Park Slope Communication & Learning Center

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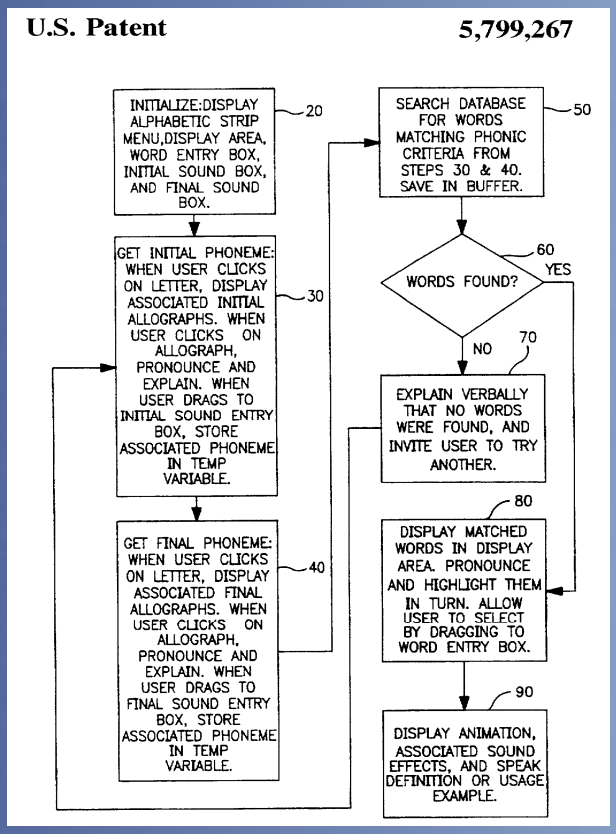
The Phonic Engine® Reading Method: Learning to Read in the 21st Century
A Transformative Advance in the Teaching of Language Arts and General Education



The Beginning: First Phonic Engine Patent
See Appendix A for What This Means to Children, and to Your Child

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Contact Information

To sign up for our reading program, please contact Laura Reisler, MS, CCC-SLP at 718.768.3526 x1, or laura@parkslopecc.com.

If you would like to become involved in furthering this methodology, please contact Laura, as above, or Steve Siegel, developer of the Phonic Engine Reading Method, at 718.833.2445, or steve@parkslopecc.com.

Helping Children to Read: Transformative Results

For the last several years, we have been providing children with help in reading, writing, and all aspects language arts – in addition to speech and language therapy. During this time, we have helped many children *turn their lives around*, helping them to overcome problems that seemed entrenched; problems, in some cases, where no one else had been able to help – including one-on-one help from a reading specialist. We have been able to achieve this through a novel, computer-assisted method for the teaching of language arts: *The Phonic Engine® Reading Method*. Kids love it, are highly motivated, succeed, and come to love reading. With the degree of success these children have achieved, we felt it time to make this service (and method) more widely known, as the results have been nothing short of astonishing. See appendix A for representative results. And please contact us if you'd like your child to join our program.

This White Paper is intended for parents whose children are having difficulty reading (or wish enrichment for their children), educators and elected officials seeking a "better way," investors, marketing & sales professionals and management/financial professionals who wish to help "spread the word," and anyone with a personal, societal, and/or financial interest in this novel, patented, dynamic, mainstream, broad-scope and highly successful technology-assisted method for the teaching of language arts and general education.

The Phonic Engine Reading Method is a *transformative* advance in the teaching of language arts, in that it does not require a *linear approach* to the teaching of language arts. What this means, is that the learner need not know one thing before the other, or learn the simple (but potentially boring) before the complex (and likely more interesting), but can learn all things in any order, or at the same time, in a manner and sequence best suited to the particular individual. A learner, beginning at age 4 – 5, does not need to know the alphabetic principle, or even the entire alphabet, before he or she can read and write, using correctly spelled words (the underlying precept of phonics), or need to encounter words and phrases in meaningful contexts in order to learn to read (the underlying – albeit incomplete – precept of whole language). To understand how this is possible, please refer to the "discussion" section below.

The software application that turns the Phonic Engine Reading Method into a reality is KidsVoyager® Online. It makes the process of teaching and learning language arts so efficient that it should really be on the home computer of every family with a young child, and on every computer in every classroom, from pre-school through about fifth grade. It also dissolves the argument between the two major current approaches to reading: phonics and whole language, which is a false argument anyway, because a gifted teacher really should understand his or her students' needs, and teach accordingly – as many certainly do – and not stick to a particular philosophy. And the Phonic Engine Reading Method substantially reduces the effort to do this.

For purpose of analogy, a computer program called VisiCalc was a transformative advance: the first spreadsheet program for the personal computer, and often credited with being the software application that turned the microcomputer from a hobby into a serious business tool. To quote Dan Bricklen, one of it's inventors: "VisiCalc took 20 hours of work per week for some people and turned it out in 15 minutes and let them become much more creative." The Phonic Engine Reading Method utilizes the personal computer to transform language arts and education, as VisiCalc did to transform accounting.

Kids typically love coming to our reading sessions, and use the Phonic Engine software, KidsVoyager® Online, at home as well as at our center, both for our homework, school homework, and general enjoyment. For example, one child who currently attends our program is receiving reading help in school and, by mutual agreement among parent, his school, and us, attends our program solely to engender the love of reading.

He attends a school for children with learning difficulties, and is receiving structured phonics instruction on a daily basis. When we contacted this teacher, and discussed KidsVoyager Online, we agreed that while she worked on phonics, we would work on helping him to enjoy reading.

This bright boy, who is 10 and dyslexic, hated to read and hated books, because he could not decode them. Fortunately, he has numerous interests – as do many children – which allowed us to pick stories, articles, and writing assignments about topics he is very interested in. He now tells us that he really likes books and especially reading about the WWE!

Summary

Park Slope Communication & Learning Center has developed a novel, technology-assisted method for the teaching of language arts, which has, over the last several years, shown a 100% success rate for all children whose parents have been supportive, as defined by consistency of attendance and completion of assigned homework. These include children with a variety of impairments, some of which have been significant, such as Auditory Processing Disorder, Dyslexia and ADHD; children who initially “hated” to read; and children who had not been helped by any other previous methodologies, including one-on-one help from a reading specialist. In addition, we have helped children who simply have had “problems,” as well as children whose parents or teachers have simply desired enrichment.

The successes have been measured by a variety of means:

1. Standardized testing (as opposed to proprietary assessments used by other learning centers)

2. Progress in school, including children advancing from the lowest, to the highest reading group
3. Parental feedback
4. Children who have initially stated that they “hate” to read, have subsequently stated that they “love” to read
5. Children with initial and severe language arts problems, have become avid readers and prolific writers
6. Children who have had difficulty with verbal and written expression, have become noticeably more active participants in conversation, including improvement in verbal expression during spontaneous conversation, with concomitant improvements in written expression
7. Children frequently use the method at home, to do homework, and for general enjoyment

We currently wish to help more children within our own practice and, additionally, “spread the word,” so that other children beyond this practice may benefit as well.

The Phonic Engine® Reading Method (the Method) was developed by Steve Siegel, a principal owner of Park Slope Communication & Learning Center, who holds 7 patents in the general area of literacy methodologies; and has been largely administered by Laura Reisler, the other principal of Park Slope Communication & Learning Center, and founder of Park Slope Speech Therapy, which provided Speech & language Therapy in Park Slope for 20+ years prior to the formation of Park Slope Communication & Learning Center.

