ReadOn and the US Reading First Curriculum

The following document details the findings of an independent evaluation of ReadOn software as to its potential fit into the Reading First curriculum. Dr. Julie Wood, Literacy and Educational Technology Specialist, Dr. Kathe Simons, Reading First Specialist, and Dr. Frances Hurley, Director of Literacy Research, conducted this evaluation.

A. Summary

In summary, we found a great many strengths in the *ReadOn* software product. As an assistive tool, we concluded that it has a great potential to provide struggling readers and writers with a motivating way to access and create texts in both home and school settings. Students can choose to upload texts to be read aloud, such as e-mails, news accounts, magazine articles, and textbooks, and can select personalized settings to optimize the reading experience. In the writing mode, *ReadOn* gives students the all too rare opportunity to hear their own composition read aloud. This capability can serve as a proofreading aid and would certainly serve to make writing more pleasurable for the struggling writer. *ReadOn* also provides the capacity for textual and pictorial help with unknown vocabulary. In total, it is our judgment that when placed in the hands of a well-trained teacher, *ReadOn* can make possible for the struggling reader more full participation in both academic and social worlds. Moreover, *ReadOn* could easily and rewardingly be utilized for the benefit of struggling readers within a *Reading First* context.

B. What is ReadOn?

ReadOn is primarily an open-ended, technology-based tool that uses synthesized speech to read aloud digital text. If the text already exists in digital form (a Wikipedia entry or an e-mail message, for example), the student can simply cut and paste the text into the product's "Read Mode." If the text comes from a printed source (a magazine, textbook, or newspaper, for example) a student can learn to scan the text and then translate it into digital text using optical character (OCR) software. Then the student can have the text read aloud in one of several voices. Teachers can save up to three sets of personalized features for each student or small group; specifically, reading by word, phrase, or sentence, displaying the text in a particular font, highlighting text at a specific speed, or including definitions and phonetic pronunciations from a list of words that the student finds challenging. Features can be easily adjusted as the student becomes more proficient.

Importantly, *ReadOn* also includes a "Write Mode." This mode allows the student to create their own texts using the software's word processing capabilities. As a student composes, he or she can have their text read back to them in synthesized speech. This read aloud feature helps the student to proofread and edit their work.

ReadOn also provides the capacity to input textual definitions of words, and perhaps more importantly for the reader struggling with vocabulary, the capacity to input pictorial definitions of words.

C. What are the characteristics of Reading First instruction?

Reading First schools along with other schools that implement a *Response to Intervention* (RTI) model use a 3-Tier Model for reading instruction (University of Texas/Texas Educational Agency, 2005). The 3-Tier model of instruction provides both support and challenge to the entire range of students in a school, from struggling readers to those who are reading above grade level and have well-developed comprehension skills. *Reading First* instruction focuses on the five essential components of reading: phonemic awareness, phonics/word study, vocabulary, fluency, and comprehension. *Reading First* instruction should be explicit, direct, and systematic. Moreover, materials bought to teach in this program are carefully vetted to ensure that they focus on one or more of the components of reading and that they provide a measure of explicit, direct, systematic instruction. Each of these characteristics is now described in turn.

1. Tier I instruction

During Tier I instruction, *all* children participate in daily instruction using the core reading program. The daily instruction usually consists of 90 minutes that focus on three formats: whole group instruction (30 minutes); differentiated, small group instruction (typically three to four rounds of 15-20 minutes each); and independent practice time (during which children typically engage with various center activities when they are not receiving small group instruction). Tier I instruction focuses on all of the five essential components of reading, and the hallmarks of Tier I instruction include: explicit, direct, and systematic instruction, teacher modeling, scaffolding, guided practice, corrective feedback, and independent practice.

2. Tier II instruction

This level of instruction is designed for those students who need supplemental support in literacy instruction. Such students receive an additional 30 minutes of daily reading instruction over and above the 90-minute reading block (see Tier I). Often students in a Tier II setting will receive progress-monitoring assessment at least once per month to ensure that they are not only responding to their total reading instruction program (Tier I + Tier II) but also making accelerated progress.

