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English in a Flash— A Breakthrough Design

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Introduction

Educating students who speak little or no English in an English-speaking classroom challenges the best of teachers. Although these students come to the classroom with prior knowledge in their native language, they cannot use this knowledge in an English-only classroom. Therefore, as their English-speaking peers move ahead in literacy and general academic knowledge, students with limited English proficiency fall behind. This paper describes how selecting the most relevant vocabulary, following an innovative and systematic process of learning, and providing individualized feedback create the optimal condition for language acquisition.

The Need is Clear

Learning a second language is difficult. Learning *in* a second language is even more difficult. According to recent research, "… even in districts considered the most successful in teaching English to students with limited English proficiency (LEP), oral proficiency takes three to five years to develop, and academic English proficiency can take four to seven years" (Hakuta, Goto Butler, & Witt, 2000). Given this information, it should be no surprise that the educational gap between children whose native language is English and children for whom English is the second language grows wider through the years.

The average six-year-old native speaker of English enters school with a fairly solid automatically available language base (Segalowitz, Segalowitz, & Wood, 1998) made up of three core components:

- The English sound system
- A 6,000 word-family base vocabulary
- Knowledge of English grammatical structures

In order to catch up to his English-speaking peers, a non-English-speaking student must master these three core language components as quickly as possible. In addition, "language continues to develop during the primary years even for native English-speaking children." Therefore, non-English-speaking children must acquire the base language skills *and* the additional academic language native English speakers are learning, if they are to keep up academically in school (Biemiller, 2003). Given this predicament, it is not surprising that second-language learners retain relatively few words over an entire year of instruction.

The need for a language product that significantly accelerates language acquisition is clear. Students will not learn if they do not understand what the teacher is saying. The time for research-based language instruction is now.

Designing a research-based approach to accelerate second-language learning requires taking a step back to where language learning is successful: the native language. Learning one's native language is rarely difficult or problematic: children just do it[1] (Chomsky, 1976). In general, all they need is exposure to a language and they learn it. All over the world, children follow the same sequence in developing their native language—moving easily from sounds to words, short phrases, sentences, and so on.

This is not, however, the experience of older children or adult language learners who struggle to make sense of unfamiliar language. For them learning a new language is both confusing and discouraging. What accounts for the contrast between the effortless learning of the first language for a child and the arduous task of learning of a second language? There are some obvious differences between the two situations: the age of the learner, the needs of the individual learner, the process of "selective focus," and the communicative context of learning.

The Problems with Most Approaches

Currently, English as a second language (like most second languages) is taught in the context of communication, using whole texts or dialogues. The problem with teaching language using whole texts or dialogues is that it is too often done without enough exposure to vocabulary: the second-language learner is bombarded with a series of unfamiliar words and ultimately gets very little out of the experience. The point about first language acquisition that many language teaching practitioners have failed to appreciate is that although young children do indeed hear full sentences in context, they have already had at least a year of very rich exposure to the core vocabulary and sound system of the native language. Before they can successfully guess the meaning of the unknown words, learners need to know at least 90% of the words in a text or dialogue (Hirsch, 2003; Hu & Nation, 2000; Nation, 2001). Therefore, contexts containing more than 10% unknown words do not efficiently facilitate language acquisition, but instead dramatically reduce the probability of success. Building a foundation of spoken words that forms the basis for learning new words is vital for success.

A second problem with today's language teaching methods is the early emphasis on speaking. In the early stages of learning, the emphasis need not be on speaking because honing listening skills will eventually carry over to speaking (Bradlow et al., 1997; Rvachew, 1994). While speaking is ultimately necessary for communication, developing good listening skills is required for students to understand what the classroom teacher is saying. In addition, research tells us "a child's maximum level of reading comprehension is determined by the child's level of listening comprehension" (Biemiller, 2003).

There are two additional problems with current teaching methods. One has to do with failures of automatic processing. The only way for processes to become automatic, whether communicating in a new language or learning to drive a car, is through practice and repetition (Gray, Mulhere, & Neil, 2000; Segalowitz, Segalowitz, & Wood, 1998). The other has to do with reliance on translation and a grammar-oriented approach, which is frequently done in second-language classrooms. Overall, the use of the native language and the study of grammatical rules interferes with the acquisition of a second language (Gabrielatos, 1998; Green, 1998).