The Method is not a “constrained” reading program, in the sense of “programmed learning.” Therefore, it is fresh and new in each and every session. Following the terrible earthquake and Tsunami in Japan, in March, 2011, for example, we read about them using KidsVoyager® Online. Then, we read about earthquakes and Tsunamis in general: what they are; what causes them; and how they change the features of the earth. We talked about how we could help the Japanese people. Thus, the kids became very actively involved. The lesson incorporated science, in addition to the language arts skills of vocabulary, sequencing, problem solving and predicting. As well as the fact that “ts” can make the sound /s/!

It may be (and currently is) used, in a highly effective fashion, for remediation and enrichment, such as that provided by a private tutor or a learning center, and the way we use it in our reading program. (Our speech/language therapists also use it for speech and language therapy.)

However, it is a broad-based method/platform for the teaching, remediation *and* enrichment of language arts, as well as general education, from pre-school through third grade and, if remediation is needed, through approximately fifth grade.

It is the equivalent, with respect to *scope*, of “Phonics,” “Whole Language,” or a “Basal Reader” approach. It does not, however, like phonics, whole language, or a basal reader approach, carry with it a “philosophy” or “dogma.” A combination of the Method itself, and assistive technology, eliminates the need for a philosophy, as it does not need to be applied in a linear fashion, with one skill preceding another, as it compensates for lack of skill with respect to the basics of language arts (i.e. alphabetics and sight reading), and thus allows students to easily follow and understand written text without knowing sight words or decoding techniques, and to encode without knowing alphabetics. (Again, to see how this is accomplished, please see The Phonic Engine Reading Method Discussion, below).

Simplistically speaking, the core philosophy of phonics (behaviorist/bottom up), is that the learning of language arts is best accomplished by teaching parts (letter/sound associations), and building from there. The core philosophy of whole language (constructivist/top down) is that the learning of language arts is best accomplished by exposing children to textual material, and then deducing sight words and letter/sound associations. The core philosophy of a basal reader approach (look/say or “whole word”) is the repetition of simple words from page to page, until the student “gets it.”

On the other hand, via patented techniques, described in the “discussion” section of this paper, the Method may be used to teach, remediate, or enrich, by allowing children to 1.) Encode any word(s) they can think of, and thus, using any textual database (for example the Internet or an intranet), search for, read, understand, and write anything they can conceive of, and 2.) Comprehend any textual material, well above grade level, where the words are contained within their mental lexicons, and even beyond.

Why do we contend that the Method will succeed in other arenas beyond Park Slope Communication & Learning Center?

1. While Laura is a highly successful professional, and a supportive individual, so are many other individuals.
2. While all the children with supportive parents have succeeded, the same parents were supportive as their children were taught, without success, via other methodologies.
3. Children who initially hated to read (virtually all of them, since poor readers typically hate to read), in response to other methodologies, typically loved using The Phonic Engine software, KidsVoyager® Online, and came to love language arts.

Thus, the single differentiating factor is the Method itself.

In a school setting, the Method has a distinct advantage: efficiency and cost. While the cost of books and personnel is high, the cost of this assistive technology, if utilized in a widespread manner, could be extremely low, and thus

able to efficiently serve a disadvantaged population, as well as middle class and other populations.

The Method, used in a school setting for *remediation*, for example, would allow a school's reading specialist, learning specialist, speech & language pathologist, or properly trained teacher, paraprofessional, intern, or volunteer, who helps students with language and language arts issues, to attend to at least 3 times the students they currently assist. This benefit derives from several reasons, including the actual Method itself, which is highly motivating, and the fact that the Method, as embodied in KidsVoyager Online, can utilize material accessible via the Internet. Laura believes that her lesson planning, using KidsVoyager Online, which typically requires 5 – 10 minutes per student, is a small fraction of the time (and cost) of assistance using traditional means, such as writing paper, construction paper, plastic/magnetic letters, scissors, pencils, erasers, crayons, pipe cleaners, textbooks, storybooks, and so on, in addition to the tasks of choosing materials, purchasing materials, aggregating materials, copying materials, etc.

If one remembers the time it once took to perform research prior to the Internet, such as going to the library, viewing microfiche, requesting journals from the librarian, waiting for them to be delivered, paging through them, as well as aisles of books, taking notes and/or copying material, one can get an idea of the efficiency provided to children via the Method. And, in addition, KidsVoyager Online can be used at home as well, so once a student learns how to use it (less difficult than a video game and of similar enjoyment) this augments instruction provided in school, and most, if not all, of *our* clientele, thoroughly enjoy using KidsVoyager Online at home.

If used within a school setting, as the *preferred means for the teaching of language arts*, there may be a number of alternatives, such as, for example:

> For Kindergarten: To accommodate the readiness and maturity level of Kindergarteners, one potential way to utilize the Method would be to have several computers in the classroom, with students receiving lessons as-needed, on a rotating basis, and holding related group discussions.
>
> > The goals of a kindergarten curriculum for language arts may include, for example (from http://lw025.k12.sd.us/kindergarten_curriculum.htm):
> >
> > a. Students will recognize the upper and lower case letters of the alphabet
> > b. Students will identify the sounds of each letter of the alphabet
> > c. Students will participate in concrete activities to enhance learning
> > d. Students will engage in speaking opportunities through "Letter of the Week" show and tell

e. Students will be immersed in written language throughout the classroom.
f. Students will discover creative writing through a process of exploration and discovery
g. Students will use pictures and inventive spelling to illustrate and tell a story
h. Students will engage in speaking opportunities through "Letter of the Week" show and tell

Except for “g”, most Kindergarten students, we believe, would far exceed these goals using the Method. With respect to “g”, the Method’s encoding technique would be used for creative writing. The software embodiment of the Method, KidsVoyager® Online, includes the ability for children to include character animations with stories and other written narratives. However, somewhat to our surprise, after an initial enchantment with this, children loved, and took pride in, their ability to simply compose stories, with correctly spelled words, and hear them read back, with animations falling by the wayside.

An additional and preliminary objective, quite naturally, would be for children to *learn* to use the Method in the first place. This would range from several minutes to several hours, depending on the student, with a level of difficulty similar to learning to use a video game controller. Once mastered, each child would have learned, from a conceptual perspective, the alphabetic principle, and detailed correlations between some specific letters and sounds. By the end of Kindergarten we would expect virtually all children to know all correspondences between all letters and all letter sounds, at the very least.

For First through Third Grade: One to one ratios of students to computers appear to be gaining ground (The Public Policy Institute of New York State, 2003, http://www.ppinys.org/reports/2003/laptops03.pdf) and this may be the preferable mode utilizing the Method.

Another mode would be to have a computerized “reading room,” through which classes could rotate throughout the school day.