Tier II instruction focuses on one or more of the five essential components of reading and provides students with extra practice and reinforcement of new skills through supplemental instruction and practice with an interventionist.

Experts believe that Tier II instruction is most effective when it is well-coordinated with Tier I instruction. In a best case scenario, for example, a teacher would coordinate and reinforce skill instruction for students on the same phonic element across both the Tier I and Tier II settings, the combined approach of which is meant to accelerate student understanding and use of that target phonic element.

3. Tier III instruction

Students who receive Tier III instruction are given an additional 60 minutes of instruction per day. Tier III instruction by definition is even more explicit and systematic than Tier I or Tier II instruction. Often delivered to small groups of 2-4 (rarely individually), Tier III instruction is also most effective when it is carefully aligned with Tier I instruction. To that end, the intervention teacher (who provides Tier III instruction) and the classroom teacher (who provides Tier I instruction) are encouraged to collaborate on ways to ensure that a student receives consistent skill instruction across the two settings.

Published programs that teachers use for Tier III instruction are often scripted. This means the teacher is told *exactly* what words to say to students throughout the lesson. Such programs also require the interventionist to provide careful, accurate, and timely corrective feedback to the students.

4. Explicit, direct and systematic instruction

Within the context of Reading First schools and classrooms, instruction must be explicit, direct, and systematic. Teacher modeling is an essential component of every facet of this type of instruction including instruction in decoding, encoding, fluent reading, and text comprehension (National Reading Panel, 2000). Teacher think-alouds, one form of modeling, provide students with an opportunity to apprentice with a skilled and fluent reader—their teacher! In addition, immediate corrective feedback from the teacher is considered crucial to the quest to help every student master reading, writing and thinking skills.

5. What materials may schools purchase for Reading First instruction?

In many Reading First schools, teachers are required to use their school's core reading program—exclusively— during Tier I instruction. In other words, a teacher who works in a school that has adopted a series such as Scott Foresman Reading Street (2007) is permitted to use *only* that program during the Tier I Reading Block. According to Reading First protocol, the teacher must carefully examine all of the program's features, including the degree to which the teacher manual suggests explicit, systematic, and direct instruction. The teacher must also carefully analyze the myriad additional resources that the core program has to offer before she may consider purchasing a supplemental program. If school administrators agree that the core reading program needs to be supplemented, they may decide to purchase additional products, but will consider only those that align with the principles of *Reading First*.

D. Could ReadOn be used within the Reading First instructional framework?

We see great potential for the use of ReadOn software within the Reading First instructional framework, particularly during Tier I and Tier II instruction. Additionally, parents of struggling readers could likewise consider this software for at-home use. How we envisage the use of ReadOn in a Reading First context is now detailed.

1. The use of *ReadOn* to support Tier I instruction

During the Tier I "Reading Block" teachers could have students work with *ReadOn* during their independent practice time to foster oral reading fluency, vocabulary development, and written expression.

First, with respect to fostering oral fluency, students could use *ReadOn* to practice reading aloud familiar texts that they have uploaded or scanned into the "Read Mode." The texts might be taken from either the core reading program or from supplemental reading materials. We note that *ReadOn* offers the option of highlighting and reading text word by word, phrase by phrase, and paragraph by paragraph. We envisage an ideal situation in which the teacher or paraprofessional would encourage the student to *read* aloud along with the highlighted text (Rasinski, 2005). Then, after the student had engaged in several independent practice sessions, the teacher or paraprofessional could then re-listen to the student, hopefully being able to note areas of improvement.

