in early mathematics learning is not as prevalent as it is in reading (Chard et al. 2005; L. Fuchs, Compton, Fuchs, Paulsen, Bryant, & Hamlett, 2005; Gersten, Jordan, & Flojo, 2005). However, several recent synthesis on mathematics instruction for students who struggle in this area have resulted in recommendations for instruction (Bryant, Bryant, & Gersten, in press; Bryant, Bryant,., Gersten, Scammacca,

Chavez, (in-press); Rivera, Smith, Goodwin, & Bryant, 1998). Bos & Vaughn (2004, p. 339) summarized these findings as follows:

1. Utilize instructional routines that engage students and focus on cognitive behavioral techniques;
2. Design instruction to be explicit and clear;
3. Teach to mastery before moving on to more advanced concepts;
4. Establish realistic goals and share that information with the students;
5. Monitor progress;
6. Provide evidence that hard work and effort will result in progress;
7. Utilize computer-assisted instruction.

Bryant et. al. (in press) have summarized the major areas of difficulty for young children learning mathematics as follows:

Difficulties with arithmetic combinations have been identified as a defining feature of students with mathematics difficulties (Gersten et al., 2005; Hanich et al., 2001; Jordan et al., 2002). Thus, it stands to reason that teaching efficient and effective strategies to enhance mastery and fluency of arithmetic combinations should be part of an intervention for students at risk for mathematics disabilities beginning in the early grades.

Thus it is of critical importance that teacher candidates are taught the strategies to address the needs of these students.

II. Features of Effective Instruction

How the components of reading instruction are taught is important and could determine which students learn to read well and which do not. All students deserve effective, efficacious instruction. The following features are effective in every teaching situation with all students (Vaughn and Linan-Thompson, 2004). These features are not new (Swanson, 1999; Carnine, Silbert, Kame'enui & Tarver, 2004). However, there is little evidence that teacher candidates are provided multiple opportunities to demonstrate mastery of these techniques.

Explicit Instruction With Modeling

Explicit instruction entails letting students know what they are to learn and then providing several models so that students understand what is expected. For example, when teaching students to decode, provide explicit instruction in what do to first, such as:

1. Underline the vowels.
2. Look for a syllable type. (Is there a final stable syllable?)
3. What is the vowel sound?
4. Say the word part.
5. Say the word.
6. Is it a real word?

A nonexample of explicit instruction is to tell a student to “try harder” or to “look at the beginning sound and guess.”

Explicit instruction involves modeling and explaining concepts and skills concretely and visibly, includes clear language, and uses many examples. When modeling, teachers demonstrate the task aloud, follow a step-by-step procedure, use language specific to the demonstration of the skill, and check for student understanding. Cuing, guided and independent practice, and corrective feedback contribute to explicit instruction (Bos & Vaughn, 2006; Swanson, 1999; Mastropieri & Scruggs, 1997; Pressley & Rankin, 1994). All learners benefit from extended practice and close monitoring of their understanding of the concept.

Systematic Instruction With Scaffolding

Sequencing activities so that students learn and develop skills systematically is essential for struggling readers. Teachers must give thoughtful analysis to which skills

will be taught in which order and when—moving from easier, more concrete concepts to more difficult, abstract concepts. Scaffolding pertains to providing temporary support; once the student has mastered the concept, the scaffolding is removed (Coyne, Kame'enui, & Simmons, 2001; Torgesen, 2002; Vygotsky, 1978). To scaffold instruction effectively, teachers need to know how to break down the new learning into small tasks a student can master, provide systematic and explicit instructions and models, and gradually remove the scaffold as the student demonstrates mastery. Examples include providing before-, during-, and after-reading questions cards for a student to answer when reading. Once the students have practiced enough so that the process is mastered, the cards can be removed. A nonexample is to tell the student to write a summary of what was read without providing any instruction in comprehension strategies (Jacobs, 2002).

Systematic instruction with scaffolding includes carefully planning the lesson and selecting appropriate tasks and goals. Students need to participate actively and be redirected as needed. Slowly, the scaffold is removed as students internalize the skill and gain independence (Clark & Graves, 2004; Honig, 2001; Larkin, 2001; Hogan & Pressley, 1997; Dickson, Chard, & Simmons, 1993).

