

Easy Read is a tool for instructors working with low literacy students who want the ability to simplify any text to the reading level of their students. When English teachers at elementary schools want to pick the next book to share with their class they have millions of books preapproved for kids to choose from, but a literacy instructor at an adult literacy center only has two subpar choices. They can bring in material so complicated that it discourages their students or material so simple it makes their students feel incompetent for not understanding it. Easy Read looks to change that by making it possible to choose any text and simplify it. Easy Read is a web application that allows the user to store, edit and view passages. The system has two types of users, instructors, and students. Students view passages and answer questions on them. Instructors add passages and use the system to generate suggestions for simplifying the language to the target grade level. The system-generated suggestions can be taken or ignored and the passage can be saved again in modified form. Easy Read also provides options to tag passages by their category, source, or other identifiers to facilitate searching through a large number of stored passages. At its core, the system is based around dropping in text, giving its source and identifying information and letting the system identify problem areas. Easy Read presents passages in searchable lists and keeps track of your answers on questions for each of those passages. Student's answers are only viewable by themselves and their instructor and each instructor will have their own set of passages their students can access.

Intellectual Merit

The difficulty of this project lays in generating appropriate suggestions and making sure that those suggestions lead to sentences that are grammatically correct English sentences. This issue stems from the complexity of determining, with any degree of certainty, a difficulty score for a word algorithmically. Easy Read will combine several different existing approaches to provide passage simplification suggestions, an existing database of 50,000 words and their average age of acquisition (determined experimentally), the commonality of a word within a large selection of English language texts and the existence of synonyms or root words for which the system has age of acquisition data on. Existing literacy tools are only good at telling you a word is too difficult, but Easy Read will be great at telling you why it is too difficult and what you can do to fix that.

Broader Impact

Low Literacy adults are an underserved demographic in the field of education. Classes full of adults should be learning material that is far more complex than a child at the same reading level. Easy Read aims to give instructors serving those adults room to innovate by providing a way of bringing real world literature – newspaper articles, research papers, etc. – down to a reading level appropriate for the users, while still preserving the original meaning. The students would get content appropriate for them instead of content appropriate for their children. Even in the traditional school setting, instructors would no longer have to limit their courses to books designed for children or young adult readers, but could bring in snippets from what their students have to look forward to in the real world.. While Existing standards generate static reports on a passage's reading level, Easy Ready can be used on a minute-to-minute basis, inside the classroom, to simplify any text that an instructor wants to share. The passage simplification suggestions, as well as the ability to add comprehension questions, will allow Easy Read to give instructors working with low literacy adults the ability to teach at the same level as their early education counterparts.

Grade: 85.5

