Advisory Program Description

Name of Entity: Take Flight: A Comprehensive Intervention for Students with Dyslexia
Contact Information: Lynne Fitzhugh, Ph.D. 719-227-0024
Type of Program: Choose an item.
If this program is intervention or supplemental which component(s) of reading are addressed:
- [ ] Phonemic Awareness
- [ ] Phonics
- [ ] Fluency
- [ ] Vocabulary
- [ ] Comprehension
Grade Level: Choose an item. Grade 2 and up
Summary of the program: Take Flight is a comprehensive Tier 3 intervention for students who meet a profile of dyslexia. Components include reading, spelling, comprehension, phonological processing, morphology, and handwriting.

NOTE: We use the following descriptions to define various types of instructional support in early literacy. Please review the descriptions and identify your program according to the type of instructional support it is intended to deliver. Each approved instructional program should classify itself under one type of instructional programming only.

Core Instruction is instruction provided to all students in the class, and it is usually guided by a comprehensive core reading program. Part of the core instruction is usually provided to the class as a whole, and part is provided during the small group, differentiated instruction period. Although instruction is differentiated by student need during the small group period, materials and lesson procedures from the core program can frequently be used to provide reteaching, or additional teaching to students according to their needs.

Supplemental Instruction is instruction that goes beyond that provided by the comprehensive core program because the core program does not provide enough instruction or practice in a key area to meet the needs of the students in a particular classroom or school. For example, teachers in a school may observe that their comprehensive core program does not provide enough instruction in vocabulary, or in phonics, to adequately meet the needs of the majority of their students. They could then select a supplemental program in these areas to strengthen the initial instruction and practice provided to all students.

Intervention Instruction is provided only to students who are lagging behind their classmates in the development of critical reading skills. This instruction will usually be guided by a specific intervention program that focuses on one or more of the key areas of reading development. This type of instruction is needed by only a relatively small minority of students in a class. In some cases, students in 2nd and 3rd grade may have lagged so far behind grade level development of reading skills that very little content from the grade level comprehensive core program is suitable for them. In these cases, students may need to receive instruction guided by a comprehensive intervention program that is specifically designed to meet their specific needs while at the same time accelerating their growth toward grade level reading ability.

January 2016
READ Act Colorado State Board of Education
Advisory List of Instructional Programming
2015-2016

**PART I: COVER PAGE (Complete and attach as the first page of proposal)**

<table>
<thead>
<tr>
<th>Name of Entity:</th>
<th>Take Flight: A Comprehensive Intervention for Students with Dyslexia</th>
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<tbody>
<tr>
<td>Contact Person for the Proposal:</td>
<td>Lynne Fitzhugh, Ph.D.</td>
</tr>
<tr>
<td>Mailing Address:</td>
<td>CLE, 1118 W. Cheyenne Rd., Colorado Springs, CO 80904</td>
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</tr>
</tbody>
</table>

**List the type of instructional programming:**

- Tier 3 Reading, Spelling, Comprehension, Phonological Processing Intervention

**List the targeted audience for the instructional programming:**

Students identified with significant reading deficiencies age 7 and above. Students should meet a specific profile and may include students from Special Education and Regular Education.

**Any other information required to complete the description of the submitted instructional programming:**

Take Flight is designed for small group instruction (4-6). Take Flight may be taught only by teachers with proof of training (graduates or those currently enrolled in training). CDE Reading Endorsements are available for licensed teachers completing training at Colorado College.
January 4, 2016

To Whom It May Concern:

The Colorado Literacy and Learning Center would like to recommend *Take Flight: A Comprehensive Intervention for Students with Dyslexia* for the READ Act Advisory List of Instructional Programming. Key findings (full research report included) on *Take Flight* include the following:

- Students who complete *Take Flight* instruction show significant growth in all areas of reading skill.
- Follow-up research with children who completed treatment indicates that students maintain the benefits of instruction on word reading skills and continue to improve in reading comprehension after one year.
- *Take Flight* is effective when used in schools by teachers with advanced training in treating learning disorders.
- Students with the lowest reading skills acquire the strongest gains from *Take Flight* instruction

*Take Flight* was designed for use by highly trained teachers with children 7 years and older who meet a specific reading profile and need targeted and intensive instructional interventions in reading. It was developed to enable students with dyslexia to achieve and maintain better word recognition, reading fluency, and reading comprehension, and to aid in the transition from a therapeutic classroom setting to “real world” learning. *Take Flight* is designed for small group instruction (four-six students) for a minimum of 45 minutes per day, five days per week. Alternatively, the lessons can be taught for 60 minutes each day for four days a week. *Take Flight* includes 132 lessons for a total of 230 hours of direct instruction. The systematic and sequential instructional design includes structured, daily lesson plans that follow a progression of increasing complexity based upon previous and cumulative learning.

*Take Flight* was designed using the scientific evidence that supports each of the five components of effective reading instruction supported by the National Reading Panel research meta-analysis and aligned with the Colorado READ Act:

- **Phonemic Awareness**: Provides a systematic exploration of the articulation of phonemes, explicitly teaching the relationships between speech-sound production first, then fully integrating with decoding and spelling instruction.
- **Phonics**: Introduces all reliable phoneme-grapheme correspondence rules, allowing time for practice toward accuracy and automaticity and leading to more guided reading practice with controlled and regular text. Also introduces an expanded use of etymology in teaching word analysis strategies.
• **Vocabulary:** Features multiple word learning strategies (definitional, structural, contextual) and explicit teaching techniques with application in text shown to promote reading comprehension. Expanded and enriched by developing morphological knowledge, word relationships, figurative language, syntax and semantics through direct instruction and in the context of reading.

• **Fluency:** Instruction incorporates guided and timed repeated reading of decodable words, phrases, and connected text. Incentives and concrete measures of progress are included. Instruction uses research-proven directed practice in repeated reading with modifications to help students read newly encountered words more fluently.

• **Reading Comprehension:** Instruction combines methods that have the support of scientific evidence (i.e. cooperative learning, graphic organizers, story structure, question generation and answering, summarization, and comprehension monitoring) when reading narrative and expository texts.

*Take Flight* requires an intensive commitment from teachers in order to train in the content and pedagogy of this multisensory structured language curriculum. *Take Flight* is not available for purchase without documentation of training. Teachers complete 200 hours of classroom instruction over a two-year period, and must provide documentation of 700 hours of supervised teaching with a minimum of ten graded observations during that time frame. Teachers trained in *Take Flight* are highly qualified to offer reading remediation. Since 2007, over 50 Colorado teachers have received intensive two-year training in *Take Flight* through CLLC. Over thirty have met requirements to earn national certification through the Academic Language Therapy Association as Certified Academic Language Practitioners and/or Certified Academic Language Therapists. It is our hope that *Take Flight* will be recognized on the READ Act Advisory List of Programs and that these highly qualified teachers, and more who will join them in the future, will have the opportunity to impact the lives of our most struggling readers across Colorado.

