

Focus: Phonemic Awareness

Skill Level: Prereaders or Beginning Readers

Intervention Range: Kindergarten to Grade 2

Teach the foundational skill of phonemic awareness to small groups of pre-readers or struggling readers with the *Funēemics*® program. Students gain awareness of words, syllables, rhyming, phonemes, and phoneme manipulation using a research-based, scripted curriculum in convenient, spiral-bound lesson guides that correspond to interactive exercises displayed for students on an iPad® or Macintosh computer. Since *Funēemics* is pre-grapheme, it offers both developmentally appropriate instruction for early learners and easy alignment with any reading curriculum when used as an intervention for struggling readers.

Funēemics provides...

- Instruction to meet all the Phonological Awareness Common Core State Standards.
- A systematic intervention perfect for pre- or developing readers.
- Carefully designed instruction based on research.
- 59 ready-made lessons in convenient, spiral-bound lesson guides, easily taught by a teacher or teacher assistant in 15-20 minutes a day.
- Pre- and post-tests for recording individual progress.
- Student lessons displayed on one iPad or Macintosh computer, increasing opportunities for peer modeling.
- Letters are not taught or used, allowing this program to be used with any reading curriculum.

Students...

- Recognize and count words in a spoken sentence or phrase.
- Recognize and produce rhyming words.
- Count, pronounce, blend, and segment syllables in spoken words.
- Blend and segment onsets and rimes of single-syllable spoken words.
- Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme words.
- Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.
- Take turns using interactive widgets on the teacher's iPad in a small group setting.
- Focus on the sounds of language--there is no instruction in letters.

Funēemics® is a systematic phonemic awareness program that teaches students the six outcomes of phonemic awareness—word recognition, syllable recognition, rhyme recognition and production, and phoneme recognition and manipulation—meeting all of the Phonological Awareness Common Core States Standards. Each lesson builds on skills taught in previous lessons, adding just a few elements at a time. With minimal preparation, teachers or aides present scripted instruction from convenient, spiral-bound lesson guides to small groups of students, and use an interactive ebook with brightly illustrated pages and interactive widgets as a display for students. *Funēemics* is entirely pre-grapheme.

Developmental Teaching Process

In each lesson, the teacher presents featured tasks that build upon one another to reach the specific outcome on the phonemic awareness continuum.

1. Introduction

Often the lessons use a simple rhyme or song to introduce the tasks. If so, the teacher says or sings the rhyme or song, and then helps the students learn it by repeating it or by singing along.

2. Modeling

If the skill is introduced in the lesson, or is still in the early stages of review, the teacher models the tasks before asking students to perform.

3. Practice

Students practice doing the tasks as a group. The practice may include verbal responses, large or small motor activity, or the use of an interactive widget.

4. Repetition

Students practice doing the tasks as a group. The practice may include verbal responses, large or small motor activity, or taking turns using an interactive widget.

5. Correction

Unless otherwise noted, if a student responds incorrectly, the teacher models the appropriate response. After the student repeats the modeled response, the teacher states the directive again, giving the student another chance to respond. Whether the student responds correctly or incorrectly, the teacher continues by saying, "That was really difficult. Let's do it together now," and then repeats the directive as the entire group responds in unison.

6. Review

Each lesson ends with a formative assessment to evaluate students' understandings of the material covered in the lesson. For more comprehensive or challenging assessments, the teacher may review all of the material on the formative assessment page with each student individually or use unfamiliar words to review the skills.

7. Extra Practice

As a follow up to the lesson, the teacher provides extra practice throughout the day as suggested in the Lesson Overview.

Funēemics® has six levels, each with a small, spiral-bound lesson guide and a corresponding interactive display book on a Macintosh computer or iPad. (The iPad is the only tablet that is capable of reading these books.) All levels have the same basic design with strategic differences.

- Book 1 Word Segmentation with 10 lessons.
- Book 2 Rhyme Recognition with 10 lessons.
- Book 3 Syllables with 8 lessons.
- Book 4 Rhyme Production with 10 lessons
- Book 5 Phoneme Recognition with 10 lessons.
- Book 6 Phoneme Recognition and Manipulation with 12 lessons.

Six lesson guides include:

- Scripts for lessons of increasing difficulty.
- Teacher tips for teaching each lesson.
- Correction guides.
- Multiple activities to support each lesson task.
- Practice, repetition, and review of each task.
- Teacher modeling that is eliminated over time.
- Formative assessments for each lesson.

Six downloadable display books include:

- Colorful images for each page of a lesson.
- Interactive activities.