A Breakthrough Design

One goal drove the creation of the English in a Flash English-language learning program: to accelerate second-language learning. Therefore, the program includes only technologies that have a solid pedagogical foundation, as determined by field research.

Other software programs offer a plethora of multimedia glitz—translation activities, role-playing, guessing from context, speech production analysis, writing requirements, and edutainment games. These unstructured activities, however, make language acquisition more difficult.

Unlike programs that offer the learner choices, English in a Flash technology facilitates systematic acquisition of English by explicitly teaching vocabulary while implicitly teaching the sound system and grammatical structures. When vocabulary is taught in a well-structured format, grammatical patterns become more transparent to the learner (Ellis, 1997). As they proceed through English in a Flash libraries, learners progress from basic interpersonal communication skills to cognitive academic language proficiency supporting achievement in the content areas (Duke, Bennett-Armistead, & Roberts, 2003; Hakuta et al., 2000; Cummins, 1979). English in a Flash technology provides simultaneous orthographic, phonological, and semantic processing of vocabulary words, ensuring deeper levels of processing for better long-term retention (Craik & Lockhart, 1972).

Cognizant of the three building blocks necessary for good language function, four key principles are emphasized in the English in a Flash program:

1. **Build a solid base of spoken vocabulary words.** Language learners need a firm foundation of spoken words before they can get much out of entire narratives or texts. "The consensus seems to be that 3,000–5,000 word families is enough to provide initial access to written material (Hirsch, 2000, 2003; Hu & Nation, 2000; Nation & Waring, 1997; Schmitt, 2000). It is therefore important to accelerate vocabulary learning by teaching words explicitly, then building on that knowledge (Hirsch, 2001) by systematically introducing Tier 1 and Tier 2 words (Beck, McKeown, & Kucan, 2002). Tier 1 words are the most basic and are used in everyday life. Native speakers rarely require instruction in school to understand their meaning.

Tier 2 words are high frequency, found across a variety of domains, and are words native speakers typically learn in school.

The first 1,350 words explicitly taught in English in a Flash Library 1 were selected after careful consideration of several factors, including the number of vocabulary words typically found in the lexicon of first-year language texts, and the communicative and academic needs of the English-language learner. Each chapter in a library explicitly teaches 90 vocabulary words, which is the optimum number for maximum retention given the number of repetitions, mode of presentation, and word difficulty (Crothers & Suppes, 1967). Semantic clustering of words (e.g., apple, pear, banana) is avoided to facilitate better retention. Researchers found that it took from 47% to 97% more repetitions to learn the group of related items, as compared to the number of repetitions it took to learn the group of unrelated items (Finkbeiner & Nicol, 2003; Nation, 2000; Tinkham, 1997; Waring, 1997). In addition, the calibration (field-testing) of vocabulary words with beginning English-language learners assures the highest quality graphic and audio, plus the necessary scaffolding of words to create an optimum learning environment.

2. **Improve speaking by improving listening.** By focusing on listening, students build phonological awareness, learn vocabulary, and acquire knowledge of English grammatical structures—all essential elements for success in school (Biemiller, 2003; Cutler, 2001; Krashen, 1985; VanPatten, 2002). "In early stages of learning, neural circuits are activated piecemeal, incompletely, and weakly. It is like getting a glimpse of a partially exposed and very blurry photo. With more experience, practice, and exposure, the picture becomes clearer and more detailed" (Genesee, 2000). Once words are learned in the second language, just as in the first, there is satisfaction in using them. Renaissance Learning's experience has shown that by the time learners have heard 6–12 repetitions of each word, learners naturally begin repeating vocabulary words. This natural desire to say words out loud helps cement long-term retention. Listening comprehension is also enhanced (and better retention achieved) by appropriate distribution of study time over several sessions (Fenn, Nusbaum, & Margoliash, 2003; Pavlik & Anderson, 2003; Rohrer et al., 2002; Willingham, 2002).

3. **Develop automatic recognition of base components of language.** Through automatic repetition, English in a Flash students are exposed to many more words and phrases (and eventually sentences, and dialogues) than they are typically given in language-learning classroom situations.

4. **Avoid competition and distraction from the native language.** Avoiding translation prevents learners from placing second-language vocabulary in first-language grammatical structures.