Patents

If you would like to view highly specific details, you may view our patented methods at the United States Patent and Trademark office Web site at the links below (if the links become broken, or you are reading this on paper you may search for them by name and number at http://www.uspto.gov):

- 7,305,624 Method for limiting Internet access
- 7,181,692 Method for the auditory navigation of text

- 6,442,523 Method for the auditory navigation of text
- 6,148,286 Method and apparatus for database search with spoken output, for user with limited language skills
- 6,009,397 Phonic engine
- 5,953,692 Natural language to phonetic alphabet translator
- 5,799,267 Phonic engine

The patents cover and protect enabling methodologies for helping children (and others) increase phonemic awareness; learn the relationships among letters, letter-sounds, words, and textual content; help pre-reading individuals navigate, understand, and learn from textual material; facilitate vocabulary expansion, reading comprehension, reading fluency, and virtually all aspects of language arts; and provide pre-reading children the opportunity to acquire knowledge about virtually anything of interest to them.

In addition, patent 7,305,624, the *Method for limiting Internet access,* provides a deterministic means for children to use the Internet, unimpeded by the frequent browsing interruptions other Internet limiting tools create.

The Phonic Engine Reading Method: Synopsis

This method, we believe, supersedes any previous or current method for the teaching of language arts. It does so due to the fact that 1.) Via a novel technique (as discussed below), a child, starting at the age of 4 or 5 can "spell" any word he or she can think of. Therefore, young children can find and/or write about anything at all and, in the process, will traverse, with a computer mouse, a multisensory user interface with all the connections necessary (letters, sounds, words, context) to advance or remediate reading skills; 2.) Any topic of a child's choosing (like dinosaurs, the solar system, medieval swords, and even games) may be used as a conduit for the concurrent teaching of highly interesting and exciting subject matter and language arts; 3.) A child is exposed, in a multisensory environment, over and over and over again, to the underlying connection between letters and sounds; the specific connections between specific letters and specific sounds; the connection between letters/sounds and vocabulary words; the connection between letters/sounds/vocabulary words and textual content, so all the building blocks of written language are understood in context; 4.) The Method is fun, in the true sense of fun for children, and thus extremely motivating; 5.) It may be (as it currently is) used at home, as well as in school, the library, or at a learning center, providing substantial carry-over; 6.) In a school setting, students – who would have this at home as well – could expect higher gain, with less teacher time, thus increasing the value and reach of each teacher.

The Phonic Engine Reading Method: Example and Enabling Techniques

One topic that children frequently enjoy is animals. This example illustrates a number of interesting points. Zoe, a kindergarten student, has an older brother, Bo, who was jumping around the house one day, when their mother laughed and said “Bo, you’re hopping around like a kangaroo!” and they *all* laughed.

Now, Zoe knows much of the alphabet, and a number of letter/sound associations, and she recently learned that “car” is spelled c-a-r, when her older brother and his friends saw a car, and chanted “car, car, c-a-r!

She wants to know about kangaroos. What does she do? (Refer to the figures below.)

1. Having previously used KidsVoyager Online before for checking out animals, she knew exactly what to do. She opened it up and, using “Favorites,” went right to the San Diego Zoo search page.
2. Now, she *thinks* the word “kangaroo” in her head, whispers it to herself and, based on her rudimentary, age-appropriate, phonological awareness, *immediately* knows that the beginning sound is /k/ and the final sound is /long u/.
3. She clicks on the letter “c” to try for the beginning sound; a number of allographic patterns (*an* ***allograph*** *is a letter or combination of letters that is one of several ways of representing one phoneme, as* pp *in* hopping *representing the phoneme /p/*), all containing “c” are displayed, with one making the phoneme /k/. She knows which one to pick, because a.) it has a picture of a castle on it and 2.) when she glides the mouse over it, it’s pronounced for her. So she clicks it, thus establishing the initial sound of the word she’s trying for. The castle picture appears in the “initial sound” box. Number of clicks: 2.
4. Partially knowing the alphabet, she guesses that the letter “u” might make the /long u/ sound, and she’s correct. She clicks it, and then listens to, and clicks on the button for the /long u/ phoneme, thus establishing the final sound as /long u/, which appears in the “final sound” box. Also, all the words (or almost all the words) in the English language that begin and end with /k/ and /long u/ are displayed. Number of clicks: 2.
5. She doesn’t recognize most of the words, and moves the mouse over them, laughing when she hears “caribou” and “cuckoo”, and winces when she hears the word “curfew.” A little later she would check out these words but, for now, she’s delighted when she hears the word “kangaroo.” She clicks it, and it appears, spelled correctly, in the word box, and in the search box on the San Diego Zoo’s search page.
6. She hits “Enter”, and then learns about Kangaroos, by gliding her mouse over the text on the kangaroo Web page, clicking on words she’d like to

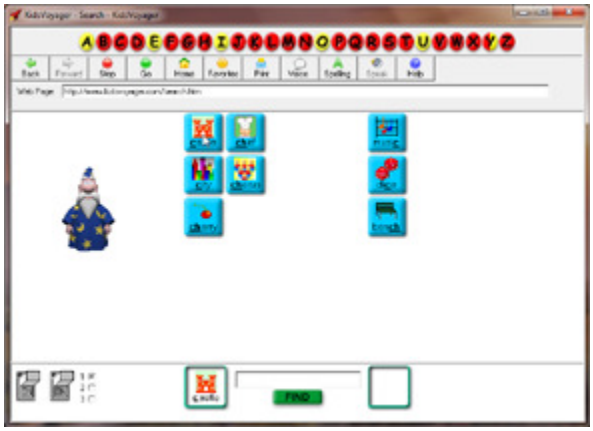
hear repeated, and double clicking on some words which she doesn't understand, like "mascots." When she double clicks, it takes her to a children's dictionary, with the clicked word filled in the search box.

What are some of the things Zoe learned, had the opportunity to learn, or had reinforced?

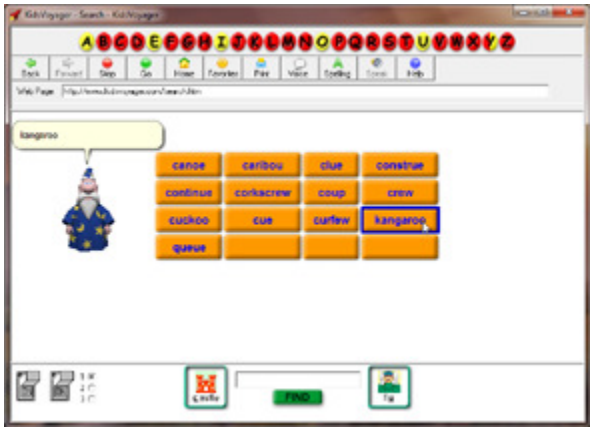
1. The phonemes represented by the allographs containing the letters "c" and "u".
2. The allographs that represent the sound /k/ and /long u/ in the word kangaroo ("k" and "oo"), and other words as well.
3. The spelling of the word kangaroo, as well as all other words in the word grid and story.
4. The various words that begin with the sound /k/ and end with /long u/ (some of which she will check out later!)
5. Information about a kangaroo, a joey, and all kinds of stuff, **(**including about red kangaroos and gray kangaroos**,** and that a group of kangaroos is called a mob, a troop, or a herd; and also about wallabies) which is what she wanted in the first place!
6. Also, information about a caribou, which she reads about a little later.
7. She found out what a "mascot" was (mentioned n the narrative), but rather quickly forgot. Had she been working with a teacher or coach, however, she would have written it in a word journal.
8. Her phonological awareness was reinforced, and built upon, through phoneme manipulation.
9. The alphabetic principle, conceptually, as well as specific letter/sound associations.
10. Both encoding and decoding processes.
11. Sight words.
12. Vocabulary.
13. Reading Comprehension.
14. At a future date, she'd read the *Winnie the Pooh* books (also mentioned).
15. Her confidence grew.
16. She enjoyed this "language arts" time, as a kid would enjoy a video game, found it motivating, and would want to repeat it.
17. She started jumping around the house, hoping her mom would refer to *her* as a kangaroo. She did!