Sincerely,

Lynne Fitzhugh, Ph.D., LDT, CALT-QI
Director
Part III.

A. Instructional design of the program:

*Take Flight* was designed for use by highly trained teachers as a Tier 3 intervention with children 7 years and older who meet a specific reading profile ("dyslexia") and need targeted and intensive instructional interventions in reading. *Take Flight* is designed for small group instruction (four to six students) for a minimum of 45 minutes per day, five days each week. Alternatively, the lessons can be taught for 60 minutes each day for four days a week. *Take Flight* includes 132 lessons for a total of 230 hours of direct instruction over two years. The systematic and sequential instructional design includes structured, daily lesson plans that follow a progression of increasing complexity based upon previous and cumulative learning. Strategies emphasize the transference from teacher-directed to student-directed learning.

Year 1:
In the first 35 lessons (Books 1 and 2) of *Take Flight*, two new grapheme-phoneme rules are introduced each day. This program directly integrates grapheme introduction, phonemic awareness, and spelling. Students apply their phonics knowledge reading single words and sentences that combine each lesson’s new rules with previously learned material. Each lesson has additional opportunity for practice of the new phoneme during direct phonemic awareness and spelling exercises. Phonemic awareness activities include practice in development of phonological memory as well as phoneme manipulation.

The lesson cycle expands in Books 3 and 4. On alternating days, the lessons continue new grapheme-phoneme introductions with additional practice of all learned decoding rules (A-Days). The alternate lessons (B-Days) provide the opportunity to practice previous learning through timed, repeated practice to improve reading fluency. These lessons also include comprehension strategy instruction and 20 minutes of oral reading of connected text that provides necessary practice for newly learned strategies.

Year 2:
Book 5 continues alternating A-Days and B-Days with an emphasis on advanced phonics and increasingly complex reading and spelling patterns, including all syllable division patterns and spelling rules. Phonemic awareness activities progress from manipulation of mouth pictures in Year 1 to the more abstract manipulation of colored squares. By the completion of Book 5, students will learn all 44 phonemes of the English language, 96 grapheme-phoneme correspondence rules, and 87 Anglo-Saxon affixes. The students also learn spelling rules for base words and derivatives. Practice opportunities are provided that are designed to improve oral reading fluency.
Books 6 and 7 emphasize a morphological approach to reading through word etymology. Book 6 teaches 27 Latin roots and Book 7 teaches 33 Greek combining forms. Decoding becomes secondary to identifying meaningful word parts.

Throughout the entire two-year curriculum, Take Flight introduces comprehension and vocabulary building strategies for both narrative and expository text in the context of oral reading exercises, preparing students for successful, independent reading. Additional comprehension activities include word study, multisensory grammar, and oral language development activities.

B. Components of the program:

Take Flight was designed using the scientific evidence that supports each of the five components of effective reading instruction supported by the National Reading Panel research meta-analysis and aligned with the Colorado READ Act:

- **Phonemic Awareness:** Provides a systematic exploration of the articulation of phonemes, explicitly teaching the relationships between speech-sound production first, then fully integrating with decoding and spelling instruction.
- **Phonics:** Introduces all reliable phoneme-grapheme correspondence rules, allowing time for practice toward accuracy and automaticity and leading to more guided reading practice with controlled and regular text. Also introduces an expanded use of etymology in teaching word analysis strategies.
- **Vocabulary:** Features multiple word learning strategies (definitional, structural, contextual) and explicit teaching techniques with application in text shown to promote reading comprehension. Expanded and enriched by developing morphological knowledge, word relationships, figurative language, syntax and semantics through direct instruction and in the context of reading.
- **Fluency:** Instruction incorporates guided and timed repeated reading of decodable words, phrases, and connected text. Incentives and concrete measures of progress are included. Instruction uses research-proven directed practice in repeated reading with modifications to help students read newly encountered words more fluently. Rate selections emphasize the following: Accuracy + Automaticity + Rate + Prosody = Fluency.
- **Reading Comprehension:** Instruction combines methods that have the support of scientific evidence (i.e. cooperative learning, graphic organizers, story structure, question generation and answering, summarization, and comprehension monitoring) when reading narrative and expository texts.
- **Handwriting:** Instruction provides a strong kinesthetic memory which may reinforce the visual memory of letter shapes for reading. Naming the letter while writing often helps to
“bind the visual, motor, and phonological images of the letter together at once.” (Adams, 1990)

- **Alphabet:** Reinforces accurate letter recognition, a precursor of how quickly students will learn to read words. Alphabet knowledge informs and supports the later acquired skill of automatically transferring graphemes into phonemes, which students need to read words. (Berninger et al., 2002). Also used to teach concepts such as directionality, sequencing, accent, etc.

- **Multisensory:** Approaches all new learning though auditory, visual, and kinesthetic modalities. Manipulatives include alphabet strips, mirrors, sound pictures and tray for each student, student workbooks, and Comprehension Mystery sheets for tabbing narrative and expository text. Teacher set includes complete classroom set-up for establishing a remediation room.

- **Semi-Scripted:** Although the core curriculum is scripted, with extensive training teachers learn to use opportunities through preparations and closures of each activity to “prep to the lowest” and “teach to the highest” of student abilities. Each lesson provides simple to advanced options for practicing the concepts taught.

C. **Colorado Academic Standards:**

*Take Flight* is well-aligned with the Colorado Academic Standards and the Common Core State Standards in that the most important part of the common core standards, the foundational reading standards, are highly emphasized in 3rd grade. This is the foundational structure of Take Flight; it provides intensive, systematic intervention while emphasizing the skills that are recognized in the CAS and CCSS as the critical foundational reading, spelling, fluency, and comprehension standards. The following standards are met in *Take Flight:*