Multiple Opportunities for Practice

Guided and independent practice opportunities must be built into the instructional plan, and these opportunities to review and practice new skills must be provided throughout the school year, not just for a few days (Bos & Vaughn, 2004). The more actively engaged the students are and the more they practice difficult skills, the more the students will internalize the skills and apply them with automaticity. Different grouping

formats can facilitate this practice. An example would be to teach a reading comprehension strategy such as “Get the Gist” and to ask students to use the strategy in several different settings. They can answer “who is this about” and “what is important about this” pertaining to following rules in the cafeteria, learning soccer rules, learning mathematic concepts, and many other areas in addition to reading. Learning to put their answers into sentences of 10 or fewer words is the final step. A nonexample of this type of instruction is to lecture to students about a comprehension strategy and not have them practice it except in the evening as a homework assignment or for teachers to ask factual questions after each reading.

Active engagement supports learning and facilitates classroom management. Therefore, teacher candidates should learn multiple techniques to actively engage their students. Some techniques include choral responses, signal cards (i.e., pinch papers), physical signals (i.e., thumbs-up or thumbs-down), partner reading, turn and whisper to a partner, write a response, stand up or down, think alouds, etc.

Immediate Corrective Feedback

Feedback occurs when a teacher directly imparts his/her opinion of a child, a child’s strategies or skills, or a child’s achievement (often in relation to goals), and provides information about that opinion (Askew, 2000). Teachers can correct a response or describe why a response is correct, helping students to develop ways to improve. Often referred to as “error correction” (Parker, Hasbrouck & Denton, 2002), teachers must ensure that students must practice new learning correctly . Without calling undue attention to a student, teachers should immediately correct incorrect responses. It is

usually sufficient to simply say something such as, “Look at that word again.” (No response ... provide a strategy or scaffold ... still no response.) “That word is _____. What is that word? Read the sentence again.” A nonexample of this type of feedback is ignoring the mistake and allowing the student to go on reading the word incorrectly.

Ongoing Progress Monitoring

Progress monitoring enables teachers to determine what a student has learned and what needs reinforcement (Vaughn & Linan-Thompson, 2004; Deno, Fuchs, Marston, & Shin, 2001). Usually such frequent checks take no longer than 1–2 minutes. Teachers then have the information needed to modify their instruction to ensure students master the concepts. Struggling students should be monitored about every 2 weeks in reading; students who are on target may be monitored three times per year. An example is having a student read a grade-level passage for 1 minute and determining how many words were read correctly. Fluency norms are available to determine whether the student is on target (Hasbrouck & Tindal, 2006). A nonexample is a teacher saying that a student is “doing fine” with no data to support that statement.

Integrating the Essential Components With the Features of Effective Instruction

The essential components of reading and the features of effective instruction must be seamlessly integrated into instructional practices. Teacher educators need to address and model how to use these foundational concepts when analyzing student assessment data and grouping students for instruction, planning the pace of instruction, differentiating for students, managing the classroom, and creating a motivating

environment. When these elements are implemented well, the class is relaxed and fun, yet structured and productive. Teachers know what students need to learn and when they have learned it. These elements can be integrated into any core reading or math program. When they are, teachers know what each student needs to learn and how to teach each student.

Observations in College Classrooms

Rarely have I seen teacher educators use features of effective instruction in their own classes. I suggest that we teacher educators progress monitor our teacher candidates, then differentiate instruction accordingly. We could have small group instruction within the college classroom, modeling how to organize such instruction and how to structure meaningful tasks for candidates while the instructor works with a small group. We could differentiate by providing different assignments and tasks, depending upon the knowledge and experience of the teacher candidates.

Teacher candidates can also practice active engagement strategies in the college classroom. Think, pair, share (Lyman, 1981); turn to your partner and respond; use of pinch papers, etc. could be implemented. I require teacher candidates to utilize “get the gist” on their own assigned readings, and it takes some of them up to six weeks to master the strategy. However, once they have used it several times, they understand better how to teach it to their own students. The more application opportunities we provide to teacher candidates, the better they will learn how to teach.