Now: imagine Zoe using the Method every day; or several days a week, with or without an instructor, checking out outer space, cool ancient civilizations, medieval swords, dolls, television programs, letting her imagination take over, looking things up and writing about them. Being able to "look it up without knowing how to spell it!" What do you think would happen over the course of, say, a year, with respect to her general knowledge as well as language arts? Think about it.

Figures: The Phonic Engine Method in Action



Initial Phoneme Selection (Multisensory)



Final Phoneme Selection, Multisensory Display of All Matching Words, Selection of “Kangaroo”

“Kangaroo” Appears in Search Box of San Diego Zoo Web Page (Correctly Spelled)

Zoe Increases Language Arts Knowledge, Learns All About Kangaroos, and More

What are the novel, enabling techniques that made this 5-10 minute, knowledge rich experience possible? Please refer to Appendix B, “Patent Abstracts,” or click on the links in the “Patents” section for detailed descriptions.

The Phonic Engine Reading Method Discussion: How It Came About – Steve Siegel

In the early 1990s, when home computers were becoming “multimedia capable,” and multimedia CDs were “all the rage,” there was one particular company, Broderbund, that I felt was producing CDs that were head and shoulders above the rest. Titles like “The Tortoise and the Hare,” for example, where kids could

listen to a beautifully animated story, page by page, and also “play in the story,” by staying on a particular page, and clicking on random things to see what happened. The animation was beautiful.

At around the same time, there were also writing programs, where a child could key in text, and hear it narrated back. One problem with this, though, was that spelling mistakes would cause the text to be mispronounced.

I had an idea to create educational software that would allow children to create *animated* stories; animated stories with *correctly spelled* words. In the process of pursuing this, naturally, I tried to conceive of a way in which a child could, in fact, *create* correctly spelled words. One thought was to use “themes,” wherein a child could select a particular theme, such as animals, for example, and would be provided with a set of words and matching animations which could be, in some manner, coupled together to form a story. I also began to wonder if there was any information a child possessed which, with computer-assisted technology, could be used to enable the correct spelling of words; words which could then be narrated back with correct pronunciation, and thus provide additional motivation. It was with *this* goal in mind, that I recalled an incident involving my own son, at age 4. We were driving along 72nd Street in Manhattan, when he noticed a dog. He pointed to the dog and said “Look daddy, a dog!” Then he repeated the word “dog,” emphasizing the “d” and “g” sounds. This struck me as interesting when it occurred.

And it occurred to me during this inventive process, that this – the recognition of initial and final sounds of words, may be, and probably was – not simply a fluke phenomenon, but something that was indicative of the capabilities of children at about that age. I verified this with a reading specialist, a speech/language pathologist, and via further research in educational journals. My interpretation was correct, and I began to wonder if this observation, previously viewed “merely” as a developmental milestone could, in fact, be put to use as a tool to encode words, and began to think about ways for children to harness this “rudimentary phonological awareness.”

I began imagining a friendly, animated on-screen guide, moving around a computer screen, which could, some way, somehow, help a child specify the initial and final sounds of a word of which he or she was thinking.

I was having substantial difficulty with this, with respect to exactly how it would function and interact with the user and, concurrently, began to feel frustrated; frustrated that this was an exercise in futility, because even if I were to come up with a feasible interaction, there would be so many words, it wouldn’t be practical. So, to see just how “bad” it would be, I took out my calculator to do the math. I thought, “Ok, at the rate of word acquisition of about 1,000 words per year, if a Kindergartener’s mental lexicon were about 5,000 words, how many would match any initial/final sound pair?” With the 44 phonemes of the English

Language, I performed the following calculation: 5,000 /44 / 44/. The answer was 2.58!

At that point, my jaw, quite literally, dropped. I immediately realized I had made an important connection; a connection between a human characteristic and a mathematical probability; a connection with extremely positive ramifications for children: if a multisensory means were created such that a child *could* specify initial and final sounds, and subsequently a multisensory means were created for a child to select one word from a group of matching words, a child, even prior to Kindergarten, could correctly encode virtually any word he or she could imagine! And further, if there were compelling content that could be accessed by so doing, a child would be motivated to do so, thus being exposed, over and over again, to the correct spellings of words; sound/letter/word connections; the alphabetic principal; enhanced phonological awareness, as well as other components of language in its orthographic form; they would increase their abilities in phonics, enlarge their vocabulary, improve their ability to comprehend textual material, and gain a substantial advantage in all areas of language arts. And, they would acquire interesting and meaningful information at the same time, as they would be able to "spell" even "tricky" words, like "laugh", and long, but interesting words, like "tyrannosaurus." They'd be able to investigate virtually any topic of their own choosing, as well as increase their overall knowledge.

This was the basis for the first Phonic Engine Patent.

I imagined the first software application to be an animated talking dictionary, with an "animated vignette" for 5,000 – 10,000 words and, shortly thereafter, sought advice from a patent attorney, filed for a patent, and began development of a prototype: an animated animal dictionary.

Working with an animator, we developed, over the course of several years, a series of "Animalations," from Aardvark to Zebra. At the same time, I acquired photographs of the animals, researched and wrote narratives about the animals, and developed software to display the animations, narratives, and photographs, all to be accessed by words encoded via the now-patented Phonic Engine Method.

However, as this was occurring, so was the Internet. After the animations, photographs, and narratives were done, I had begun adding sound effects. At around the letter "c", this came to an abrupt halt, as much of the same software and user interface could be coupled with a Web browser component to supply more content – by far – than even a full blown "Animated Talking Dictionary." The name "KidsVoyager" came to mind, and I checked to see if the domain name, kidsvoyager.com was available. It was.

Currently, the Phonic Engine Method is embodied in a software application, aptly called KidsVoyager® Online, and has been in use at the Park Slope

Communication Center, in Brooklyn, NY, since 2007. From then, up until and including the present time, children – and to a large degree, children with disabilities in one or more areas – who had previously not responded to help from teachers or specialists, have improved in a manner that has changed their lives; for example, moving from the lowest reading group in second grade, to the highest in third grade; and from "hating to read" to "loving to read." The success rate for children with supportive parents (as defined by consistency of attendance and timely completion of homework) has, to date, been 100%. They have gained years in months, attending our center only one or two hours a week and (at no additional cost) using the software at home, usually with enthusiasm.

Why is this? KidsVoyager Online includes an Internet browser along with a variety of clickable buttons: alphabet buttons, phoneme buttons, and word buttons, in a multisensory environment, whereby children can correctly encode words, and thus look things up that are *of interest to them*, and read them "by ear", by simply gliding the mouse. Then can also hear a single word via one mouse click, and learn more about it by two mouse clicks. In addition, they can create stories on any topic, and hear them narrated back. And they love using it. It's intrinsically motivating.

Now, the Phonic Engine Method is not just the basis for "another reading software application." It is not programmed learning. It is a method that, we believe, is superior – and by far – to any particular reading method currently in use.