- Know and apply grade-level phonics and word analysis skills in decoding words. (CCSS.RF.2.3)
- Distinguish long and short vowels when reading regularly spelled one-syllable words. (CCSS.RF.2.3a)
- Know spelling-sound correspondences for additional common vowel teams. (CCSS.RF.2.3b)
- Decode regularly spelled two-syllable words with long vowels. (CCSS.RF.2.3c)
- Decode words with common prefixes and suffixes. (CCSS.RF.2.3d)
- Identify words with inconsistent but common spelling-sound correspondences. (?) (inconsistent--ea/ar, or?) (CCSS.RF.2.3e)
- Recognize and read grade-appropriate irregularly spelled words. (CCSS.RF.2.3f)
- Read with sufficient accuracy and fluency to support comprehension. (CCSS.RF.2.4)
- Read grade-level text with purpose and understanding. (CCSS.RF.2.4a)
• Read grade-level text orally with accuracy, appropriate rate, and expression. (CCSS.RF.2.4b)
• Use context to confirm or self-correct word recognition and understanding, rereading as necessary. (CCSS.RF.2.4c)
• Know and apply grade-level phonics and word analysis skills in decoding words. CCSS:RF.3.3b, CCSS:RF.3.3c (RWC10-GR.3-S.2-GLE.3-EO.aii, iii)
  • Take Flight teaches children phonemic awareness, phonics, word analysis for decoding and the practice of coding ensures that children see, analyze and demonstrate their knowledge of the graphemes that comprise words.
• Identify and know the meaning of the most common prefixes and derivational suffixes. CCSS:RF.3.3a (RWC10-GR.3-S.2-GLE.3-EO.ai)
  • Take Flight directly teaches 87 Anglo-Saxon prefixes and suffixes, 27 Latin roots/prefixes/suffixes, and 33 Greek combining forms.
• Decode words with common Latin suffixes. CCSS:RF.3.3b (RWC10-GR.3-S.2-GLE.3-EO.c.ii)
  • Explicit decoding instruction applies to identifying a base word and a suffix. Special attention is given to the importance of the orthographic role of a vowel suffix versus a consonant suffix as well as grammatical properties.
• Syllable division rules. CCSS:RF.3.3c
  • Take Flight directly, explicitly, and systematically teaches seven syllable types (open syllables are taught to be recognized both when accented and unaccented unlike most programs which do not differentiate).
• Decode multisyllable words. CCSS:RF.3.3c (RWC10-GR.3-S.2-GLE.3-EO.c.iii)
  • Take Flight directly teaches the eleven most common syllable division patterns in the English language from most common to least common.
• Read grade-appropriate irregularly spelled words. CCSS:RF.3.3d (RWC10-GR.3-S.2-GLE.3-EO.a.iv)
  • Take Flight builds automaticity with irregularly spelled words. Based upon the Fry’s List of the most common 300 words, Instant Words are taught ten at a time and reinforced daily with alternating formats: cards, rows, columns, phrases, and sentences. Every third week a review of the previous twenty is provided. Progress monitoring for mastery is included.
• Read with sufficient accuracy and fluency to support comprehension. CCSS:RF.3.4 (RWC10-GR.3-S.2-GLE.3-EO.b)
  • Accuracy is emphasized in decoding. Fluency is emphasized on A-Days with repeated accurate practice of the same words used in decoding. Rate practice is expanded on B-Days with the introduction of timed rate packets and connected text practice with comprehension
• Read and comprehend grade-level text accurately and fluently with prosody. (RWC10-GR.3-S.2-GLE.1-EO.d) and (RWC10-GR.3-S.2-GLE.2-EO.d)
Prosody practice is introduced to students following practice with fluency packets beginning after Lesson 35 on B-Days.

- Read grade-level text with purpose and understanding. CCSS.RF.3.4a (RWC10-GR.3-S.2-GLE.3-EO.b.i)
  - The Comprehension Mystery is a multisensory approach to reading comprehension which provides children a purpose for reading both narrative and expository text.
- Use context to confirm or self-correct word recognition and understanding, rereading as necessary. CCSS.RF.3.4c (RWC10-GR.3-S.2-GLE.3-EO.b.iii, c.iv)
  - Vocabulary is emphasized in comprehension activities and connected text (K-W-L) and a focus on meanings relative to context.
- What is cause and effect? (RWC10-GR.3-S.2-GLE.2-EO.a.iii) and (RWC10-GR.3-S2-GLE.2-EO.b.iv)
- What is the language that helps you infer the cause and effect relationship between these two concepts in the text? (RWC10-GR.3-S.2-GLE.2-EO.a.iii)
  - *Take Flight* leads students to investigate cause and effect during Comprehension activities.
- Humans communicate to express ideas, values, opinions, and different points of view. (RWC10-GR.3-S.1-GLE.2-EO.a) and (RWC10-GR.3-S.2-GLE.1-EO.b.iv) and (RWC10-GR.3-S.1-GLE.1-EO.d,f,g) and (RWC10-GR.3-S.3-GLE.1-EO.a) and (RWC10-GR.3-S.4-GLE.1-EO.c) and (RWC10-GR.3-S.4-GLE.2-EO.f)
  - Students investigate the history of oral and written language, purposes for written language, and varying points of view during comprehension activities.

For students beginning in third grade and progressing in program to fourth grade:

- Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context. (CCSS.RF.4.3a)
- Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph). (CCSS: L.4.4b)
- Consult *reference materials* (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases. (CCSS: L.4.4c)
- Demonstrate understanding of *figurative language*, word relationships, and nuances in word meanings. (CCSS: L.4.5)
- Explain the meaning of simple *similes and metaphors* (e.g., as pretty as a picture) in context. (CCSS: L.4.5a)
• Recognize and explain the meaning of common *idioms*, adages, and proverbs. (CCSS: L.4.5b)

• Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms). (CCSS: L.4.5c)

Inquiry Questions answered through instruction in *Take Flight*:
1. How can analyzing word structures help readers understand word meanings?
2. How do prefixes (un-, re-) and suffixes (-ness, -ful) change the meaning of a word (meaning, meaningful)?
3. Why do root words change their spelling when suffixes are added?

Relevance and Application:
1. Changing accent changes the meaning of words (CONtest, conTEST).
2. Readers can create new words by adding prefixes and suffixes (such as wood, wooden).
3. The spelling of multisyllabic root words can change when suffixes are added (transfer, transferrable).

Nature of Reading, Writing, and Communicating:
1. The ability to notice accent is essential for successful communication.
2. Readers use phonemes, graphemes (letters), and morphemes (suffixes, prefixes) in an alphabetic language.

[Note: *Take Flight* is the curriculum used as the basis of the Colorado College Master of Arts - Literacy Intervention Specialist Program, recognized by the International Dyslexia Association as one of seven universities in the United States providing an exemplary model of teaching teachers of reading. IDA standards are aligned with CCSS.]

D. Assessments:

*Take Flight* provides Progress Monitoring for word level reading as well as for fluency. Word level PM is available in four alternate forms, so may be repeated as often as needed to guide instruction. Rate Packets (introduced on B-Days after Lesson 35) include pre- and post-timed readings of passages following ample practice of word pages. PM is based upon research that increases in fluency come from practice at the word level rather than at the passage level, where students often “memorize” phrases and sentences.
Name of Entity:
Take Flight: A Comprehensive Intervention for Students with Dyslexia.

Contact Information
Contact Name:
Colorado Literacy & LearningCenter
Lynne Fitzhugh, Ph.D.
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Website: www.literacyNow.org

Type of Instructional Program:
(Please describe if this is a comprehensive reading program, an intervention reading program, a supplemental program to be used in conjunction with another program. Also, please describe what students would be targeted for this instructional program. Use the columns below for your brief description)

<table>
<thead>
<tr>
<th>Comprehensive</th>
<th>Intervention</th>
<th>Supplemental to other programs</th>
<th>Students targeted</th>
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<tr>
<td></td>
<td>X</td>
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<td>Ages 7 and older.</td>
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If an intervention, describe what component of reading it addresses:

Take Flight addresses the five components of effective reading instruction identified by the National Reading Panel's research and is a comprehensive Tier III intervention for students who struggle with reading including those with dyslexia. The following components are addressed:

Phonemic awareness includes a systematic exploration of the articulation of phonemes and is fully integrated within decoding and spelling instruction.

