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## DENISE EIDE

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"A clarion call to all teachers of reading. This book is a must-read for anyone who cares about the future of our children and the welfare of our nation."
—Dr. Robert W. Sweet, Jr, President
The National Right to Read Foundation
"A gem of a book that brings light to the way in which words are read and spelled. This is a very useful book for teachers, parents and anyone interested in bringing the joy of reading to our nation's children."
—Dr. Reid Lyon, Distinguished Professor of Education Policy, Southern Methodist University
"Uncovering the Logic of English is a thoughtful guide for anyone who wants to understand language better or is looking for advice to help them teach it."
-Midwest Book Review
"The 'thrust' of this book might be better described if the title was changed to The Heartbreak of English: a Logical Means of Recovery."
-Jack Blackburn, Retired 3M Engineer
"A must-read for anyone involved in teaching literacy."
-Cathie Baier, Homeschool Speaker and Parent
"This book is changing my life. If you struggle with reading, or know anyone that does, Uncovering the Logic of English is totally worth it!"

- Allie Gower, Designer
"I teach language arts to middle school students with autism. My literal, logical thinking students are frustrated daily by the seemingly endless exceptions to the rules of the English language. Until today, the only answer I ever had for them was, 'The English language is full of exceptions to the rules. Be glad you are learning it as your native language and have had the benefit of years of immersion.' This is of little comfort to them. I finally have a comprehensive list of the real rules of the English language! The best thing of all is that experts talk a lot about using the obsessions of students with autism to teach them. Most of my students are obsessed with rules (memorizing them, following them to the very literal letter, and making sure others follow them as well), so I am confident that they will enthusiastically devour and retain this information! For the first time since learning to diagram sentences in college, when parts of speech rules really clicked for me, I am excited to teach English!"
-Jenny Lundgren, Middle School Teacher
"Once it is understandably explained to you, the perceived illogical spelling system of the English language actually starts to make a lot of sense-and FUN! My first language is German-completely different spelling system—and I learned to read and write in English 'the old way'. It did work alright, but I know, had I been taught the way described in Uncovering the Logic of English, it would have been SO much easier!"
-Valerie Adomakoh, parent, non-native English speaker
"I am a certified reading specialist and have been studying reading instruction for years, but most of the information in Eide's book was completely new to me... If you are a parent or educator, this passage from Eide's book is a MUSTREAD! She provides critical information and insights for all of us..."
-Susan Kruger, M.Ed., author of the best-selling book SOAR Study Skills and founder of www.StudySkills.com


# UNCOVERING The LOGIC of ENGLISH 

A Common-Sense Approach to Reading, Spelling, and Literacy

# DENISE EIDE 

## LoǧcofEnglish

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This book is dedicated to all students of English.
I hope it brings clarity where there was confusion and renews hope for those who have struggled.

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Soli Deo Gloria

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## INTRODUCTION

As I have spoken with people around the country, I have discovered a pervasive belief: English spelling is inconsistent, illogical, and, for some, impossible. This apparent "flaw" with English has caused deep frustration not only within our schools-public, private, and home-but through all levels of society. We have professionals who cannot spell, parents who cannot answer their children's questions, and employers who are despairing at the low literacy rates of the workforce.

Language, both spoken and written, is the foundation of all academics and the medium by which we conduct business, science, politics, and relationships. Without a firm grasp of our language, we sever the Achilles tendon of our society and of the individuals within it.

The United States currently has one of the lowest literacy rates in the developed world. According to the Nation's Report Card, 34\% of fourth graders cannot read, and $68 \%$ are below proficient. ${ }^{1}$ An astounding $68 \%$ of eighth graders test below grade level in reading. ${ }^{2}$ These statistics continue on through the adult population; fully $48 \%$ of adults are not proficient in reading. ${ }^{3}$

This is at a time in history when the economy demands more highly skilled workers each year, and competition in highly trained fields such as science and engineering is exploding worldwide. Not only do we need to increase literacy rates to stay competitive in a world economy, but illiteracy and remedial
education cost our nation $\$ 536$ billion each year ${ }^{4}$ and are primary factors in both crime and poverty. ${ }^{5}$ Teaching reading so that everyone succeeds is vital to the health of our society and our economy.