III. Response to Intervention

The revised Individuals with Disabilities Education Act (IDEA, 2004) and No Child Left Behind (2002) support the implementation of response to intervention (RTI), a process to provide early intervention to struggling readers and a way to identify students with disabilities. RTI involves universal screening of all students; early intervention with students experiencing difficulty; frequent progress monitoring of students receiving intervention instruction; use of a multitier model of service delivery; implementation of scientific, research-validated interventions and instruction; and the use of data to make decisions. Student progress is monitored frequently, applying response data to guide instructional decisions (Batsche et al., 2006). The typical model is a 3- to 5-tiered approach, in which the general education teacher usually provides Tiers I and II within the general education classroom. RTI depends upon excellent Tier I, or core, instruction. Thus, teacher educators need to ensure that all teacher candidates understand and can implement excellent core instruction in which 70 percent or more of their students succeed.

Students who have difficulty learning when exposed to differentiated core instruction are provided with additional, more intensive instruction, called Tier II. Teachers meet with small groups of three to five students with similar needs for additional instruction every day (Foorman & Torgesen, 2001). Teacher candidates need to learn how to use student assessment data to determine which students need the additional instruction and how to group the students. Progress monitoring data are kept to determine rate of progress and whether the instruction must be adapted to ensure all students are successful.

Observations in the College Classroom

Rarely have I seen Response to Intervention introduced in a general education pre-service class. Rather, it is presented as a special education initiative, though general education has the primary responsibility by providing effective Tier 1 and 2 instruction. Teacher educators must make transparent to their teacher candidates what research-based instruction looks like and how to select research validated instructional materials for Tier 1 & 2. The first instruction a student receives should be excellent and appropriate, differentiating for the student within the general education classroom. Only when all students are receiving excellent core instruction can Response to Intervention be an effective method of identifying students with disabilities.

IV. Suggestions for Teacher Educators

Teacher candidates are exposed to many excellent practices during their preservice years. In most programs, candidates learn about children's literature, how to motivate students to develop a love for reading, and how to identify with the characters in a narrative or the theme of a text. Candidates learn how to place children in text and strategies to increase reading comprehension, such as the use of graphic organizers. What I am suggesting, however, is to further enhance teacher preparation programs by modeling within the preservice classroom what we want candidates to do in the elementary classroom: directly teach the essential components of reading and mathematics while modeling the features of effective instruction. When candidates experience the integration of the features with the content, they will more likely teach that way themselves—directly, systematically, and explicitly, monitoring understanding

and providing appropriate feedback. By doing so, it is possible for more students to be responsive to instruction and intervention in the general education classroom.

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Appendix A: Continuum of Skills

Appendix B: Additional Resources

Web Sites

Vaughn Gross Center for Reading and Language Arts: www.texasreading.org

- *Essential Reading Strategies for the Struggling Reader: Activities for an Accelerated Reading Program*
- *Reading Strategies and Activities: A Resource Book for Students At Risk for Reading Difficulties, Including Dyslexia*
- *Supplemental Instruction for Struggling Readers*

Florida Center for Reading Research: www.fcrr.org

National Center on Teaching and Learning, University of Oregon:

<http://education.uoregon.edu>

Texas Primary Reading Inventory and Tejas LEE: www.tpri.org

DIBELS: www.dibels.org

IRIS Center: <http://iris.peabody.vanderbilt.edu>

National Institute for Literacy: www.nifl.gov/partnershipforreading

A Consumer's Guide to Evaluating a Core Reading Program: Grades K–3:

http://reading.uoregon.edu/curricula/con_guide.php

New Resources from the Center on Instruction: www.centeroninstruction.org

Practical Guidelines for the Education of English Language Learners:

- Book 1: Research-based Recommendations for Instruction and Academic Interventions
- Book 2: Research-Based Recommendations for Serving Adolescent Newcomers
- Book 3: Research-Based Recommendations for the use of Accommodations in Large-Scale Assessments.