All phoneme-grapheme correspondence rules are introduced over a shorter time than most Tier III remediation programs, allowing time for practice toward accuracy and automaticity in the application of phonics skills and for more guided reading practice with controlled and regular text. Also, there is an expanded use of etymology in teaching word analysis strategies.

Vocabulary is expanded and enriched by developing morphological knowledge, word relationships, figurative language, syntax and semantics by direct instruction and in the context of reading. Take Flight features multiple word learning strategies (definitional, structural, contextual) and explicit teaching techniques with application in text.

Fluency instruction incorporates guided and timed repeated reading of decodable words, phrases and connected text. Incentives, concrete measures of progress and daily practice are important elements of fluency training.
A combination of techniques is used for instruction in reading comprehension, including comprehension monitoring, question generation, story structure, summarizing, and inferencing. Students learn how to utilize graphic and semantic organizers when reading narrative and expository text.

**Grade Level:** K 1 2 3

*(Please circle the grade level(s) that the program is designed for.)*

**Program Summary:**

*(This section should be limited to 200 words and is your opportunity to let schools or districts know why they should choose this program.)*

*Take Flight* is an evidence-based, comprehensive reading intervention designed for use with children 7 years and older who struggle with reading and exhibit a profile of dyslexia. It was developed to enable struggling readers to achieve and maintain better decoding, word recognition, reading fluency, reading comprehension, and spelling. The program is designed to be taught four days per week (60 minutes per day) or five days per week (45 minutes per day). It is intended for small group instruction with no more than six students per class. The program is structured to aid in the transition from intervention to "real world" learning.

Students who complete *Take Flight* instruction show significant growth in all areas of reading skill. Follow-up research with children who completed treatment indicates that students maintain the benefits of instruction on word reading skills and continue to improve in reading comprehension after one year. Students with the lowest reading skills acquire the strongest gains from *Take Flight* instruction.

*Take Flight*, an Orton-Gillingham based curriculum, was developed through over 40 years of research at the Luke Waites Center for Dyslexia at Texas Scottish Rite Hospital for Children in Dallas, Texas. Research results are available upon request.
DYSLEXIA: A TREATABLE LEARNING DISORDER

Dyslexia, the most common specific learning disability, causes difficulties with reading and spelling in approximately 10 to 15 percent of school age children (Shaywitz, Escobar, Shaywitz, Fletcher, and Makuch, 1992). The definition of dyslexia has been modified with advances in research since the first consensus definition was formulated by the World Federation of Neurology at Texas Scottish Rite Hospital for Children in 1968. The current definition specifies that children can be identified with dyslexia when they have problems accurately and efficiently sounding out (decoding) single words associated with difficulties processing the sound (phonological) structure of language (Lyon, Shaywitz and Shaywitz, 2003). Slow, inaccurate word reading leads to poor reading comprehension and is unexpected because most other cognitive and academic abilities are intact. The spelling problems of dyslexia contribute to difficulty acquiring proficiency in writing.

Definitions of dyslexia refer to the constitutional origin or intrinsic nature of the condition that represents an underlying neurobiological (brain) difference. Early postmortem (biopsy) studies and more recent neuroimaging research suggest that brain regions that are involved in word recognition have different structure, function and connections in individuals with dyslexia (Shaywitz, Pugh, Jenner, Fulbright, Fletcher, Gore, and Shaywitz, 2000). Family and twin studies show strong genetic influence, suggesting the brain differences in dyslexia are inherited (Olson, Forsberg, Gayan, and DeFries, 1999).

Although the core phonological deficit of dyslexia may persist, most impaired readers can learn to improve their reading skills. Teaching that promotes the acquisition of sound (phonological) awareness, letter-sound decoding skills and other word-level and reading comprehension skills can reduce the number of children who would otherwise qualify for a diagnosis of dyslexia (Vellutino, Fletcher, Snowling, and Scanlon, 2004). Moreover, improvement in reading skill with remedial instruction has been shown to be associated with changes in neuroimaging patterns consistent with normalization of brain function when reading (Simos, Fletcher, Bergman, Breier, Foorman, Castillo, Fitzgerald, and Papanicolau, 2002). One theory is that new networks are established between regions of the brain that support word recognition.

TEXAS SCOTTISH RITE HOSPITAL FOR CHILDREN DYSLEXIA INTERVENTIONS: BUILDING ON A LEGACY

Alphabetic Phonics (AP) originated at Texas Scottish Rite Hospital for Children (TSRHC) in the mid-1960s as an expansion and organization of the Orton-Gillingham (O-G) multisensory approach for teaching children with dyslexia (Cox, 1985). The central feature of O-G and other phonologically based programs is the systematic approach that is taken to establish a link between the alphabet and the language sounds (phonemes) it represents. In response to the requirement for intensive instruction for students with dyslexia (TEC 38.003), the Dyslexia Training Program (DTP), an adaptation of AP, was created (Beckham and Biddle, 1989). Using a video format, the DTP provides intensive phonics instruction to children who may not have access to trained dyslexia teachers.
During the past 40 years, research has emerged that supports the O-G form of instruction for individuals with dyslexia. Orton-Gillingham-based instruction has proven efficacy in reducing the central impairments in dyslexia, decoding and word recognition (Torgesen, Alexander, Wagner, Rashotte, Voeller, and Conway, 2001). The effectiveness specifically of the DTP has been evaluated in a comparison-control study (Oakland, Black, Stanford, Nussbaum, and Balise, 1998). That study, which met the scientific standards necessary to be included in the National Reading Panel Report (NICHD 2000), found gains that were notably significant in word reading.

There is less evidence that phonologically based remedial instruction can improve reading fluency or reading comprehension (NICHD 2000). Also, many students level off in their reading development after remediation or fail to apply word reading skills when working independently (Torgesen, et al., 2001). These findings and program evaluation data collected at TSRHC were the stimuli for curriculum development that culminated in *Take Flight: A Comprehensive Intervention for Students with Dyslexia* (*Take Flight*) (Avrit et al., 2006).

*Take Flight* builds on the success of the DTP for teaching phonics skills while providing more guided reading practice toward accuracy and automaticity. Etymology and phonemic awareness are expanded and integrated within decoding and spelling instruction to more fully develop word analysis strategies. The reading fluency component of *Take Flight* is designed to exceed the benefits realized with standard repeated reading practice by sequentially introducing phonic patterns of increasing complexity. A combination of instructional techniques develops vocabulary and verbal reasoning in the context of reading. Graphic organizers and illustrated cards are employed to teach more effective use of comprehension strategies during teacher-directed and student-directed learning. Improved reading comprehension is the ultimate goal.