It is superior not simply because of the features it provides for, but because of the motivation it provides, the efficiency it engenders (one specialist or teacher can use it with multiple children simultaneously, in a fashion where each child is doing something that is individually motivating) and cost.

KidsVoyager Online may be used with all Windows operating systems from Windows 98, up through Windows 7 and, although not currently supported, was originally developed for Windows 95, and could easily be made, if need be, to work on Windows 95 again. And it also does not necessarily need to be used with a high-speed Internet connection, as most of the processing occurs on the client computer. What this means is that it can be used in disadvantaged areas as well as well-to-do or middle class areas, where there may be one or more older computers in a classroom. It reduces the need for costly textbooks, because the Internet contains cost-free information in all areas (including classic literature, such as by Jules Verne, Mark Twain and Lewis Carroll), and the Phonic Engine Method, in its current embodiment, leverages this to the advantage of the disadvantaged – as well as all.

How to Finally Help "Johnny" Read

Back in 1955, there was a book published entitled, *Why Johnny Can't Read*, written by Rudolf Flesch, which blamed the reading problems of the time on the use of a method called "look-say," currently referred to as the "whole word method," and advocated "a return to phonics." Since that time, and prior to that time, there has been what is commonly referred to as the "reading wars." In its current incarnation, this typically means "whole language" vs. phonics.

The basis of this is that a certain "camp" purports that the *best* way to teach reading is via a constructivist means, while another "camp" purports that the *best* way is via behaviorist means. In this arena, "constructivist" means learning to understand words by attempting to read "motivating" textual material and, over time, learning the correspondence between letters and word sounds. And "behaviorist" means learning to associate letters with sounds, and building from there.

However, this is a false argument, because research, beginning in the 1960s, has demonstrated that it *doesn't matter*. To quote from a 2002 position statement by the International Reading Association, which may be found at:

http://www.reading.org/Libraries/Position_Statements_and_Resolutions/ps1055_evidence_based.sflb.ashx :

"The quest to find the 'best programs' for teaching reading has a long and quite unsuccessful history. Most notable among such efforts is a group of studies conducted in the mid-1960s that became known as the First-Grade Studies (Bond & Dykstra, 1967/1997). This series of U.S. federally funded investigations examined popular approaches to teaching beginning reading. Included were examinations of basal reading, phonics, language experience, and linguistics approaches to reading instruction. The collection of 27 studies comparing different methods and materials found as many differences between and among teachers using the same program or approach as there were between and among teachers using different programs or approaches, leaving the authors unable to identify a 'best' program. Instead, the results led the authors to conclude,

> Children learn to read by a variety of materials and methods.... No one approach is so distinctly better in all situations and respects than the others that it should be considered the one best method and the one to be used exclusively. (Bond & Dykstra, 1967/1997, p. 416).

Indeed, many large studies have come to similar conclusions. For example, consider the recent findings related to the evaluations of Comprehensive School Reform. Once again the focus was on reading programs and methods, and the findings echo those of

the First-Grade Studies, that 'no models had uniformly positive effects, and no models had uniformly negative or neutral effects. In other words, no model worked in every case and every situation' (national Clearinghouse for Comprehensive School Reform, 2001, p. 2).

Despite many attempts at program studies in the years since the First-Grade Studies, and many claims of program excellence, literacy scholars (e.g., Allington, 2001; Stahl, Duffy-Hester, & Stahl, 1998) argue that careful examination of such studies reveals the use of either flawed designs or selective reporting of the available data. Furthermore, attempts to find the 'right program' for large-scale implementation is complicated by the diversity of student needs, teaching styles, and classroom conditions that exist in any school or group of schools. Whereas efforts to find 'best programs' have centered largely on the materials teachers use, attempts to identify best practices have focused on the actions teachers take and the practices in which they routinely engage students.

In contrast to the discrepant findings of studies designed to identify best programs, examinations of best practices have led to highly consistent results when such studies have been rigorously designed and systematically analyzed and compared. The results of the First-Grade Studies again provide a relevant starting place. Although findings failed to show superiority of any particular approach or program, evidence did indicate strong relationships between particular practices and high achievement. Most recently, the National Reading Panel (National Institute of Child Health and Human Development, 2000) took a similar approach to its study of effective instruction of reading, examining evidence related to practices in phonemic awareness, phonics, fluency, vocabulary, and comprehension instruction. They found 22 phonics programs that varied along several dimensions that were effective. ***The results support a conclusion that it is particular practices and not the specific programs that are effective***."

The National Reading Panel has identified these practices:

http://www.nichd.nih.gov/publications/nrp/findings.cfm

In summarized form, they are

1. Phonemic Awareness Training using one or two types of phoneme manipulation. See below.
2. Systematic Phonics.
3. Fluency, best taught through guided oral reading.
4. Comprehension: Vocabulary – see below.
5. Comprehension: Text Comprehension – see below.

Now, the Phonic Engine Method is not a "method" or "approach" or "model" or "program" in the sense of phonics or whole language. It is a *collection of*

patented techniques, as defined by United States patent law: “a series of steps or acts, for performing a function or accomplishing a result.” For example, patent number 5,953,692 enables a child (or anyone) to specify phonemes, without knowing a phonetic alphabet; patent 5,799,267, enables an individual to encode a word (and more) by knowing only it’s initial and final phonemes; and patent 6,442,523 enables a pre-reading individual to “navigate” a document by ear (by simply gliding a mouse) in a fashion that is analogous to the way a reading individual navigates it by eye. It may be used to leverage both behaviorist and constructivist techniques, as well as an intermingling of the two, which may be tilted in one way or the other, based on individual need and interest, to the benefit of the learner. And more. It allows a learner to utilize his or her strengths in any area, using any and all “best practices.”

It supersedes every accepted reading methodology currently in use, including phonics and whole language. It assists learners by providing tools that enable students to learn at their own pace, using materials of their own choosing, coupling spoken language with written language, and providing them with combined stimuli, including auditory, visual, kinesthetic, tactile, and proprieceptive (stimuli with respect to mouth formation and movements to produce specific sounds), thus not only creating multiple concurrent sensory reinforcement, but providing the ability to build upon strengths to enhance weaknesses.

It contains novel (and patented) techniques which allow children, even as young as 4 or 5 to phonemically encode (i.e. spell) virtually any words they can think of; use those words to understand, "investigate," and write about anything of their choosing, exploring written language from every conceivable angle within an engaging multisensory environment. And, during this process, which is fun (the way children, not adults, define fun), they increase their understanding of and/or learn: phonemic awareness; phonics; vocabulary; reading comprehension; reading fluency; spelling; writing; and every single aspect of language arts, using every single practice (including variations) that has been scientifically shown to achieve results. .

The Phonic Engine® Method was also developed with, and promotes, a certain "attitude" toward the learning of language arts: it must be fun. The three major practices currently in use, independently or in combination are: a basal reader approach, a phonics approach, and a whole language approach. None of these are fun. (This does not mean children will not benefit from them; most adults were taught using approaches that were not fun, and most adults learned to read.) Reading about Dick and Jane is not fun. Phonics drills are not fun. Whole Language could be fun, but typically is not. In general, many, if not most, schools these days use a mixed approach. One common approach is to teach using themes. What themes do schools pick? Things like Colonial America. Or Native American pottery. How many of the students we work with do you think have asked to learn about Colonial America, or Native American pottery? (We do not

believe that information such as this should not be taught, but it frequently creates unnecessary obstacles to the acquisition of literacy skills.) They ask for things like the solar system, dinosaurs, medieval swords and pets. They use the Method to read stories written for kids. They explore. And they learn. .