How it Works

Following the four principles, Renaissance Learning developed English in a Flash for language learners of all ages. Each content library in the program is made up of 15 weeks of focused lessons. The lessons teach students to automatically recognize the sounds and core vocabulary of English. English in a Flash also implicitly teaches students the basic grammatical structures of the language. In just 15 minutes a day, five days a week, students learn more than 100 new words a week using the program. Continuous reinforcement of previous learning promotes long-term retention. And, in a short space of time, a large number of words are learned and these words form the basis for learning additional words.

Here's how English in a Flash works:

- **Students take a pretest** at a computer to determine which words they know and do not know.
- **Students follow a simple progression of 15-minute focused lessons of 90 words** to learn the English sound system, core vocabulary, and base phrasal structures. They see a detailed graphic of the word on the computer screen and hear the word pronounced by five native speakers of American English. Hearing a variety of speakers helps learners develop robust phonemic categories (Lively, Logan, & Pisoni, 1993; Logan, Lively, & Pisoni, 1991; Manguson et al., 1995). The simultaneous bimodal (auditorial and visual) presentation enhances long-term retention.

- **Students focus on intensified repetition** spaced over a series of five days. Together, the number of repetitions, the number of words per lesson, spacing, and the timing of repeating words out loud is optimized. Spaced study is conclusively shown to benefit second-language instruction (Bahrick et al., 1993; Bloom & Shuell, 1981).

- **Students take short assessments** after each lesson. These lessons provide feedback to the student about the progress they're making learning words. This feedback instills confidence and encourages students to use learned words immediately, which in turn brings more success, reinforcement, and motivation.

- **Students learn pronunciation and basic grammatical structures simply and easily.** The method of "training the ear" by having language learners listen to repetitions of five native speakers pronouncing words in the second language leads to the acquisition of the new sound system and better pronunciation of the second language (Bradlow et al., 1997; Flege, 1988; Jamieson & Morosan, 1989; Lively, Logan, & Pisoni, 1993; Rvachew, 1994). Renaissance Learning's experience has been that as students progress in learning the sound system, they naturally begin repeating words out loud. Building on the acquisition of the sound system and vocabulary items in each chapter, a scaffolding approach is used to help learners progress from short phrases to longer grammatical structures. The end result is that learners begin to know what sounds right.

- **Students learn how to use the vocabulary and simple grammatical structures in more complex ways.** Students' new vocabulary is combined into longer phrases, sentences, and dialogues. The systematic approach of English in a Flash enables students to quickly produce grammatically correct, original word combinations.

- **Students review words, phrases, and dialogues that need more reinforcement.** Students customize areas that need individualized reinforcement so 100% of the words can be learned. And because students work at their own pace without time limits or pressure, all students can be successful.

With English in a Flash, educators have access to comprehensive reports that indicate student progress. As a result, teachers can intervene with meaningful and appropriate classroom lessons and activities, which can be tailored to the needs of individual students.

Conclusion

English in a Flash follows a comprehensive, bottom-up approach to language learning that filters out distractions and uses the most relevant vocabulary possible. It is an innovative and systematic process of learning that provides individualized feedback to create an optimal condition for language acquisition. The breakthrough design of English in a Flash allows students to acquire communicative competence in English in up to 50% less time than traditional methods of teaching.

Carol Johnson is a Senior Product Consultant with Renaissance Learning and creator of English in a Flash. A bilingual educator, she has extensive experience teaching many different courses including basic language, methods, and linguistics. Carol holds a bachelor's degree in French, a master's degree in French Linguistics, and a doctorate in Second Language Acquisition and Teaching, specializing in how people learn a second language. She is a member of the American Psychological Association (APA), American Educational Research Association (AERA), Teachers of English to Speakers of Other Languages (TESOL), and the Modern Language Association (MLA).

[1]Work in the 1960s and 1970s by Chomsky and others claimed that every normal human being was born with a "language acquisition device," a hypothesis concerning why children develop competence in their first language in a relatively short time, merely by being exposed to it (Richards, Platt, & Platt, 1992).

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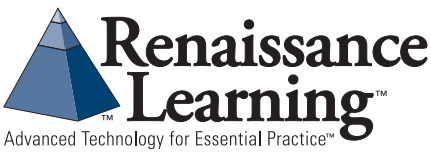

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