A RESEARCH-BASED PROGRAM

The report of the National Reading Panel identified the research-proven components of effective reading instruction to be phonemic awareness, phonics, fluency, vocabulary and reading comprehension (NICHD 2000). *Take Flight* was designed using the scientific evidence that supports the importance of each of these five components. Skillful word reading largely depends on the ability to learn letter sounds, which requires sufficient phonemic (speech sound) awareness (Wagner and Torgesen, 1987). Intensive training in phonemic awareness and letter sounds (phonics) is critical for the child with dyslexia to acquire word identification, spelling and general reading ability (Vellutino and Scanlon, 1987). Phonemic awareness training in *Take Flight* follows established procedures for explicitly teaching how articulatory gestures relate to sounds and spelling-sound patterns and how to manipulate sounds in analytic spelling and reading exercises (Olson, Wise and Ring, 1999). The phonics component of *Take Flight* was derived from the DTP. The effectiveness of the DTP was evident in the evaluation study cited by the National Reading Panel (Oakland, et al., 1998). The important role of reading fluency (rate and proper expression) in the comprehension and motivation of readers has been well documented.
Take Flight fluency instruction uses research-proven directed practice in repeated reading (Meyer and Felton, 1999). However, modifications in the Take Flight approach have potential to help students improve their fluency when reading newly encountered words. Standard repeated reading results in fluency gains only in texts that contain practiced words (Faulkner and Levy, 1994). Vocabulary knowledge is strongly related to reading skill development. Vocabulary instruction in Take Flight features multiple word learning strategies (definitonal, structural, contextual) and explicit teaching techniques with application in text shown to promote reading comprehension (Bryant, Goodwin, Bryant, and Higgins, 2003). Formal instruction in the application of comprehension strategies also has been shown to be highly effective in improving reading comprehension. Take Flight employs a multiple-approach strategy for reading comprehension instruction that combines methods that have the support of scientific evidence (i.e., cooperative learning, graphic organizers, story structure, question generation and answering, summarization, comprehension monitoring) (NICHD 2000). The systematic introduction of strategies, teacher modeling, guided practice and student-lead group instruction follows the Reciprocal Teaching Model (Palincsar and Brown, 1984).

Take Flight Treatment Effects: Descriptive Results

The publication of Take Flight has been preceded by the evaluation of treatment effects with students attending the TSRHC Dyslexia Laboratory and dyslexia programs in public schools. Major findings are described and summarized below.

Dyslexia Laboratory

The Dyslexia Laboratory at TSRHC provides treatment services for local students with dyslexia who do not have access to adequate treatment options in their own schools. Students come to the hospital for class four days per week for two academic years. The Take Flight instruction at the laboratory is delivered by Certified Academic Language Therapists in small groups of two to four students for 90 minutes each day. Enrollment is approximately 40 children each year.

Descriptive data of reading skill development were collected from students receiving Take Flight instruction at the laboratory. Students were tested three times during the intervention: a baseline assessment, after one year of instruction and when treatment concluded at the end of the second year. Follow-up data were collected from a subset of the sample for four years post-treatment to document long-term effects after treatment.

Take Flight improved upon previous versions of Alphabetic Phonics instruction provided at TSRHC by including specific treatment components for reading efficiency/fluency and comprehension. Additional reading data from students who received an older version of Alphabetic Phonics at the Dyslexia Laboratory are also presented to illustrate differential treatment outcomes of the added components.
Participants: The data on treatment effects were collected from six consecutive graduation groups of students at the Dyslexia Laboratory; the last group graduated in May 2011. The sample includes 113 children (51 females) in Grades 2 through 7 (Median: Grade 4). All students had a diagnosis of developmental dyslexia from the Luke Waites Center for Dyslexia and Learning Disorders at TSRHC.

Results:

Main Effects Summary statistics of phonological awareness\(^1\), word decoding\(^2\), reading\(^3\), comprehension\(^4\), reading efficiency\(^5\), oral reading\(^6\) and math skills\(^3\) are shown in Figure 1. The data show the sample’s mean skill levels at the beginning of treatment and observed gains in norm-referenced standard scores after the two-year Take Flight treatment. The data in Figure 1 indicate several important observations about the sample at the laboratory and the intervention outcome.

![Take Flight Treatment Effects](Image)

Figure 1: Average Baseline Levels and Gains at Post-Test

First, at baseline the sample was below the average range (i.e., 90-109 SS) in phonological processing and reading skills, particularly word and text reading efficiency, but showed average arithmetic abilities. Observed gains after treatment were statistically and clinically significant for phonological awareness and all reading skills, bringing the sample within, or close to, the average range Wilks’\(\Lambda = .22, F_{(6, 95)} = 56.63, p < .0001\). The modest gains in arithmetic skill suggest that observed treatment effects were specific to the domain of reading and related skills and could not be readily attributed to effects of smaller classes and/or increased teacher attention.

An alternate account of both the observed gains in reading and comparatively modest growth in math skills is that both could be explained by effects of regression-to-the-mean (e.g., Weeks, 2007). In the absence of data from a randomized-control clinical trial, it is
difficult to separate confounding artifacts of regression with real treatment effects. However, data collected from clinical evaluations that documented the diagnosis of developmental dyslexia in this sample permits one way to assess regression effect sizes.

Briefly, the analysis is an adaptation of an interrupted time-series design. Patients were initially assessed in the TSRHC Dyslexia Evaluation Center an average of nine months prior to beginning treatment. The months between initial evaluation and the treatment baseline evaluation thus provide a contrast of differences in growth observed between a pre-treatment ‘control’ period and the subsequent two years of intervention.

![Interrupted Time Series](image)

**Figure 2: Regression Effects from Clinic to Posttest Assessment**

Figure 2 shows average phonological awareness and word identification standard scores from a subset of the sample with sufficient data points for the analyses (n = 105). A regression-to-the-mean explanation for observed gains would predict a more-or-less linear trend from initial clinic evaluation to the posttest evaluation. The observed trends indicate a significant inflection in the average growth curves at the point of intervention. Repeated-measures profile analyses confirmed that there were no significant gains in phonological awareness, $F_{(1, 96)} = 3.2, p = .08, \eta^2 = .03$ over the pre-intervention ‘control’ period from diagnosis to baseline evaluation. The data also show that relative word identification decreased over the same period, $F_{(1, 104)} = 5.7, p = .02, \eta^2 = .05$. In contrast, significant development was observed from baseline to posttest evaluations in both phonological awareness, $F_{(1, 96)} = 106.7, p = .0001, \eta^2 = .59$, and word reading, $F_{(1, 104)} = 87.1, p = .0001, \eta^2 = .46$.

**Comparative Effects Take Flight** differs from previous curricula at TSRHC with the inclusion of specific instruction to develop reading fluency and comprehension. Descriptive data from a sample of students who received treatment at the laboratory with the DTP that did not include those specific components are added for comparative purposes.
The comparative data were taken from a sample of 25 students (11 female) from Grades 2 through 7 (Median: Grade 4). The students were two consecutive graduation groups of the lab; the last group graduated in May 2002. All students in this historical control sample also had a diagnosis of developmental dyslexia from the Luke Waites Center for Dyslexia and Learning Disorders at TSRHC Diagnostic Clinic. The intervention was delivered by Certified Academic Language Therapists. The DTP intervention was of equal duration and intensity as Take Flight intervention.