Appendix C: A Rubric to Evaluate College Reading Textbooks

Selecting a Textbook

Selecting the best textbook for a beginning reading class can be daunting. Although there are a plethora of textbooks available, few are comprehensive or sufficiently elucidate all aspects of beginning reading. Therefore, most classes will require a combination of textbooks and research articles to expose teacher candidates to the most important facets of teaching reading and the most current research. Since this course emphasizes teaching all students to read, including those who struggle to learn to read, making a selection of a text even more challenging.

The recent report, entitled *What Education Schools Aren't Teaching About Reading and What Elementary Teachers Aren't Learning*, by the National Council on Teacher Quality (NCTQ, 2006) analyzed the textbooks used in reading education courses and concluded that "The quality of almost all the reading texts is poor. Their content includes little to no hard science and in far too many cases the content is inaccurate and misleading" (p.33). This conclusion arrived after examining 226 textbooks by three 'literacy experts' as to whether the textbook is acceptable either as core or as supplemental, non-acceptable as core or as supplemental, or not relevant.

In a recent study by Joshi et al (), five well-known reading textbooks publishers were contacted and asked for the titles and authors of their best-selling books in reading education. A total of seventeen textbooks were selected and examined for the content of the books. Two of the co-authors independently examined three items: (1) whether *at least* the five components (phonemic awareness, phonics, fluency, vocabulary, and comprehension) were included in the textbook; (2) whether the definitions provided in the text matched that of the NRP definition; and (3) the amount covered in the text. The amount covered in the text was computed by dividing the number of pages devoted to the five components of reading recommended by NRP by the total number of pages of the text excluding the references, appendices, and glossaries and multiplying by 100 to obtain the percentage of the content covered.

The analyses of the above three items showed that only 13 of the 17 'best-selling' books included all the five components recommended by the NRP and only 10 textbooks had correctly defined the five components. The percentage of materials covered ranged

from 60 to 4. Some noteworthy findings were that four textbooks did not cover the topics of phonemic awareness and phonics, considered basic building blocks of literacy acquisition. One of the textbooks adopted by 84 universities devoted only 10% of the entire volume to the five components of reading and another textbook adopted by 91 universities did not cover phonemic awareness, fluency, and comprehension. Nine textbooks devoted only 1/3 of the textbook to the five components.

To assist teacher educators in selecting the best book for the course being taught, the attached form has been created. Although not all aspects of reading are addressed in this form, the knowledge most critical for beginning teachers to master is emphasized. The configuration recording sheet for scientifically-based reading research was used as a guide (Reschly et al., in press).

References

- Joshi, M. R., Binks, E., & Hougen, M. (in press) The Role of Teacher Education Programs in Preparing Teachers for Implementing Evidence-Based Reading Practices. In: Rosenfield, S., & Berninger, V. (Eds.) (in progress) Handbook on implementing evidence based academic interventions. Oxford University Press.
- Reschly, D., Smartt, S., Oliver, R., & Holdheide, L. (in press). Innovation Configurations to Improve the Availability of Highly Qualified Teachers for Students with Disabilities and At Risk Characteristics.
- Walsh, K., Glaser, D., & Wilcox, D. D. (2006). What education schools aren't teaching about reading and what elementary teachers aren't learning. National Council on Teacher Quality.

RUBRIC FOR EVALUATING TEXTBOOKS
Focus on Teaching Beginning Reading, Grades K-3

Instructions:

Under each descriptor of the component, place a 0, 1, 2, or 3 to indicate at which level the specified component is addressed. Descriptors and /or examples are bulleted below each of the components.

Note that it is unlikely that any textbook will receive a perfect score. However, completing an examination such as this will indicate which components will need to be addressed through the use of supplemental materials. Also, not all classes need to address all the components. However, as the program aligns all the reading courses, it is important to ensure that all components are addressed at some point during the reading program.

Scoring:

- 0 = No evidence that the component is included in the text.
- 1 = Textbook mentions the component but there is no in-depth coverage. Not all the bulleted items are discussed, and non-research-based practices are included. Some definitions are inaccurate or incomplete, there are limited resources, and insufficient opportunities for candidates to demonstrate their understanding of the component.
- 2 = Textbook addresses the component in some depth. The definitions are accurate. There are limited suggestions for application and not all bulleted items are addressed.
- 3 = Textbook addresses the component accurately, in-depth, and provides suggestions for application and evaluation of understanding. The text is clear, contains recent research, and provides sufficient detail so that the teacher candidate can demonstrate knowledge of how to implement a comprehensive beginning reading program. Resources and supplemental materials address the components and are useful to the beginning teacher.

