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# **Readability**<sup>1</sup> and the **Champion** *Reader*

Educators spend a great deal of time selecting texts that their students can read. The "readability" of a text is determined in several different ways. A common method for assigning a reading level to a text is through the use of a readability formula.

## **Readability Formulas**

Readability formulas are mathematical equations that determine the difficulty of text. These formulas are usually based on calculations made from three text samples that are 100-150 words each. As a rule, these calculations include factors such as the following:

- number of sentences in the passage
- number of syllables
- number of multi-syllabic words (three or more syllables)

Formulas vary in grade indication depending upon the level of comprehension the formulas assume. For example, the SMOG formula, which is frequently used to indicate the difficulty level of upper-grade texts, assumes a 90-100% comprehension level. In comparison, the Fry formula assumes about a 75% comprehension level. The formulas assume that a long sentence or a three-syllable word is more difficult than a short sentence or a single-syllable word. However, consider the following sentence examples:

Example 1: It is little. It is red. It is round. It is a ball.Example 2: It is a little, red, round ball.

While reading formulas would score Example 1 as easier to read and Example 2 as harder to read, in actuality the second example is much easier for readers than the first one. In Example 2, the combination of words makes the information much more coherent, although the



readability formulas would calculate the sentence as more difficult.

Readability formulas also assume that multisyllabic words are more difficult than one-syllable words. This assumption in readability formulas is misleading. For example, the words *America* and *American* have four syllables, yet trying to convey these concepts in words of lesser syllables would be confusing, complicated, and less comprehensible. Words such as *America* and *American*, while multi-syllabic words, are readily known by most readers.

<sup>1</sup> The information in this report is based on and adapted from a study conducted by Dr. Norma Inabinette in 2005 and a subsequent unpublished report of her findings.

### **Readability Formulas Ignore Many Factors**

While readability formulas are useful in determining an *approximate* level of reading difficulty, they do not consider many factors that make texts reader-friendly. For example, readability formulas do not consider the following features:

#### **Physical Features of the Text**

- ► Whether the columns are reasonable with large margins and ample white space.
- If the text is in a font that is large enough for comfortable visual input and clear enough to avoid undue eyestrain.
- If the paper on which the text appears is of a high quality that allows the print to remain crisp without blending into the paper.

#### **Text Content**

- Whether the text has visual interest with colorful and attractive pictures, maps, tables, diagrams, and other visuals that aid in reading comprehension.
- Whether the text has useful sections such as a table of contents, appendixes, indexes, glossary, and other reader aids.
- Whether the text includes a statement of the main idea at the beginning of each text section and features headings that help the reader identify the content and organization.
- Whether the text contains information that will allow the reader to identify with the text, e.g., references to cultural groups, gender, age, and experiences.
- Whether the text introduces new concepts slowly enough to avoid frustrating or confusing readers.

- If the text includes definitions on the page or context clues to reveal the meanings of difficult or unfamiliar vocabulary.
- How sentences relate to one another and whether the text features a clear and coherent writing style with ideas welldeveloped in a sensible sequence and sensitive handling of the subtleties of language (e.g., clear pronoun referents, explicit comparing and contrasting, and organized listings or information).
- Whether the text emphasizes information based on prior learning so that the new learning is comprehensible.
- ► If the text content refers to practical, reallife situations to which students can relate.
- ► If the text includes summaries that review and emphasize the critical information in the text.

#### **Environment in Which Text Is Used**

Whether the text is used by teachers who will motivate and instill interest in the topic.



# **Readability Formulas and the Champion** Reader

The *Champion Reader* includes text selections that the authors deemed appropriate for students in middle school through high school. Specific reading levels have been assigned to text selections based on the Flesch-Kincaid formula and Lexile Framework, two commonly used tools to measure text readability<sup>2</sup>. As the previous discussion indicates, however, readability formulas have limitations because many critically important ways in which text is rendered more readable (and more comprehensible) are unacknowledged by the reading formulas. The following is a summary of the text elements that make the *Champion Reader* easily readable no matter what grade level the readability formula may indicate.

