

Assessing Written Materials

Readability Formulas

Two common readability formulas are the SMOG Readability Formula and the Fry Graph Reading Level Index. The Fry Graph method is based on the number of sentences in three 100-word passages and is best for longer publications. The SMOG formula measures the number of syllables in a 30-sentence passage within a publication and is better for shorter publications.

There is evidence that word frequency is a reasonable estimate of word difficulty. Words that do not appear very often in print are usually harder to read and understand than words that appear frequently. Multi-syllable words like diabetes, which are essential in some documents, may increase the readability.

There are software packages that can be purchased to determine readability level. Many word processing programs, such as Microsoft (MS) Word or Corel's WordPerfect, have the software built in to the program. These programs usually use the Flesch Kincaid readability formula. The Flesch Kincaid score given by MS Word is often lower than the Fry or SMOG. Use the electronic version and compute it manually to see how they compare.

Documents need to be prepared before using one of the readability programs. Any software program looks for punctuation to determine the number of sentences. Your document may contain periods that do NOT indicate the end of a sentence. MS Word is not able to differentiate those. For example, if there are abbreviations such as M.D. or R.D., MS Word may "see" those single letters as short sentences. This could bring the average sentence length down and the score will be artificially low.

Measuring Understandability

Readability is just one measurement and this alone does not imply that a document is understandable. Depending on the words used, text can be incomprehensible at any grade level.

Suitability of Assessment Materials (SAM) provides a way to assess materials in print, audio, and video formats. SAM also finds potential problem areas so that they may be revised. There are 22 assessment factors used in SAM; they are divided into six categories:

1. Content
2. Literacy Demand
3. Graphics
4. Layout and Typography
5. Learning Stimulation and Motivation
6. Cultural Appropriateness

SAM uses a scoring system for each factor to determine an overall score of suitability.