The information contained in Uncovering the Logic of English is not new. You may be surprised to learn that, with some variations, the spelling rules and phonograms already are used with great success by dyslexia institutes and reading centers around our nation. For unknown reasons, this "intensive phonics" is saved almost exclusively for students who struggle. I simply cannot understand why material that effectively teaches almost all students ${ }^{6}$ has been reserved for remedial reading centers. As a nation, we need to rethink how reading is taught in our schools and thereby prevent many children from needing outside help in the first place.

As you read, I hope it becomes apparent that knowing the logic of English benefits everyone who uses this language. You, too, might shake your head at points in this book and say, "Why didn't someone tell me this before?" In these pages, you will discover the answers to your long-held questions about English, and you will learn answers for your children as they are learning to read and spell.

I have taught numerous reading and spelling classes ranging from $45 \mathrm{~min}-$ utes to three days in length. The participants have included teachers from public and private schools, special education teachers, and homeschool parents. The response has been unanimous: "Why wasn't I taught this in elementary school? It all makes so much sense!" Many professional teachers have told me after a one-hour presentation, "I learned more in one hour than in all my methods classes in graduate school."

With this information I am resoundingly confident that we can teach reading at a fraction of the cost, and with much higher success rates, than we currently do. To do so, it is essential that all students, all teachers, and all parents know the logic of English. The knowledge in this book is as basic to academic success as $1+1=2$.

Learning these basic concepts does not require expensive materials or a lot of resources. It simply requires teachers who know how English works and how students learn. When we combine the logic of English with strong methods, our
whole society will reap the rewards economically, scientifically, educationally, and politically. Imagine a nation where $99 \%$ of third graders read at or above grade level and where our high schools are dominated not by students who are discouraged and frustrated but by confident young adults who are preparing to fulfill their life mission.

Although I understand that, to some, reading a book of English rules might sound dull, I encourage you to let this book unfold the mystery of what may have seemed hopelessly chaotic. It will provide you with information you will be able to apply as soon as you sit down to write your next e-mail. You may also experience, as I do, that the coherence in the midst of complexity is more alluring than if it had been in plain sight all along.

I hope you find this information as engaging and enlightening as I have and that you pass this book on to many others so that everyone can begin to understand the logic of English.

## Chapter 1

## THE PROBLEM OF ENGLISH

At the level of the written word, English is one of the most complex languages in the world. Due to this complexity, most English speakers do not know the basic building blocks of the language: the sounds, their corresponding written expressions, and the spelling rules that go with them.

On the contrary, most English speakers are cynical about the language and readily dismiss it as a language of exceptions. But what if the problem is not the language itself but the rules we were taught? What if we could see the complexity of English as a powerful tool rather than a hindrance?

Certainly, it is not as easy to learn to read and spell English as it is most other phonetic languages. Yet a finite number of tools unlock the mystery of $98 \%$ of the words in the English language. When these 106 tools are presented, nearly all students can succeed.

Learning these tools also develops logic and higher-order thinking skills. When students learn to think systematically about English, a complex language, not only do they enhance their English language skills, but they also gain strategies by which to master foreign languages.

To begin, we must understand the definition of word. Spoken words in all languages are formed by combining one or more sounds. This series of sounds carries meaning. Each sound is called a phoneme. English is comprised of 44 unique phonemes which combine together to form words.

This presents the first problem: the 26 letters of the Latin alphabet are inadequate to describe the 44 spoken phonemes or sounds. To solve this discrepancy, English adds 49 multi-letter phonograms. A phonogram is a letter or combination of letters which represents one or more sounds. When we only teach children the alphabet, even if we include long and short vowel sounds, we give the false impression that English has only 31 sounds. This is the beginning of the prevailing confusion. To provide students with a more complete understanding of English they must master not only 26 letters but the 75 basic phonograms.

The second problem with English is that the language contains immense variety and choice. The 44 sounds can be spelled in 75 basic ways, 27 of which make more than one sound. The fact that phonograms frequently say more than one sound results from the fact English words often shift in pronunciation when suffixes and prefixes are added. Consider the sounds of the A in vacate, evacuate, and vacation. In order to preserve the relationship in meaning between each of these words, the A represents three different sounds. Due to the unique challenges with spoken English, spellings are chosen to represent sound while preserving meaning. In other words, English is a morpho-phonemic language where the morphology or meaning of words is balanced with the phonemic representation of words, resulting in some phonograms representing multiple sounds. This means a student of English must learn all the sounds represented by each phonogram.