Second, with respect to building vocabulary, we want to especially note *ReadOn*'s capacity to both create personalized word banks and access online dictionaries. We believe that this could be a very effective way for students to develop their lexical understandings, particularly if they are studying words, related books, and articles that truly interest them. Although the *ReadOn* software itself does not teach word meanings in a direct and systematic way, with teacher guidance *ReadOn* could help to build students' knowledge of word meanings through the use of multiple exposures, picture clues, and student-friendly definitions. Such scaffolds could certainly help students bridge their receptive and expressive vocabularies in an enjoyable way.

Third, with respect to writing development, we would like to note that in the "Write Mode" students can write in response to texts they have read or heard during reading time. They can also listen to their own text being read aloud (in synthesized speech) by simply toggling between "Write Mode" and "Read Mode." This feature could both motivate and assist students with the tasks of proofreading and editing their compositions.

2. The use of *ReadOn* to support Tier II instruction

ReadOn could be used by students to review familiar texts, practice reading aloud to build fluency and accuracy, create personalized word banks, and write in response to texts. With close supervision by a teacher or paraprofessional, a student could use *ReadOn* to explore additional texts (including phonetically regular texts) in order to practice new decoding skills. Further, with the addition of writing templates, common graphic organizers or story frames, students could use *ReadOn* in the "Write Mode" to develop their comprehension and written expression.

3. The use of *ReadOn* to support Tier III instruction

ReadOn could serve as an important assistive tool for those students who receive Tier III instruction. Students could practice reading with carefully selected decodable texts to reinforce their reading and writing skills. *ReadOn* could also be used by students to reread anthology selections that were introduced during Tier I whole group instruction. As an adjunct to listening to the story on CD-ROM (which most core reading programs provide), a student would have far more control over the text when using *ReadOn*.

4. The use of *ReadOn* to support the home literacy environment

It is our judgment that the *ReadOn* software could easily be used in the home environment in much the same way as we propose the software be used in the *Reading First* classroom setting. This would, of course, require an involved and supportive parent working in concert with the classroom teacher.

E. Other strengths of the ReadOn software

1. Pedagogical strengths of the software

- Given that teachers often find it difficult to provide struggling readers with appropriate texts in terms of both topic and readability, a great strength of the product is its potential to give students access to a wide range of interesting, grade-level reading materials.
- As noted earlier in this paper, teachers can personalize settings for different types of learners. Teachers can save up to three sets of personalized features for each student or small group; specifically, reading by word, phrase, or sentence, displaying the text in a particular font, highlighting text at a specific speed, or including definitions and phonetic pronunciations from a list of words that the student finds challenging. Features can be easily adjusted as the student becomes more proficient.
- Students can add their own words and related pictures (*e.g.,* clip art, original drawings they have scanned, kid-friendly definitions) to the dictionary. Pictorial definitions would seem particularly beneficial for students who struggle with decoding but still need to comprehend.

- Students can access a built-in spell-checking tool that offers American English (and British English) spellings. This tool will also pronounce each of the suggested words, which is a useful feature.
- Students and teachers can monitor word recognition by consulting the "auto logging" feature, which tracks the words individual students have had difficulty decoding.

2. Technical strengths of the software

- ReadOn works with the types of computers often found in schools. It does not require state-of-the art computers with vast memory capabilities.
- The system requirements for using the software are spelled out on the package. Also, the product is easy to install.
- ReadOn can potentially be used in a variety of contexts (stand alone and/or networked for school and home use).

3. Implications for learning

- We believe that ReadOn will motivate struggling readers and writers by giving them access to texts that can be imported, scanned, or created by themselves. Students who have difficulty decoding text independently can more fully participate in all parts of the curriculum by hearing texts read aloud.
- Once trained on the software, students could use ReadOn independently or with a partner to explore content-related topics and texts, and to write their responses to a text. Established in this manner, ReadOn can give students ready access to texts of their own choice, and supplement the reading program by offering additional practice opportunities in both reading and writing. These capabilities are no small matter given that teachers need a full range of tools to address the needs of struggling readers and writers (often in classrooms with 30 or more students) to ensure that all students become proficient readers and writers.
- Students can use ReadOn beyond the school day in after-school programs or home settings.