The Phonic Engine® Reading Method is the primary tool we use for all reading instruction at our center. Kids love to come, as you may have heard in the videos on our website. Kids use it at home, as you also may have heard in the videos. The cost to help children is significantly reduced because KidsVoyager® Online can be used at home. And it is used at home. And kids improve. At a lower cost, and often in a dramatic fashion.

A Diagnostic Tool?

While not designed explicitly to be a diagnostic tool, the Phonic Engine® Method utilizes easily observable techniques, and provides teachers and parents a unique opportunity to quickly receive feedback, and identify learners who are experiencing specific problems. For example, a typical first step in using the Method, is to "think" of a word, and then "think" of its beginning and ending sounds. If, by first grade (and perhaps earlier), if a child is unable to do this (with the exception of certain short vowels and some other situations), they are experiencing a phonemic awareness problem at that point in time. A typical second step is to click letters that make these sounds. If a child has difficulty with this, they are experiencing a phonics problem at that point in time. If used in a small group, or in a classroom with monitoring, these issues can be readily observed. If a problem is identified, appropriate action can be taken. At the very least, the student can then be more formally assessed and, if needed, followed. In situations where a problem is identified, using any means, it is our strong suggestion that parents be highly assertive in ensuring that their children receive appropriate intervention.

Quoting again from the International Reading Panel's Position Statement:

> "There are few instructional tasks more important than teaching children to read. The consequences of low achievement in reading are costly both to individuals and society. Low achievement in literacy correlates with high rates of school dropout, poverty, and underemployment (Snow, Burns, & Griffin, 1998; Wagner, 2000). The far-reaching effects of literacy achievement have heightened the interest of educators and non-educators alike in the teaching of reading. Policymakers, parents, administrators, and teachers seek the same end — to provide literacy instruction that is most likely to lead to high rates of achievement for all children.
>
> As we pursue this goal, we must be mindful of the critical lesson provided by investigations of the past and of the present: There is no single instructional program or method that is effective in teaching all children to read. Rather, successful efforts to improve reading achievement emphasize identification

and implementation of evidence-based practices that promote high rates of achievement when used in classrooms by teachers with diverse instructional styles with children who have diverse instructional needs and interests (Bond & Dykstra, 1967/1997; National Clearinghouse for Comprehensive School Reform, 2001)."

This is precisely what the Method provides for: "implementation of evidence-based practices." It provides a means for a teacher to teach, and a learner to learn, using whatever particular practice or set of practices are best suited to a particular individual, and does so in a manner that is truly fun, and therefore motivating. And since the Method can deliver "best practices" and, more to the point, practices best suited to a particular individual, the Method will always provide the best possible path to success, so long as a teacher applies suitable practices. It is devoid of dogma, and does not encourage either a "top down", "bottom up" or any other philosophy, except that which is best for a particular individual; and it does that by providing motivation, tools, and assistance. And further, it is extremely efficient with respect to 1.) The ratio of teacher to students; 2.) Cost of materials; 3.) The fact that it can be used at home, as well as, and in addition to, a classroom or learning center; and 4.) The motivation it provides, and the content it makes available. One bright student we recently began working with, who has extreme decoding and encoding difficulties which cause him enormous distress (and recently also began attending a school for children with learning disabilities), stated, with respect to KidsVoyager Online "what a relief."

Obstacles

As a rule, all new methods or technologies confront obstacles. But in virtually all cases, technologies always out-perform previous means. The obvious reason for this is that when a novel, non-obvious method is invented, the obvious and previously straight-forward method cannot keep pace.

In addition to detractors for the sake of "general opposition to change," there are bound to be detractors for other reasons. Textbook publishers, for example, would stand to have reduced revenue. Certain educators would likely have objections for any number of reasons.

We have already run into this locally in a number of cases.

1. A bright 2nd grade student was in the lowest reading group in her class in a local school. She was being tutored by the school's reading specialist. As this did not appear to be helping, her mother brought her to us for assistance. By third grade, she was in the top reading group, and this girl, who initially stated that she "hated to read," stated, after several months, that she "loved to read." However, even with this knowledge, the reading specialist was not at all interested in the Phonic Engine Method.

2. A parent bought her child to us for assistance, and signed up for our Phonic Engine based reading program. Upon learning of this, her teacher stated that she would work after school with this student. Now, in New York City, as result of a teacher's strike a number of years ago, teachers agreed to work an extra 15 or 20 minutes per day, after school, to help students in need. Although we cannot be certain this was the reason, it seemed suspiciously so.
3. We offered to the head a local school's parent association (and a personal acquaintance), to present seminars on a variety of speech, language, and literacy topics. We were told directly that school employees considered this to be infringement on their "turf."

Now, as a further example of obstacles, on a larger scale, the National Reading Panel, in 2000, released its research-based findings entitled "Teaching Children to Read." In this report, and consistent with the position of the International Reading Association and earlier research, they identified, through meta-studies, certain "Evidence Based Practices" that were *shown to work*. If one does an Internet search, however, on

national reading panel criticism

one will find that there are no lack of critics. While it may (or may not) be so that the report is not complete or perfect, it certainly is a step in the right direction.

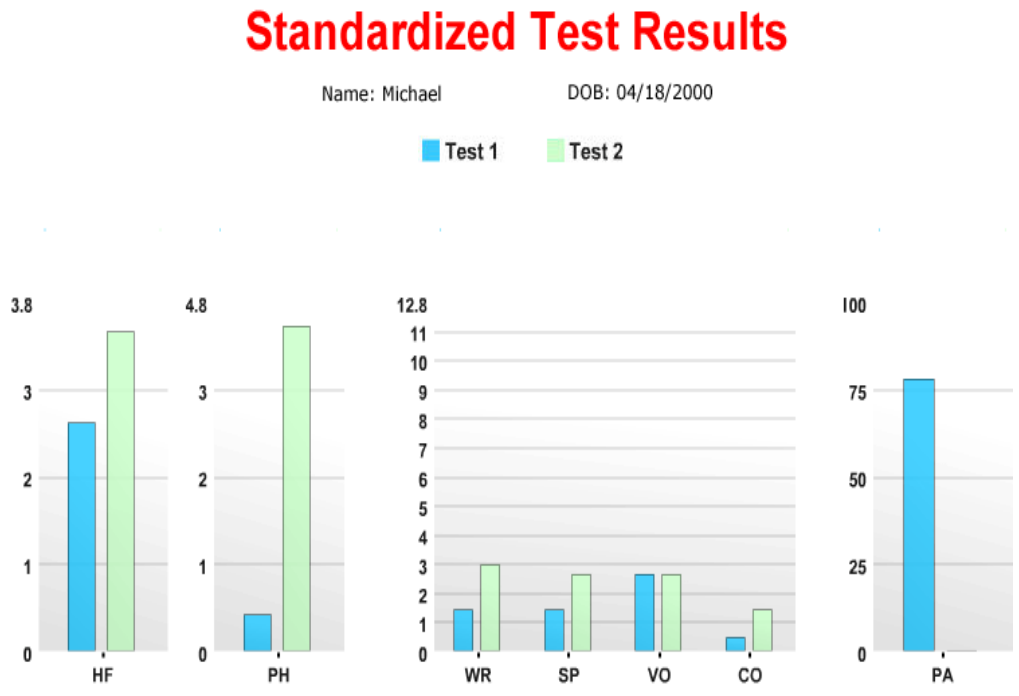
For example, at Park Slope Communication & Learning Center, it has helped us to improve our utilization of the Method; specifically, to enhance reading fluency via a better approach to guided oral reading.