Essential Component	Accurate definitions/ Current research	Depth of coverage (amount & quality)	Resources, appendices, Supplemental materials	Application & Evaluation Opportunities	Total of Row
Oral language development -listening comprehension -vocabulary development -speech sounds -sentence structure -retelling -oral questions -questioning strategies					
Phonological Awareness -rhyming & alliteration -sentence segmenting -syllable segmenting -onset-rime -phonemic awareness -relationship to reading					
Phonemic awareness -speech sounds -early indicators of risk -detect, segment, blend, manipulate phonemes -steps of PA development (rhyming, alliteration, etc.) -activities for teaching (Elkonin boxes, say it & move it, etc.)					
Phonics -sound/letter correspondence -phoneme/grapheme correspondence -Alphabetic Principle -blending, decoding, encoding -syllable types -prefixes, suffixes, base words -nonsense words (used for assessment) -word analysis -multi-syllabic words					
Fluency -rate, accuracy, prosody					

<ul style="list-style-type: none"> -relation to comprehension -fluency training -partner reading -measurable goals -progress monitoring 					
<p>Comprehension</p> <ul style="list-style-type: none"> -before, during, & after reading strategies -questioning strategies -summarize, predict, retell -metacognitive strategies -narrative text & story schema -types of expository text -text structure -graphic organizers -think, pair, share -directed reading activity -cloze procedures -fact & opinion -author's purpose -think alouds 					
<p>Features of Effective Instruction</p> <ul style="list-style-type: none"> -explicit instruction with modeling -systematic instruction with scaffolding -sequential teaching of skills -pacing -multiple opportunities to practice/respond -progress monitoring -selection of text -grouping for instruction 					
<p>Motivating Students</p> <ul style="list-style-type: none"> -voluntary reading -classroom libraries -teacher modeling enthusiasm -involving parents 					
<p>Assessments & Use of Data</p> <ul style="list-style-type: none"> -screening -diagnostic 					

-progress monitoring -outcomes -analysis of data -using data to design instruction -TPRI -informal reading inventories -fluency norms					
Spelling -stages of spelling development -teaching spelling -spelling & reading					
Effective instruction for all students -English Language Learners -gifted & talented -dyslexia & other reading disabilities -economically disadvantaged					
SBRR/NCLB/IDEA/RTI -National Reading Panel Report -scientifically based research -NCLB law -IDEA -Response to Intervention					
State Standards -aligned with TEKS -aligned with EC-4 State teacher standards					
Other					
Column subtotals					

Phonemic Awareness

Simple ← ↑ Complex	Simple ← ↑ Complex	Sound & Word Discrimination	Produce different speech sound	Kindergarten	
			Tell which word is different in group of 3 or more words		
	Tell whether sounds and words are the same or different				
	Simple ← ↑ Complex	Rhyming	Produce a word that rhymes with another words	Kindergarten	
			Identify whether words rhyme		
	Simple ← ↑ Complex	Blending	Blend 3–4 phonemes into a whole word	Kindergarten	1st
			Orally blend separate phonemes		
			Orally blend syllables or onset rimes		
	Simple ← ↑ Complex	Sound Isolation	Identify initial sound in 1-syllable words	Kindergarten	1st Grade
			Identify final sound in 1-syllable words		
			Identify medial sound in 1-syllable words		
	Simple ← ↑ Complex	Segmentation	Clap once for each word in a sentence	Kindergarten	1st
			Clap once for each syllable in a word		
			Say syllables in word		
			Segment 3- and 4-phoneme words into individual phonemes		
	Simple ← ↑ Complex	Manipulations⁴	Add, delete, and substitute syllables and/or individual sounds in words		1st Grade

⁴ Manipulation skills are based on assessment of these skills by The Texas Primary Reading Inventory (TPRI).