The third problem is that phonograms alone do not unlock the mystery of English spelling. There are 31 spelling rules which interplay with the phonograms and affect the pronunciation and spelling of words. These rules apply to a vast majority of words and explain why they are spelled and pronounced in a particular manner. Without an understanding of these simple rules, some scholars have estimated English to have over 1,700 phonograms! ${ }^{1}$ The 31 rules that explain how the sounds interplay with one another bring order to the chaos.

The fourth problem is that English is an amalgamation of languages. England's location and history of occupation play a significant role in the development of modern-day English. It is beyond the scope of this book to describe
the history of this development, but a few of the highlights are pertinent to our topic. From AD 43 to 410 the British Isles were occupied by Rome. This brought about a heavy influence of Latin. In fact, $90 \%$ of multi-syllable words in English have Latin roots. ${ }^{2}$

After the Norman Invasion in 1066, the following 300 years of politics and trade were conducted in French. Many words in the English lexicon reflect this period. English is also influenced by Celtic, Norse, Anglo-Saxon, German, and increasingly other modern languages. Having grown with such rich influence, English has synonyms for most of its words, which allows for a tremendous range of meaning, precision, creativity, and expression. English is also a multicultural language. Words which represent objects, places, and peoples from other cultures are frequently brought into English while preserving spelling conventions from the language of origin.

This history has misled many people to believe that English no longer follows patterns, which leads to the fifth problem plaguing English-the widespread assumption that English is illogical. In reality, the logic of English has been lost in the past 80 years to educators and the general public. The keepers of this knowledge remain a few reading centers, literacy specialists, dyslexia institutes, and researchers. Experts in these fields know that a majority of children who are presented with the whole picture of English, combined with solid methods, can succeed. Nevertheless, "intensive, systematic phonics" is often taught only as a last resort to those who have the resources to hire special tutors.

It makes much more sense to provide all students with the knowledge needed to master English. After all, it is a complex code which many linguists do not understand. Why would we abandon our young students to solve a master puzzle like English on their own?

Despite its complex phonetic system, many aspects of English are much simpler than other modern languages. English has a comparatively simple grammatical system. We do not need to memorize genders or conjugate adjectives. It has very little inflection and a comparatively short list of irregular verbs and plurals. It is helpful to remember that every language presents unique challenges to students; English is not alone. Learning to think logically about

English develops minds which are more adept at meeting the challenges of other language systems.

Learning 75 phonograms and 31 spelling rules is the most efficient route to mastering English. Put into perspective, English has the largest vocabulary in the history of the world. According to one count, there are more than 2 million words in the English lexicon. ${ }^{3}$ The average adult speaker knows between 40,000 and 60,000 words, with a well-educated adult mastering 200,000. Surely, the most efficient way to master such a large lexicon is to learn the 106 tools which together describe each of the words.

Prior to the 1920s, reading was taught in a systematic manner, with students spelling their way into reading. A dramatic shift occurred during the educational reform movements of the 1920s and 1930s. Rather than beginning to teach reading with sounds and then using the sounds to build words, educators began with whole words. This became known as the Look-Say method. Students were required to memorize each word as an individual word picture. Today we refer to these as sight words.

During this period, literacy rates plummeted, leading to the second reform movement: Whole Language. Educators blamed illiteracy on a lack of interest due to the repetitive nature of basal readers, such as Dick and Jane. Whole Language educators replaced boring readers with real books. They believed learning to read was much like learning to speak. Children who were surrounded with good books would naturally develop a love for reading and, with minimal guidance, be able to read. This inspirational hands-off approach was a disaster. In California, where whole language was mandated in 1987, the functional illiteracy rate soared to 60 percent. ${ }^{4}$

Nevertheless, both reforms have continued to influence how we teach English reading around the world. In the 1990s, a "new eclecticism" began as educators recognized the need for phonics in the classrooms. Eclectics teach reading "progressively." They begin by teaching sight words and then progress to syllables and word families, followed by a smattering of phonics.

In addition to the inconsistent and confusing nature of the eclectic approach, it does not teach English in a complete, systematic, and logical manner. The
phonics that are presented are too little, too late, and disjointed. This method dangerously gives the impression that the logic of English is being taught while leaving glaring holes in content and continuing to employ many of the failed methods of the past, including a heavy reliance on sight words.