Teacher's Manual includes:

- Research and rationale for phonemic awareness.
- Scope and sequence.
- Correlation to common assessments.
- Description of teacher responsibilities.
- Support for introducing the program.
- Pretests and Post-tests, Books 1–6

<https://www.readnaturally.com/product/funemics#custom534>

Research Basis for *Funēemics*

Funēemics is a phonemic awareness program that provides systematic, explicit instruction based on phonemic awareness and instructional design research.

The Problem: Phonemic Awareness Eludes One-fourth of Middle Class First Graders

Reading comes naturally to many children. They “teach themselves” as their parents proudly observe. Often, these children listen to books daily in school and nightly with their parents. Surrounded by books and words, some children acquire the skills almost effortlessly.

There are also children who struggle as they attempt to learn to read. They may also hear many books read aloud. Surrounded by books, the words remain a mystery to these children, jumbled nonsensically on the page. Often, instruction in phonological awareness helps these students begin to make sense of the printed word.

Understanding how children make sense of oral language helps an educator understand that learning to speak does not directly correspond with learning to read. A string of sounds makes sense to humans in chunks, according to research (Louisiana Department of Education, 2002). The ability to separate those chunks into the smallest units of sounds is often not a reality for children who struggle to learn to read. They hear the sentence, but not the words. These children lack phonological awareness. And because they can't hear that a word like SAM is really a progression of three sounds, /s/ /a/ /m/, these children face difficulty learning to read. They have a hard time understanding that three letters stand for three sounds and that those three sounds blend into the word SAM.

The Solution: Direct Instructional Support Provides the Language Experiences Most Students Need

Funēemics breaks the phonological awareness continuum down into simple steps to teach a child: a sentence is made up of words, words are made up of syllables, syllables are made up of sounds (phonemes), and sounds can be manipulated to make new words. This teacher-led program uses nursery rhymes, songs, and interactive Display Books that are designed in a colorful, whimsical, and child-friendly format. *Funēemics* engages children with simple scripts, delightful illustrations, and interactive widgets.

Just as reading is taught to every student, phonological awareness can be taught to every pre-reader. Systematically teaching these skills plays an important role in preventing many of the problems that may necessitate remedial reading instruction (Shanahan, 2006).

Phonemic Awareness Instruction Research

| What the Research Indicates | How the Research is Applied in <i>Funēemics</i> |
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| <p>Phonemic awareness is “the ability to examine language independently of meaning and to manipulate its component sounds” (Griffith & Olson, 2004, p. 1). After reviewing over 50 studies specifically focused on phonemic awareness instruction, the National Reading Panel (NICHD, 2000) concluded that instruction in phonemic awareness leads to higher achievement in spelling, word recognition, and reading comprehension. And children found to be lacking in phonemic awareness show significant risk of future delays or failure in reading (King, 2005). In fact, the International Reading Association contends that “phonemic awareness abilities in kindergarten (or in that age range) appear to be the best single predictor of successful reading acquisition” (1998, p. 3).</p> <p>“Research indicates that, without direct instructional support, phonemic awareness eludes roughly 25 percent of middle class first graders and substantially more of those who come from less literacy-rich backgrounds. Furthermore, these children evidence serious difficulty in learning to read and write” (Adams et al., 1998, p. 1).</p> | <p><i>Funēemics</i> purposefully provides a step-by-step, fun, developmentally appropriate, and research-based curriculum. <i>Funēemics</i> guides students through the six outcomes of phonological awareness, laying a foundation for a successful introduction to reading or filling some gaps for a struggling reader:</p> <ol style="list-style-type: none"> 1. Students demonstrate awareness of words in spoken sentences and phrases. 2. Students demonstrate awareness of rhyme. 3. Students demonstrate awareness of syllables in spoken words. 4. Students demonstrate the ability to produce rhyming words. 5. Students demonstrate awareness of phonemes in spoken words. 6. Students demonstrate the ability to manipulate phonemes in spoken words. |

