

## Technology Feature Brief

# Manual Text Leveling

Text leveling is a process in which text is modified manually by a human to be simpler or more complex to fit a student's reading skills. Text leveling is beneficial because teachers can match reading materials to individual students' skill levels. For struggling readers, text leveling provides opportunities to read comfortably instead of becoming frustrated with a text that is too difficult. Additionally, these readers learn the same material as students reading a more complex version of the same text. Teachers can also choose which levels to use for different purposes. For example, a teacher might provide a simplified version for a student's independent reading but may choose a more complex version for guided reading when a teacher is present to support understanding. Text leveling criteria may include sentence length, vocabulary difficulty, number of syllables in words, and content, among others. **Manual text leveling differs from automated text simplification, which uses automated processes like natural language processing or machine learning to change how texts are worded to make them easier to understand.**

The example shows CAST's digital reader, [Clusive](#), offering a choice of manually leveled texts to readers.

The screenshot shows a user interface for text leveling. At the top, there is a teal header with the text "Switch?" and a toggle switch icon. Below the header, the main content area has a light gray background and contains the text "You have options! How do you want to travel through this text?". There are three columns representing different levels of challenge:

- Least challenge:** Represented by a blue icon of a person walking. The text below the icon says "Words include:" followed by a list: "• domesticate" and "• noncommercial".
- More challenge:** Represented by a blue icon of a person with a backpack and a walking stick. The text below the icon says "Words include:" followed by a list: "• companionship" and "• herd".
- Stay Here:** Represented by a red icon of a person jumping or running. The text below the icon says "(most challenge)" and "Words include:" followed by a list: "• comradeship".

# Research

Multiple studies have found that **increased text difficulty can cause students to read slower and negatively affect their comprehension**. When students encounter more difficult texts, they must devote cognitive resources to reading individual words rather than connecting ideas in the text to facilitate comprehension. Additionally, texts using words that appear more frequently or are relatively short show improved readability and comprehension for people with dyslexia.

- [Amendum, Conradi, & Hiebert, 2018](#)
- [Rello et al., 2013](#)

As a result, publishers have provided “leveled texts” to teachers. These are designed to guide students through a progression of texts, beginning with simpler material and progressing to more challenging texts. However, the focus of leveled texts is often the development of students’ early reading skills, not teaching students about a particular subject. Thus, **much of the research concerning leveled texts has focused on students in early elementary school**.

- [Brabham & Villaume, 2002](#)
- [Compton, Appleton, & Hosp, 2004](#)

There is a difference between “leveled texts” and “manual text leveling.” **Leveled texts refers to a series of different texts that become progressively more complex**. Typically, the focus is on developing students’ reading skills as students progress through the series. Manual text leveling refers to a process of altering the words (and other textual features) in a single text to make it more comprehensible to readers of different levels. With manual text leveling, there are multiple versions of the same text—but the meaning of the content remains the same--and the focus is on students’ comprehension of the material rather than the development of reading skills. Leveled texts for early elementary students without disabilities have been examined in the research literature. A review conducted by [Siddhartan \(2014\)](#) examined research studies that were conducted with young students without disabilities. Results showed that manual text leveling can improve students’ reading comprehension in a variety of ways, including:

- When students do not have much background knowledge of the material ([Kamalski et al., 2008](#); [McNamara et al., 1996](#); [Noordman & Vonk, 1992](#))
- Making the language more accessible ([Beck et al., 1991](#))
- Changing the order of phrases ([Levy, 2003](#))

Manual text leveling has also been used as a gold standard when conducting research with older students diagnosed with dyslexia. A study conducted in Spain, with students in high school or college who were diagnosed with dyslexia, used manual text leveling when comparing different software programs that would alter the text. **Students with dyslexia considered the passages that**

were manually leveled to be more readable than those leveled by the software. The authors of the study theorized that this was because manual text leveling allows for greater control of word complexity, length, and other related factors.

[Rello, Baeza-Yates, Bott, & Saggion, 2013](#)

A recent paper advocates for a more modern approach to manual text leveling that improves text coherence and the structure of information in the text. **The authors describe a process that reorganizes information in the text to improve readers' comprehension and inference skills.** This can involve adding text such as topic sentences or explicitly connecting ideas instead of shortening long sentences and simplifying vocabulary, which are typically used to alter the text.

[Arfé, Mason, & Fajardo, 2018](#)

## Related Guidelines

Manual text leveling is a feature related to existing guidelines and best practices, including the Web Content Accessibility Guidelines (WCAG) and the Universal Design for Learning (UDL) Guidelines. Connections include:

- UDL Guidelines
  - [UDL Checkpoint 2.2](#): Clarify syntax and structure
  - [UDL Checkpoint 2.3](#): Support decoding of text, mathematical notation, and symbols
  - [UDL Checkpoint 8.2](#): Vary demands and resources to optimize challenge
- WCAG includes requirements that address cognitive accessibility. The requirements appear in [Guideline 3.1 Readable](#): Make text content readable and understandable, specifically [Success Criterion 3.1.5 Reading Level \(Level AAA\)](#): When text requires reading ability more advanced than the lower secondary education level after removal of proper names and titles, you need to ensure that supplemental content, or a version that does not require reading ability more advanced than the lower secondary education level, is available.

## Manual Text Leveling Examples

Manual Text Leveling Tools:

- [The Academic Word Finder](#) is a free source for users to enter existing text and learn which words are below, on, or above grade level, the grade range, meanings, and part of speech that are included the text. From there, users can replace these specific words to decrease the text complexity.
- [Microsoft Word](#) can be used to get basic readability statistics such as Flesch Reading Ease, Flesch-Kincaid Grade Level, and number of passive sentences to help you understand the original reading level of your text and guide the manual leveling process.

- [The Corpus of Contemporary American English \(COCA\)](#) allows registered users (basic account is free) to input words or passages to get detailed information on words and phrases, such as word rank, frequency, and related words. Users can use this information to identify less challenging and more challenging versions of words.
- [The Lexile Analyzer](#) allows users to enter text to get the Lexile range (a measure of how difficult a text is) and a list of key words and their definitions. “The Lexile Analyzer measures the complexity of the text by analyzing characteristics such as sentence length and word frequency.” While the Lexile Analyzer is free to registered users, the membership plan offers additional features and useful indicators for the manual leveling process.

#### Commercial Providers of Manually Leveled Texts:

- [Newsela](#) is an online source for classroom content, including ELA, science, and social studies, with the same content available at 5 reading levels, allowing teachers to differentiate content for students based on their reading level. Newsela offers free and commercial products.
- [Learning A-Z](#) and associated products (e.g., Reading A-Z, Raz-Kids, etc.) offers teachers more than 2,400 books at 29 levels of reading difficulty (grouped into 4 stages of reading development) based on their own leveling system, in order to provide developmentally appropriate content for students of all ages.



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