![Graph showing treatment effects by curricula](image)

**Figure 3: Oral Reading and Reading Comprehension Outcomes by Curricula**

Figure 3 presents data from standardized measures of oral reading and reading comprehension. The data show significant improvements in both text reading fluency and reading comprehension for students receiving both curricula, $F_{(1,115)} = 14.4$, $p = .0001$, $\eta^2 = .11$; $F_{(1,124)} = 34.9$, $p = .0001$, $\eta^2 = .22$, respectively. Additionally, the Take Flight sample shows significantly larger growth in reading comprehension relative to students who received DTP instruction, $F_{(1,124)} = 6.0$, $p = .02$, $\eta^2 = .05$. The Take Flight sample also showed an advantage in growth of oral reading skill but that difference was not statistically reliable.

*Longitudinal Effects* Post-treatment evaluation is important for documenting immediate effects of treatment. However, longitudinal data months or years post-treatment are needed to provide evidence that treatment outcomes are durable. Follow-up data were collected annually for four years post-treatment from 69 former students (34 female) of a total sample of 81 graduates in the last five lab groups eligible for follow-up assessment. Figure 4 presents word recognition and reading comprehension outcomes in standard scores over the intervention and at each of the four follow-up evaluations.
Figure 4: Reading Comprehension and Word Reading for Four Years Year Post-Treatment

The follow-up data suggest several important conclusions about the long-term effects of *Take Flight*. The significant rate of growth in reading comprehension skill continues post-treatment and the group average is approaching the population average of 100 SS at one year follow-up, $F_{(1, 66)} = 10.1, p = .002, \eta^2 = .13$. Word recognition skill shows a different developmental pattern. The rate of growth observed during the intervention period slows after treatment concludes and is no longer statistically significant, $F_{(1, 66)} < 1, p = .8, \eta^2 = .00$. The reported data are in standard scores; therefore, the observed result suggests that although growth rates were slower, the students’ word recognition skills still developed at the same rate as their same age peers for the one year after treatment.

The data from 51 students who returned for a second follow-up evaluation show that observed growth in reading comprehension in the first year after treatment slows and is no longer statistically significant after two years, $F_{(1, 50)} < 1, p = .83, \eta^2 = .00$. Although statistically non-significant, the data suggests that the reading comprehension skills of students in the follow-up sample continue to improve at similar rates as their same-aged peers.

The data presented in Figure 4 indicate that the developmental patterns observed in the second year after treatment continue for the remainder of the follow-up evaluations for both reading comprehension and word reading ability. Taken as a whole, the data suggest a pattern of maintenance of treatment effects up to four years post-treatment.

**Field Evaluation**

The data collected in the lab at TSRHC provide some evidence of treatment outcomes. However, the lab is a controlled environment with limited enrollment. The majority of
students who will receive instruction in *Take Flight* will be students who are served by their school’s dyslexia program. For this reason, it is necessary to document the effects of *Take Flight* in a field study.

Descriptive data of *Take Flight* treatment effects were collected from several Texas school districts that used the curriculum for their state-mandated dyslexia program. All students enrolled in the field study were identified and instruction delivered for two academic years by the respective school districts’ dyslexia program personnel. Figure 5 shows baseline levels and treatment gains on academic measures after two years of instruction for 59 public school students (29 female) in Grades 3 through 5. Data from the Dyslexia Lab sample are added for comparison.

![Treatment Effects by Site](image)

**Figure 5: Treatment Effects in Dyslexia Lab and Public School Samples**

The results in Figure 5 show several important differences between the lab and school samples. First, the school sample average was significantly higher at baseline on measures of decoding, word recognition, comprehension, and word reading efficiency, Wilks’ $\Lambda = .9, F_{(4, 152)} = 4.14, p = .01, \eta^2 = .04$. In addition, treatment effects after the intervention were statistically smaller than those observed in the lab, Wilks’ $\Lambda = .74, F_{(4, 151)} = 13.2, p = .0001, \eta^2 = .25$. Although the gains observed in the school sample were rather modest, these results are reported in standard scores; thus, the reading skills of the school sample were progressing at the same rate or, in some cases, faster than their same age peers.

However, the data presented in Figure 5 show scores averaged across the entire sample. There was significant variation in both baseline levels and treatment effects in the school sample. Growth curves for each individual showed a relatively consistent pattern where students with lower scores at baseline tended to show larger gains during treatment.
Figure 6: Treatment Effects as a Function of Baseline Skill

Figure 6 illustrates this effect of individual differences. The figure shows relatively little additional growth in both reading comprehension and word reading efficiency for students in the top half of the sample at baseline. Note that those results are reported in standard scores, and that those students' average scores are already near the population average. In contrast, students in the lower half of the sample present a different developmental profile with significantly stronger growth in each reading skill, $F_{(1, 57)} = 11.9, p = .001, \eta^2 = .17$; $F_{(1, 57)} = 23.7, p = .0001, \eta^2 = .29$, respectively. Students with more severe reading impairments derived greater benefit from treatment.

Conclusions

The data show that in a relatively well-controlled environment of the lab at TSRHC, children receiving Take Flight instruction show statistically and, more importantly, clinically significant growth in all areas of reading. At the conclusion of treatment, children were within the average range in decoding, word reading and comprehension. Final status of word and text reading efficiency was lower, but still very near the low average range. Moreover, the significant contrast of growth during treatment with the nine month period prior to treatment suggests that the observed treatment effects were specific to the treatment and not due to regression artifact or general developmental effects. Comparisons of reading growth from Take Flight with alternative versions of Alphabetic Phonics instruction provide suggestive evidence for the efficacy of added comprehension and reading rate instruction. Finally, longitudinal results indicate that during the first year after treatment, these children maintained the word recognition gains and continued to show additional significant growth in reading comprehension. The remaining follow-up
assessments showed that treatment gains continued to be maintained up to four years post-treatment.

The results from the field study suggest there is some generalization of *Take Flight* treatment effectiveness outside the lab environment, although that efficacy is more modest and variable. Specifically, the treatment seems to be most beneficial for students with relatively weaker skills at the onset of intervention. The reasons for the differential effects compared with the lab results may be attributed to several factors that are difficult to control within a school environment, including criteria for placement, co-existing problems, class size, variable contact time and instruction delivery.

The only way to definitively document treatment effectiveness is in a randomized clinical trial. The data presented in this summary were not collected from a study of that design and therefore conclusions about treatment efficacy of *Take Flight* are tentative. However, norm-referenced standardized measures such as those used for these evaluations do provide a baseline to compare observed treatment effects against expected reading development for average-achieving children.