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| <p>Phonemics Versus Phonics</p> <p>There is an important distinction between phonemics and phonics. “Phonemic awareness is the ability to hear and manipulate the individual sounds within words. . . . Phonics instruction teaches students to use the relationship between letters and sounds to translate printed text into pronunciation” (Shanahan, 2006, pp. 6, 11). Phonemic awareness is an understanding of auditory concepts, and instruction in phonemic awareness does not need to involve words in print.</p> | <p>The <i>Funēemics</i> program consists of lessons that are entirely pre-grapheme. While teachers of preschool and kindergarten students may use the <i>Funēemics</i> program as a precursor to any formal reading instruction, research suggests that teaching phonemic awareness simultaneously with the teaching of letter names can prove effective (Shanahan, 2008). Because <i>Funēemics</i> focuses on sounds and does not teach letters or printed words, this program can be paired seamlessly with any reading curriculum or can be taught independently of other reading instruction.</p> |
| <p>Nursery Rhymes</p> <p>Research reveals that children’s knowledge of nursery rhymes at a young age has a role in the capacity to learn to read, write, and spell. MacLean, Bradley, and Bryant, in four longitudinal studies spanning from 1983 to 1989, report a strong correlation between early knowledge of nursery rhymes and subsequent reading, writing, and spelling success, despite factors of socioeconomic status, intelligence, and beginning phonological skills. These strong predictive correlations were not reproduced in the area of arithmetic skills, further supporting evidence of the correlation of reading to knowledge of nursery rhymes (Harper, 2011). L. J. Harper conducted a quantitative study on the phonemic skill levels of pre-kindergarten children after an intervention of explicit Euro-American nursery rhyme instruction. “Results of this research suggest that knowledge of nursery rhymes enhances children’s phonological awareness and sensitivity to individual phonemes and rhyme, and stimulates phonemic skill development” (2011, p. 65).</p> | <p>The <i>Funēemics</i> program uses a variety of traditional rhymes and songs as a basis for many of the lessons.</p> |

Instructional Design Research

Funēemics was designed to include effective intervention methods and strategies that increase the achievement of students with diverse learning needs.

| What the Research Indicates | How the Research is Applied in <i>Funēemics</i> |
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| <p>The National Reading Panel, in a report titled <i>Practical Advice for Teachers</i> (Shanahan, 2006), advises that the average young child should receive 14–18 hours of systematic phonemic awareness instruction. The report was clear to acknowledge this is an average. While some students may not require as much, others will need more intervention, which is why it is important to differentiate instruction and keep each individual learner’s needs in mind.</p> | <p><i>Funēemics</i> consists of 59 lessons, each 15–20 minutes in length, depending on the amount of repetition required by individual students. <i>Funēemics</i> provides approximately 17 hours of instruction.</p> |
| <p>Small-Group Instruction</p> <p>Small-group instruction is the most effective instruction for teaching phonemic awareness to young children (NICHD, 2000) and provides more one-to-one teacher/student opportunities. “Small-group instruction allows the teacher to receive more of the children’s attention, children can better see the teacher’s mouth as the words are being spoken—an important perceptual cue to phonemic awareness (Massaro, 1997), and the children have more opportunities to respond to and receive feedback from the teacher in the small-group setting” (Shanahan, 2006, p. 9).</p> | <p><i>Funēemics</i> is designed to be taught in small groups, ideally four to six students, in learning centers, when the level of active play is at a minimum and children are working on quieter projects.</p> |

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| <p>Wait time</p> <p>As demonstrated over several research-based studies, wait time is an often overlooked but important component of an effective teaching strategy. Wait time refers to the period of silence after a teacher asks a question and before the teacher calls on a student for a response. Research (P-16 Science Education at the Akron Global Polymer Academy, 2014) suggests that increasing wait time in the classroom setting from three to seven seconds results in an increase in:</p> <ul style="list-style-type: none"> ● The length of student responses. ● The number of unsolicited responses. ● The frequency of student questions. ● The number of responses from less capable children. ● Student-to-student interactions. ● The incidence of speculative responses. | <p>Throughout the <i>Funē</i>mics program, teachers ask students to “Put your thumb up when you know . . .” This model is used to encourage wait time, allowing students more time to process the question and think of an answer before someone else can say it out loud. Also, using a thumb instead of raising hands often eliminates the frantic waving an excited young student employs when he or she wants to share.</p> <p>The Tips for Teachers in each lesson guide includes this statement about wait time:</p> <p>When asking students to put their thumbs up, give them time to think; wait for several thumbs to go up before calling on a student. The word WAIT follows each directive to put up a thumb, as a reminder to do so.</p> |
| <p>Formative Assessments</p> <p>By teaching small amounts of information and repeating it, and then by testing the student directly after the information is taught, the information is more likely to be encoded in the memory (as cited in Tamer, 2010). Regularly reviewing skills is also an effective instructional tool (Swanson et al., 1999).</p> | <p>Each <i>Funē</i>mics lesson teaches a small amount of information in a brief lesson (15-20 minutes) and ends with a formative assessment to evaluate students’ understandings of the material covered in the lesson.</p> |