When we teach sight words, we are effectively stripping the power of the code and asking students to memorize visual symbols for each word. Worse yet, the visual symbols have very little variation between words. How are children to memorize bag, beg, big, bog, and bug as different word pictures without knowledge of the code? They appear virtually the same. This is why so many children read the first letter and guess at the remaining word. Frequently, students taught with these methods make simple errors in reading because they are not able to handle the level of detail needed to decode the word correctly.

Diane McGuinness, PhD , has shown that human memory is limited to approximately 2,000 individual symbols. ${ }^{5}$ Yet adult speakers of English need to master 40,000 to 200,000 words-an impossible task without the understanding of how to decipher the code. This is demonstrated by the fact that many of the adults who are functionally illiterate know between 1,000 and 2,000 sight words. Though these students were successful at the task presented to them—memorizing individual words-they are unable to use this knowledge to meaningfully decode new words and are thereby crippled from being able to read anything beyond the elementary level.

This reality is reflected by what is commonly known as The Literacy Crisis.

## Chapter 2

## THE LITERACY CRISIS

0ur nation is facing a literacy crisis at all levels of the U.S. educational system. It is well-documented by the popular press, the United States government, and academia, and is felt by every teacher with whom I speak: public, private, and homeschool.

The literacy crisis resonates deeply within our hearts. For even if we were among those who learned to read proficiently, we all have unanswered questions and frustrations with English. The difference between the literate and the illiterate is that the literate blame the problems on English, but the illiterate blame themselves.

Both demonstrate misplaced blame. The problem is neither English nor individuals. The problem is that we cannot know what we were never taught.

The statistics are both numbing and consistent. Thirty-two percent of fourth graders read well, $34 \%$ test below proficiency, and $34 \%$ cannot read. ${ }^{1}$ Every time I meet an elementary school teacher, I ask if this reflects their experience. They all say it does.

One third grade teacher who attended my class said, "This is my last resort. My principal will not allow me to teach intensive phonics in the classroom, but I am paying for my own training and using my own money to buy the kids materials. I plan to close the door and teach the children the logic of English. It
makes so much sense. If it works, I will tell my administration. If it does not, I am quitting. I cannot continue failing these kids year after year."

The devastating reality is that the situation does not improve as students age. An astounding $69 \%$ of our eighth grade students are reading below grade level. ${ }^{2}$ Twenty-six percent of eighth graders are functionally illiterate, meaning they do not possess reading and writing skills adequate to function in daily life. ${ }^{3}$ Forty-eight percent of adults are not proficient readers, while $22 \%$ are functionally illiterate. ${ }^{4}$ Only $3 \%$ of adults test at the highest level of reading proficiency. ${ }^{5}$ Even when the population is limited to college graduates, the news is not encouraging. Only $10 \%$ of college graduates read at a high level of proficiency, $15 \%$ are below proficient, while $4 \%$ are functionally illiterate. ${ }^{6}$

The greatest complaint by employers and educators is that workers are not adequately prepared in basic reading and writing skills. ${ }^{7}$ Their complaint reflects the reality that only $17 \%$ of working adults are both well educated and proficient in literacy skills. ${ }^{8}$ Devastatingly, the literacy crisis is occurring during a time in history when jobs are becoming increasingly technical and the need for highly skilled workers is continually rising.

Certainly something is deeply wrong with how we are teaching reading. It is simply not conceivable that $22 \%-70 \%$ of our population has a reading disability. What is clear is that students who do not thrive in first, second, and third grade continue to struggle through adulthood.

It has been shown that success in reading is not linked to IQ, nor is it a problem of poverty alone. Forty-five percent of children in middle and high income families are struggling. Adult illiteracy is, however, connected to almost every socioeconomic issue in the United States. ${ }^{9}$ Fifty percent of the chronically unemployed and $60 \%$ of inmates are illiterate. ${ }^{10}$ Eighty-five percent of all juveniles in the court system are illiterate. ${ }^{11}$ Low literacy levels cost between $\$ 106$ and $\$ 238$ billion per year in health care spending, $\$ 225$ billion in nonproductivity in the workforce, ${ }^{12} \$ 1.4$ billion ${ }^{13}$ to provide remedial education for students who have recently completed high school, and $\$ 2.3$ billion ${ }^{14}$ in lost earning potential.