Fluency

(letters, sounds, words, phrases, text)

Simple ↑ Complex	Oral Reading Fluency (Reading Connected Text)	Complex	Increase independent reading					3rd	
		← Simple	Self-correct word recognition errors		1st Grade	2nd Grade			
		← Simple	Read and reread to increase familiarity		1st Grade	2nd Grade			
		← Simple	Read with inflection					3rd Grade	
		← Simple	Read with expression			2nd Grade		3rd Grade	
		← Simple	Read aloud using phrasing attending to punctuation		1st	2nd Grade		3rd Grade	
		← Simple	Read 120 words per minute by end of year					3rd	
		← Simple	Read 90-100 words per minute by end of year			2nd			
		← Simple	Read fluently (1 word per 2-3 sec. at midyear; 1 word per sec by end of year)		1st Grade				
		← Simple	Read accurately (one error in 20 words)		1st Grade				
		← Simple	Phrase Fluency	Read common phrases accurately and fluently		1st			
		← Simple	High-Frequency & Decodable Word Fluency	Read words accurately and fluently	Kindergarten	1st Grade			
	← Simple	Blend sounds in words accurately and fluently		Kindergarten	1st Grade				
	← Simple	Letter Name & Sound Fluency	Identify sounds accurately and fluently	Kindergarten	1st				
	← Simple		Identify letter names accurately and fluently	Kindergarten					

Institute for the Development of Educational Achievement (2002-2004). Big ideas in beginning reading.
http://reading.uoregon.edu/big_ideas/trial_bi_index.php

Comprehension

Comprehending Informational Text	Follow multiple-step written instructions				3rd Grade	
	Use information in tables, graphs, diagrams, maps and charts					
	Use text structure to aid understanding			2nd Grade		
	Use title, table of contents, and chapter headings to locate information					
	Use information from simple tables, maps, and charts to learn about a topic					
Comprehending Stories	Answer questions about main characters, setting, theme, and plot				3rd Grade	
	Answer literal, inferential, and evaluative questions					
	Distinguish main idea/details; fact/opinion; cause/effect			2nd Grade		
	Answer <i>what if, why, and how</i> questions					
	Identify characters' actions, motives, emotions, traits, and feelings					3rd Grade
	Make and confirm predictions based on information from the story		1st Grade			
	Identify and answer questions about characters, settings, and events					
	Tell the main idea of a simple story or topic of an informational passage					
	Answer <i>who, where, what, when, and how</i> questions after listening to a sentence or short paragraph	Kindergarten				
	Respond to stories by answering and asking questions, discussing ideas, and relating events to personal experience					
	Use picture and information about the story to predict what will happen next					

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Comprehension (Continued)

Retelling, Summarizing, & Synthesizing	Complex	Identify important themes from readings and examine those from multiple points of view				3rd
	Simple	Identify/discuss theme of text			2nd	
	Complex	Draw conclusions and generalizations based on content				3rd
	Simple	Draw conclusions based on content			2nd	
	Complex	Recall the correct sequence of events in a story or informational passage				3rd
		Identify the correct sequence of events			2nd Grade	
		Retell explicit and implicit main ideas of stories or informational text			2nd	
		Summarize main ideas learned about a topic from an informational passage		1st Grade		
		Retell correct sequence of events in a story or a chronological passage		1st Grade		
		Retell a story and include characters, settings, and important events		1st Grade		
		Retell main idea of simple stories		1st Grade		
		Retell a story and include characters, settings, and important events	Kindergarten			
	Simple	Retell a familiar story without a book including beginning, middle, & end	Kindergarten			
		Retell a familiar story with a book	Kindergarten			

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Comprehension (Continued)

Monitoring Comprehension				Making Connections			
Stop while reading to assess understanding and clarify	Read for understanding	Interact with stories and informational text to clarify and extend comprehension	Check and adjust for understanding while reading	Connect events, characters, and actions in the story to specific life experiences	Use prior knowledge to clarify understanding	Connect events, characters, actions, and themes to specific life experiences	Make comparisons across reading selections
				K			
1st				1st Grade			
	2nd Grade				2nd Grade		
			3rd	3rd Grade			

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State Standards -aligned with TEKS -aligned with EC-4 State teacher standards					
Other					
Column subtotals					