In summary, these data show that *Take Flight* has a beneficial impact on the reading skills of children with significant reading difficulties. Future research will determine how well *Take Flight* compares with comparable alternative treatments and what components of the curriculum are responsible for observed outcomes.
References:


1 Comprehensive Test of Phonological Processing (ProEd, Inc.).
2 Woodcock Reading Mastery Test (American Guidance Services).
3 Wechsler Individual Achievement Test (PsychCorp).
4 Test of Word Reading Efficiency (ProEd, Inc.).
5 Gray Oral Reading Test (ProEd, Inc.) Oral Reading Quotient.
6 DTP sample with oral reading data is 10 of 25 possible participants.
7 Texas Education Code 38.003.
Part IV: Examples of the Instructional Programming
Take Flight
Lesson Cycles

A – Day
New Learning Day
2 days a week

- Alphabet
- Reading Decks
- ARD or IRD
- New Learning
  - Grapheme/Syllable division/Affixes
  - Application
- Instant Words
- Sentences
- RAP Pages

---

B – Day
Rate – Fluency Day
2 days a week

- Reading Decks
- ARD or IRD
  - Both one day a week
- Instant Words
- Rate Packet
- Spelling Deck
  - Partial deck
  - Complete one day a week

- Spelling Practice
- Review
  - Emphasis of the day
  - Previously taught
- Connected Text with Comprehension Mystery
  - *Comprehension Skill*

*Take Flight 23*
ALPHABET

Emphasis
Alphabetizing

Preparation
My before hand is my left hand.
My after hand is my right hand.
I = (initial, as in your name).
F = (final, last).
The 2 middle letters = (M and N).
How many letters are in the alphabet? (26)
There are 2 kinds of letters in the alphabet. (Vowels and Consonants)
Touch and name alphabet strip.
Demo:

Practice
Alphabet list Lesson 43

Closure
Write a V/A/K closure that will meet the needs of your students.

READING DECKS

☐ Advanced Reading Deck (ARD)
☐ Initial Reading Deck (IRD)
Linkages—(irregular for spelling)
—changes in the linkages

1. *When writing the digraph ai in cursive ...*
   
   (Linkage paper)
   
   Name and trace.
   
   Name and make a copy.
   
   Go below, name and write an additional copy.

2. *I’m going to give you the name of the letter, and you give me the keyword and sound. (Showing ARD and IRD)*

3. *(Not needed because it is irregular for spelling.)*

4. *The name of the letter is ... (Showing ARD)*

   The keyword and sound are ... *(Showing IRD)*

   *What is the name of the sound? (smiling vowel sound)*

   [Bottom of linkage paper is handwriting practice for homework.]

Practice

Code and read Lesson 43 decoding.

<table>
<thead>
<tr>
<th>Code and Read.</th>
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<tbody>
<tr>
<td>1. aim nail faith</td>
</tr>
<tr>
<td>2. gait mail claim</td>
</tr>
<tr>
<td>3. trail saint waist</td>
</tr>
<tr>
<td>4. aid sail braid</td>
</tr>
<tr>
<td>5. brain main paint</td>
</tr>
<tr>
<td>6. rain train wail</td>
</tr>
<tr>
<td>7. rail grain frail</td>
</tr>
<tr>
<td>8. tail strait gain</td>
</tr>
<tr>
<td>9. maid vain pail</td>
</tr>
<tr>
<td>10. snail sprain plain</td>
</tr>
</tbody>
</table>
DISCOVERY and LINKAGES

Auditory Discovery

Repeat these words.

aim trail faith

What sound do you hear alike in these words?
What part of your mouth is working when you make the sound (ā)?
We already know this sound is a smiling sound.
Is it ...

open or blocked?
voiced or unvoiced?
vowel sound or consonant sound?

Review sound picture.

Visual Discovery

Write these words on the board.

aim trail faith

What do you see alike in these words?
How many letters do you see?
How many sounds do you hear?
Two letters that come together and make one sound are called a ...
digraph.

So, we call this ... digraph ai. (Show ARD card)
We have a keyword to help us remember the sound.
Read the riddle.

Riddle:

This small thin piece of metal is pointed at one end and flat on the other end.
It is used to fasten or join things together.
You can hammer this piece of metal into wood or other materials.
The keyword is ______. (nail) (Show IRD card).
ay = (ã)

DISCOVERY and LINKAGES

Auditory Discovery

Repeat these words.

hay play spray

What sound do you hear alike in these words?

What part of your mouth is working when you make the sound (ã)?

We already know this sound is a smiling sound.

Is it...

open or blocked?

voiced or unvoiced?

vowel sound or consonant sound?

Review sound picture.

Visual Discovery

Write these words on the board.

hay play spray

What do you see alike in these words?

Where do you see these letters?

How many letters do you see?

How many sounds so you hear?

Two letters that come together and make one sound are called a ... digraph.

So, we call this ... digraph ay. (Show ARD card)

We have a keyword to help us remember the sound.

Read the riddle.

Riddle:

This flat container is used to hold, carry, or show items.

It is useful when going through the line at a cafeteria.

A waiter carries your food on one of these at a restaurant.

The keyword is _____. (tray) (Show IRD card).
Linkages

1. When writing digraph ay in cursive ...
   
   (Linkage paper)
   
   Name and trace.
   
   Name and make a copy.
   
   Go below, name and write an additional copy.

2. I'm going to give you the name of the letter, and you give me the keyword and sound. (Showing ARD and IRD)

3. I'm going to give the sound, and you give me the keyword and letter name. (Showing ISD to mouth, and ARD and keyword)

4. The name of the letter is ... (Showing ARD)
   
   The keyword and sound are ... (Showing IRD)
   
   If I give you the sound ... (Using ISD)
   
   Echo the sound ...
   
   Name the letter ...
   
   Write it beside the last copy.
   
   What is the name of the sound? (smiling vowel sound)

[Bottom of linkage paper is handwriting practice for homework.]

** ISD response is now a-e/ay

Practice

Code and read Lesson 43 decoding.

- **Code and Read.**

  1. say  lay  play
  2. pay  bay  stay
  3. nay  day  stray
  4. way  may  gray
  5. jay  hay  pray
  6. slay  fray  spray
  7. clay  sway  tray
Instant Words
Use one of the following activities:
Flashcards
Columns
Rows
Phrases/Sentences

Practice
Code and read Lesson 43 sentences.

Code and Read.
1. She has faith that the rain will stop in time to see the game.
2. Todd left bait on the trail. Will the deer see it?
3. If the paint is left in the playroom, we can not use it.
4. The maid wore her long black curls in a plain braid.
5. We stood at the rail to see the train pass.
6. She fed the pigs the grain in the pail.
7. That stray dog will lay in the hay.
8. Shay likes to play with clay.
9. May I spray the gray paint in her room?
10. If you sway with the tray, you will spill the drink.
11. When he stops the sermon, we will pray.
### Concepts: ai CVVC CCVVC 43.1

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<th>tail</th>
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### Concepts: ay CVV CCVV 43.2

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</table>
SPELLING DECK
☐ Complete Deck
☐ Partial Deck

PHONEMIC AWARENESS Part I

Preparation
Review sound pictures.