It's an unfortunate situation that, with advances in technologies and evidence based practices that have been shown to work, we adults just can't seem to get it right. And our kids are deprived as a result.

Appendix A – Standardized Test Results

We use standardized tests as one measure of the effectiveness of the Phonic Engine Reading Method. The Method has significantly impacted the lives of children with a broad range of literacy issues. The results you see below are typical of the results of children whose parents are supportive of their efforts, by ensuring consistency of attendance and completion of assigned homework. What do we mean by "typical?" We don't mean that every bar graph looks like the ones below, though many/most do. What we mean by "typical," is that the degree of gains, in one skill area, or a combination of skill areas, usually consists of gains such as those below: several years to many years over the course of 4 – 12 months, with attendance at our center of 1 - 2 hours per week, plus the use of KidsVoyager Online at home, for assigned homework, school homework, end enjoyment. Of course, there are some gains that are not measured, such as writing. If you are a parent interested in services for your child, or an individual interested in helping us promote the Method, we will gladly accommodate you by reviewing all our results to date.

Michael had a language delay, and had been experiencing difficulties in school. Michael used KidsVoyager Online at our literacy center for about a year and a half. During the last 6 months (not shown on this graph) he advanced across the entire spectrum, particularly in vocabulary and comprehension, gaining one year, and one and a half years, respectively. He became an extremely prolific and enthusiastic writer, creating stories and essays up to 8 pages long, using KidsVoyager Animated StoryWriter. Michael came to our center approximately once or twice a week, for a one hour KidsVoyager Online session.

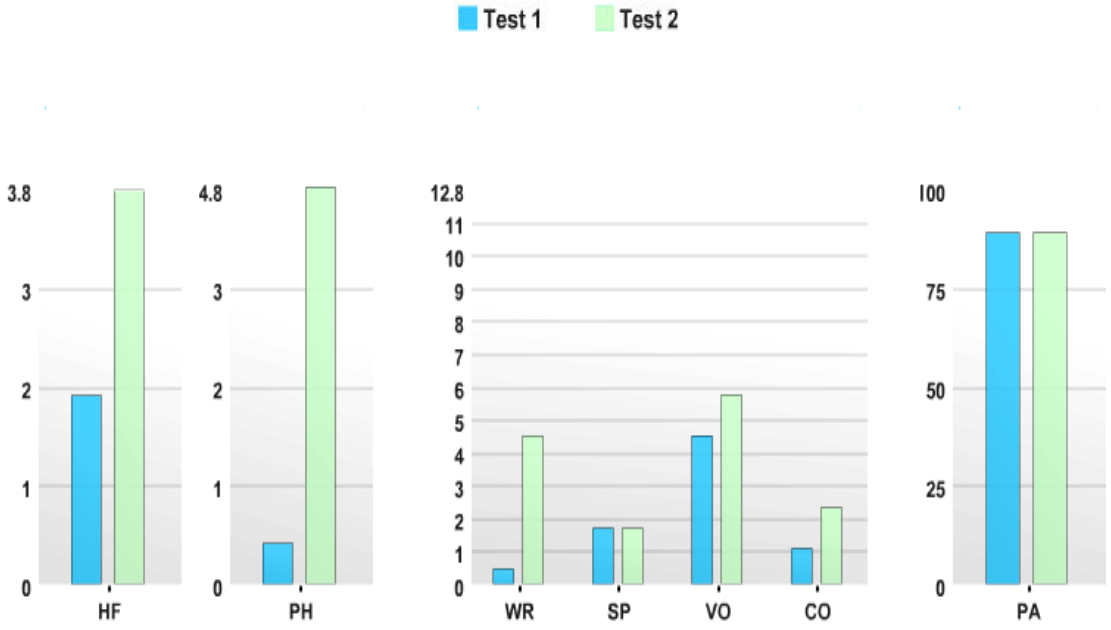


	High-Freq. Words	Word Rec.	Phonics	Phonemic Awareness	Spelling	Vocabulary	Comprehension
Test 1: 01/08/2008	2.5	1.5	0.5	78%	1.5	2.83	0.5
Test 2: 12/23/2008	3.5	3.17	4.5	0	2.83	2.83	1.5

Gabi was a bright second grader, who was reading well below grade level. She had a history of speech and language issues, which we had previously treated her for. Prior to working with the Phonic Engine Method, she had received substantial tutoring to address her literacy problems, but was not making progress. However, by third grade, she had moved from the lowest reading group in her class, to the highest, with test scores well above grade level. She was also one of two children who, when they first started with us, stated "I hate to read!" After several months, she stated, "I love to read!" She came back for a visit in fourth grade. Have a look at the nine minute "interview." Hard to believe that Gabi once "hated to read."