**Special Book Features:** The book contains a simple table of contents that is easy to read. Also included are appendix sections that include a pronunciation guide, an explanation of the parts of speech, graphic organizers, and maps. The book also contains an easy-to-read index. The introductory section of the book provides explicit information about the layout of the book. Each text selection is short, often only 2-3 pages, with a minimal amount of text on each page. Titles and headings are intriguing (e.g., "Good Notes = Good Grades," "Mikail and the Mysterious Messages," "Take a Trip of a Lifetime—Climb a Mexican Volcano"), and subheadings are clearly marked in bold type.



<sup>2</sup> The Lexile Framework is an educational tool designed to measure reading comprehension and text difficulty by placing readers and text on the same scale. Although Lexiles do not equate to grade levels, the measure that a student receives helps connect the reader with a database of books, periodicals and other resources optimal for the individual's reading success. Source: http://www.tea.state.tx.us/curriculum/lexile/

**Text Presentation:** The print in each book is clear, an appropriate size for comfortable eye movement, and has spacing that makes the text very readable. Margins are very large and the quality of the paper is good. The text is placed on the page so that it is not overwhelmed by the visuals that amplify it. Headings and subheadings are clearly marked in bold type. The passages are short (often no more than 100-125 words), surrounded by supplementary and support material such as maps, pictures, diagrams, comprehension questions, and critical thinking questions.

**Vocabulary:** The vocabulary incorporated into the reading selections is appropriate for the grade level and the content of the text. Difficult words are often defined in context. The visuals on the page reinforce the new vocabulary students are reading in the text. The vocabulary builds upon itself throughout the text so that words are often repeated in order to assure their mastery. Many of the new words are image words that form pictures in the reader's mind. A reasonable number of new words are targeted in each selection.

**Visual Support:** Each chapter includes visuals that help the reader place the content in perspective. Pictures, graphs, maps, charts, boxes of significant information, and questions are all clearly labeled and visually appealing. Images are varied and include original photographs, colorful illustrations, and primary sources. There is a great deal of white space on each page that makes the illustrations more dramatic. Visuals include images that will intrigue the reader (e.g., photographs of sporting events, pictures from a scrapbook, various foods, and illustrations of Mesoamerican cultures). These visuals enhance reading comprehension and make the material very appealing to the middle school or high school reader. Many ethnic groups are represented in the visuals so that middle school and high school English learners can identify with the material easily.



**Text Content:** The text has a recent publication date with current information included. The content covers a broad range of interesting topics, including immigration, holidays, travel, history, environment, entertainment, etiquette, and careers. The information is presented so that the middle school or high school reader can relate to the content. Many ethnic groups are represented in the selections so that middle school and high school English learners can identify with the material easily.

Writing Genres and Style: The text includes many different writing genres, including poetry, news reports, biographies, cartoons, myths and legends, short stories, plays, and nonfiction articles, with topics that greatly appeal to readers at the middle school and high school grade levels. The text is written in a very straightforward manner. The sentences are clear and follow a declarative pattern. Adverbs and adjectives are included to paint a picture without distracting the reader from the main ideas.

Illustrations of the concept are included and then repeated in another way to ensure comprehension. Most selections begin with opening sentences that direct the reader's attention to the content and pique the reader's interest. Referents are clear and subject/noun relationships are obvious. Ideas in the Champion Reader have a sensible sequence so that information presented flows from one idea to another without the reader experiencing any difficulty in following the content. Each reading selection ends with a conclusion that brings the reading to a comfortable close. For example, a section on the Greek myth of Daedalus and Icarus ends with a life lesson for students to ponder and discuss. When reading about the Aztecs, the reader will know what the Aztec civilization was like at its height, after the coming of the Spanish, and today. This provides closure in the reader's mind.

not CHICKEN,

All Pigs Aren't Fat

Klare, G.R. (1976). "A Second Look at the Validity of Readability Formulas." *Journal of Reading Behavior, 8(2),* 129-152.
Zakaluk, B.L., & S.J. Samuels (Eds.). (1988). *Readability: Its Past, Present, & Future.* Newark, DE: The International Reading Association.

Students are exposed

to different writing genres such as news reports and plays.

For more information about the *Champion of IDEAS* ELD program for middle school to high school English learners, contact Ballard & Tighe at (800) 321-4332.

UNIT 2: THE WONDERS OF NATURE

Hurricane Wilma Strikes Miami