Show me
(ɔb) (sh) (t)
(θh) (b) (ə)
(ɔ) (v) (h)
(z) (æ) (g)
(i) (r) (ɨ)

PROCEDURES
1. Look and listen
2. Echo
3. Echo in your mirror
4. Pull down sound pictures and label
5. Replace

PHONEMIC AWARENESS Part II

Show me
lay
slay
clay
play
pray
spray
stray
tray
ray
may

PROCEDURES
1. Look and listen
2. Echo
3. Unblend
4. Pull down sound pictures
5. Add, take away, trade, switch, repeat

Closure
Write a V/A/K closure that will meet the needs of your students.
SPELLING PRACTICE

Preparation
F(ā) = ay
(k) a, o, u, C = e

Words
1. say 4. play 7. pray 10. tray
2. lay 5. stay 8. slay 11. stray
3. pay 6. gray 9. clay 12. spray

Preparation
Learned words: the, to, we
(\(\overline{V}(C) = \overline{V}e\))
(\(\overline{V} \rightarrow ^{e} = \overline{V}\))
(\(\overline{V}(C) = \overline{V}C_{e}\))

Dictation
1. I like to play with clay.
2. Lay the spray on the tray so we can play.

Closure
Write a V/A/K closure that will meet the needs of your students.

REVIEW
2. Previous New Learning.
B-Day Lesson Plan—Lesson 4.3B

**Reading Decks**

ARD:

IRD:

**Instant Words**

**Rate Practice**

Emphasis:

Preparation:

Practice:

Closure:

**Spelling Deck**

**Spelling Practice**

Emphasis:

Preparation:

Practice:

Closure:

TBD based on student needs.
B-Day Lesson Plan—Lesson ___

**Review**

1.

2.

**Connected Text with Comprehension Mystery**

Emphasis:

Preparation:

Practice:

Closure:

**Comprehension Skill**

Emphasis:

Preparation:

Practice:

Closure:
READING DECKS

- Advanced Reading Deck (ARD)
- Initial Reading Deck (IRD)

ROOT DISCOVERY

A b.w. is ... the simplest form of an English word.
A root is ... a word or word part that carries meaning and provides the base for an affix.
An affix is ... a letter or letters added to the beginning or end of the b.w.

Visual Discovery

I’m going to write some words on the board. What letter(s) do you see alike in all of these words?

scribe transcript

Let’s box any prefixes or suffixes we see in these words.
What letters are left? scribe and script
Scribe and script are two forms of the same root. A root is a word or word part that carries meaning and provides the base for an affix.

Auditory Discovery

Echo each word and tell me what sounds you hear alike.
scribe = (s)(k)(r)(i)(b)
script = (s)(k)(r)(i)(p)(t)

Let’s see if we can discover the meaning of this root. To have your name inscribed on a card means to have your name written on a card. A transcript is a written document.
So, scribe and script are two forms of the same root that mean to write.

Keyword: inscribe = write

Practice

Look at the prefix and suffix charts. Are there any prefixes or suffixes we can add to the root scribe or script to create new words?
(Students will write the new words on the bubble sheet in their book as therapist writes them on the board.)
Practice
Identify and highlight the root in each word.

**Code and Read**

1. inscribed  prescribe
2. transcribe  subscriptions
3. prescribed  oversubscribe
4. described  subscriber
5. script  prescription
6. transcript  indescribable
7. describing  nonprescription
8. scribe  overprescribed

**Instant Words**
Use one of the following activities:
Flashcards  Columns  Rows  Phrases/Sentences

**Practice**
Code and read Lesson 102 sentences.

**Code and Read.**

1. Kim gave Tom a three-year subscription to *Newsday* for his birthday.
2. The vet prescribed these pills for my dog Tex.
3. Jim is describing his summer trip to his class.
4. Please transcribe all of the notes from the meeting and send them to us.
5. Mail the script to me, so I can look at my lines.
6. The sunset was *indescribably* wonderful last night.
7. He inscribed our names in the trunk of the oak tree.
8. Jan sent her transcript to five schools in this state.
9. The witness *described* the thief as a tall man wearing *nonscript* black pants and a white shirt.
10. The unscripted moments in the play are so funny.
<table>
<thead>
<tr>
<th>concepts: scribe/script</th>
<th>102.1</th>
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<tbody>
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### Characteristic Profile for Take Flight

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SPELLING DECK

☐ Complete Deck
☐ Partial Deck

PHONEMIC AWARENESS

Preparation
Review sound pictures.

PROCEDURES
1. Look and listen
2. Echo
3. Unblend
4. Pull down the sound pictures
5. Add, take away, trade, switch, repeat

Show me
- deck
- desk
- disk
- whisk
- risk
- brisk
- brick
- brake
- bake
- lake
- flake
- flock

Closure
Write a V/A/K closure that will meet the needs of your students.
SPELLING PRACTICE

Preparation

(V)(C) = ČC
(a)(r) = ār
M(o) = ɔ
1Sb.w.M(e) = ee
1Sbw(ʌ) F(k) = ck
(VV)(C) F(k) = k
2+Sbw(ʌ) F(k) = ć

Words

1. stack 4. speck 7. brisk 10. plastic
2. block 5. struck 8. brook 11. garlic
3. smock 6. flask 9. creek 12. metric

Preparation

Learned words: the, Are (V)(C) = ČC
á

Dictation

1. Stack the blocks in piles.
2. Are a creek and a brook the same thing?

Closure

Write a V/A/K closure that will meet the needs of your students.

REVIEW

2. Previous New Learning.
# Reading Levels for Rate Stories

<table>
<thead>
<tr>
<th>Title</th>
<th>Reading Level</th>
<th>Concept Focus</th>
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<tbody>
<tr>
<td>1. The Tan Mitt</td>
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<td>CVC</td>
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<tr>
<td>2. The Raft Trip</td>
<td>0.8</td>
<td>CCVC, CVCC, CCVCC</td>
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<tr>
<td>3. Hank and Ping</td>
<td>1.0</td>
<td>ng, n(k)</td>
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<td>4. Swat That Wasp</td>
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<tr>
<td>5. Jobs at the Ranch</td>
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<td>j, ch, ck</td>
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<td>6. Skate to Win</td>
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<td>7. Plume of Smoke</td>
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<td>8. Track Athlete</td>
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<td>10. Starting West</td>
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<td>11. Paul’s Class Trip</td>
<td>2.2</td>
<td>au, aw</td>
</tr>
<tr>
<td>12. Oscar and Victor Are the Worst</td>
<td>2.4</td>
<td>ar, or</td>
</tr>
<tr>
<td>13. A Hound and His Boys</td>
<td>2.7</td>
<td>oi, oy, ou, ow</td>
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<tr>
<td>14. Toby and Salem</td>
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<td>15. The Sight of Snow</td>
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<td>16. Propose to Elope</td>
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<td>17. The Poetry Rodeo</td>
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<td>18. Flynn Middle School</td>
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