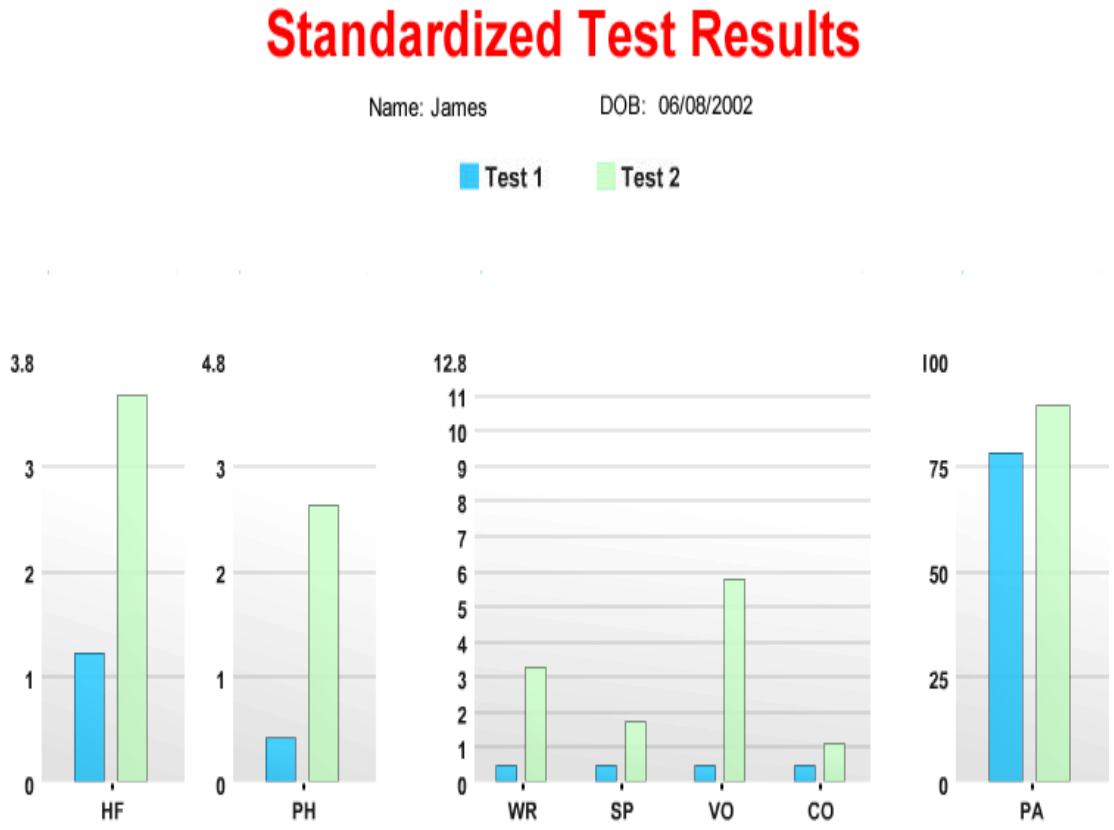
Standardized Test Results

Name: Gabi DOB: 07/29/2000



	High-Freq. Words	Word Rec.	Phonics	Phonemic Awareness	Spelling	Vocabulary	Comprehension
Test 1: 05/30/2007	1.83	0.5	0.5	89%	1.83	4.83	1.17
Test 2: 05/16/2008	3.83	4.83	4.5	89%	1.83	6.17	2.5

James came to us because he was having difficulties in school, both with respect to reading and class participation. His teachers came to believe he had word finding problems. He enrolled in our Phonic Engine literacy program, where his literacy needs (as well as underlying language issues) were addressed. As you can see, he made rapid progress in a relatively short period of time.



	High-Freq. Words	Word Rec.	Phonics	Phonemic Awareness	Spelling	Vocabulary	Comprehension
Test 1: 01/29/2009	1.17	0.5	0.5	78%	0.5	0.5	0.5
Test 2: 06/10/2009	3.5	3.5	3.17	89%	1.83	6.17	1.17

Appendix B – Patent Abstracts

Patent 5,799,267 Phonic engine - Abstract

A method of accessing information in a database of text entries is provided. The user may be prompted for an initial sound of the information to be accessed, by providing a menu of symbols, each symbol representing a respectively different sound. The initial sound is received. A sound other than the initial sound for the information to be accessed is also received. A subset of the text entries in the database is associated with the initial sound and the other sound. The associated text entries are searched by a searching method that may include sequential search. The associated text entries are provided as the accessed information, and the meaning of a selected one of the text entries is indicated in a manner which would be understood by individuals who cannot read, such as sound and pictures, or sound and animation.

Patent 5,953,692 Natural language to phonetic alphabet translator - Abstract

A method and apparatus which transforms a standard natural language alphabet into a phonetic alphabet provides a user with a plurality of alphabetic characters of a natural language and prompts the user to select a letter. When a letter is selected, a plurality of allographs containing that letter are displayed, along with indications of the sounds of the phonemes which are encoded by the allographs. The plurality of allographs have in common the selected letter. Thus, a user need not learn a specialized phonetic alphabet to represent sounds for which the allographs may not be known. At the same time, the user is taught alternative allographic representations for the same phoneme. In addition, because a letter may appear in allographs which encode respectively different phonemes, the user is taught alternative sounds that the selected letter may represent. This translated phonemic information may be used in a further selection process to specify phonemic information without needing to know a specialized phonemic alphabet.

Patent 6,009,397 Phonic engine – Abstract

A method and apparatus which allows a user to specify phonemes and the relative positions of the phonemes with respect a word or a group of words, such as a title. Phonemic indicators representing phonemes are provided, and selection of the indicators is allowed. When a phoneme is selected, its position with respect to a word or group of words is determined. According to one aspect of the invention, the phonemes are either initial phonemes or final phonemes, i.e., phonemes which are identifiable by young children. According to another

aspect of the invention, the indicators are provided in a manner understandable to an individual who cannot read, such as a young child. According to another aspect of the invention, the phonemic indicators further indicate positional information, in which case both the phoneme and its position are selected when the indicator is selected. According to another aspect of the invention, the selection process itself forms associations between the phonemes and their respective positions. According to another aspect of the invention, the selection may be received using electronic input means, such as a computer selection device, a remote control device, or from a computer network. According to another aspect of the invention, the word or group of words represent information corresponding to dictionary entries, encyclopedia entries, reference material, educational topics, database entries, games, merchandise or television programs.

Patent 6,148,286 Method and apparatus for database search with spoken output, for user with limited language skills - Abstract

A method and apparatus which allows a user with minimal understanding of the orthography of a language to nevertheless use its orthography as the basis for performing a database search. Orthographic information is displayed. When a user indicates a possible selection of this information by, for example, placing a mouse cursor over the displayed information the selection is pronounced. When the user selects this information by, for example, clicking a mouse button, the input data associated with the information may be used for a database search, and the results presented to back the user aurally. According to another aspect of the invention, the results may also be presented orthographically. According to another aspect of the invention, the results may also be presented pictorially. According to another aspect of the invention, when the user indicates a possible selection of an orthographically presented result by, for example, placing a mouse cursor over the result, the result is pronounced. According to another aspect of the invention, when the user indicates a selection of a result by, for example, clicking a mouse button, more information about the result may presented orthographically, pictorially, via animation, or by a combination of the three.

Patent 6,442,523 Method for the auditory navigation of text - Abstract

A method of navigating textual information via auditory indicators is provided. Through the pervasive and immediate articulation of virtually all textual elements in response to a comparatively passive action, such as a selection device rollover, a user may quickly peruse titles, headings, list items, and so on, as well as emphasized text, paragraphs, captions, and virtually any unit of visually contiguous text. A user may also hear a particular selected word via a slightly more active action, such as clicking a mouse button. Via use of this method, a child, or other user who may understand a language, but not be able to recognize its orthography, may successfully and easily navigate textual documents.

Patent 7,181,692 Method for the auditory navigation of text - Abstract

A method of navigating textual information via auditory indicators is provided. Through the pervasive and immediate articulation of virtually all textual elements in response to a comparatively passive action, such as a selection device rollover, a user may quickly peruse titles, headings, list items, and so on, as well as emphasized text, paragraphs, captions, and virtually any unit of visually contiguous text. A user may also hear a particular selected word via a slightly more active action, such as clicking a mouse button. Via use of this method, a child, or other user who may understand a language, but not be able to recognize its orthography, may successfully and easily navigate textual documents. The method also resumes articulation of text that has been stopped due to a passive deindication. The articulation is restarted approximately at the word where it was stopped.

Patent 7,305,624 Method for limiting Internet access – Abstract (not shown in this example)

A method for limiting Internet access via the World Wide Web is disclosed. The method may be used to help provide a safe Internet experience for children, to help enforce business practices with respect to the World Wide Web, and analogous purposes. Rather than relying on lists or content filtering, which can provide an unnatural and/or ineffective browsing experience, the method instead allows a computer owner or administrator to specify a "Navigation Boundary", similar in nature to a fence, with respect to a particular domain, and subsequently allow browser navigation only within that boundary. The boundary substantially follows the "hyperlink contours" of the domain, and thus is deterministic in nature, such that users do not substantially experience the effect of randomly being denied access to a site. Additionally, the user may graphically view his or her location with respect to the boundary.