Instructional Components

H. Lee Swanson, Maureen Hoskyn, and Carole Lee conducted an extensive meta-analysis of 180 intervention studies and identified a number of instructional components that demonstrated effectiveness with students (1999). The lessons in *Funēemics* include many of these instructional components: attention to sequencing, segmentation, control of task difficulty, modeling, practice and repetition, and review.

| What the Research Indicates | How the Research Is Applied in <i>Funēemics</i> |
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| <p>Attention to Sequencing</p> <p>Instruction that includes breaking down tasks and sequencing short activities affects student outcomes (Swanson et al., 1999). The order of phonemic awareness instruction begins with word recognition, then moves on to rhyming and syllable segmentation, and then finally culminates with phoneme recognition and manipulation (Robertson et al., 1995).</p> | <p><i>Funēemics</i> presents instruction in skills in a series of short, carefully sequenced lessons. The continuum of phonological awareness is broken down into specific tasks, and the tasks sequentially increase in difficulty as the student acquires the skills necessary to manipulate phonemes.</p> |
| <p>Segmentation</p> <p>Segmentation of skills improves student achievement (Swanson et al., 1999). Segmentation is breaking the targeted skill into small units and then synthesizing the units back into the targeted skill. An example of segmentation in the teaching of phonemic awareness is breaking a word into its phonemic parts and then blending the sounds back into words (Robertson et al., 1995).</p> | <p>In <i>Funēemics</i>, students learn to break a sentence or phrase into individual words. Then they learn to break the words into syllables. Then they learn to identify each phoneme in a word and blend the phonemes back into a word. Finally, they learn that by manipulating those phonemes, they can make new words.</p> |
| <p>Control of Task Difficulty</p> <p>Controlling the difficulty of tasks—beginning with simple and then moving to more demanding ones—supports students during initial learning phases and promotes independence as students become more capable (Kame’enui et al., 2002; Swanson et al., 1999). The use of cues and prompts in diminishing frequency provides the support students need as they acquire difficult skills.</p> | <p><i>Funēemics</i> is designed with great attention to controlling difficulty. The lessons build upon one another. For example, the lessons in the beginning of Book 1 use shorter phrases, mostly one-syllable words, and precise teacher modeling. In later lessons, the phrases get longer, the words become more complex, and the modeling is removed. In Book 6, phoneme segmentation and blending begins with three-phoneme words made up of continuous sounds (Ex: FAN), and progresses to five-phoneme words consisting of continuous as well as stop sounds (ex: SCREAM).</p> |

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| <p>Modeling</p> <p>Modeling and carefully explaining the steps required to do a task helps students correctly perform the task. It also increases the likelihood that students will perform the task independently later (Swanson et al., 1999). When teaching students phonemic awareness, the steps in the continuum must be made conspicuous by modeling the strategy before students practice (Kame'enui et al., 2002).</p> | <p>In <i>Funēemics</i>, every task is introduced with modeling by the teacher. Only after the students have had practice doing the task with modeling are they asked to do so as a group, and then independently. The Correction Guide used throughout the curriculum also uses a continuum of modeling.</p> <p>Unless otherwise noted, if a student responds incorrectly, the teacher will model the appropriate response. After the student repeats the modeled response, the teacher states the directive again, giving the student another chance to respond. Whether the student responds correctly or incorrectly, the teacher continues by saying, "That was really difficult. Let's do it together now." Then the teacher repeats the directive with the entire group responding in unison.</p> |
| <p>Practice, Repetition, and Review</p> <p>Intuitively, we know that practice helps us become better at many things we do. Repetition of the same material provides a safety zone for learners. They are familiar with the format and may even remember some of the material. It makes learners feel that they have a better chance to understand the concepts. B. Price Kerfoot, Ed.M., after years of study and developing a patented methodology of repetition and formative assessment, found there are two steps important in retention: the spacing effect and the testing effect. By teaching small amounts of information and repeating it, and then by testing the student directly after the information is taught, the information is more likely to be encoded in the memory (as cited by Tamer, 2010). Regularly reviewing skills is also an effective instructional tool (Swanson et al., 1999).</p> | <p><i>Funēemics</i> lessons introduce a skill and repeat the use of that skill several times throughout the lesson, providing opportunities for both group and individual repetition. The skills are then reviewed and developed further in subsequent lessons. The formative assessment at the end of each lesson gives yet another opportunity to repeat the skills taught in the lesson on an individual basis. Additionally, the Extra Practice tips in the Lesson Overview pages offer many ideas for repetition and are important for supporting the lesson throughout the day. They provide review and connect the lesson to things within the students' environment, making the students more aware of the transference of "school lesson" to real life.</p> |