

Guidelines for Assessing Materials

Resources for Developing and Assessing Materials

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Online Resources:

www.hsph.harvard.edu/healthliteracy

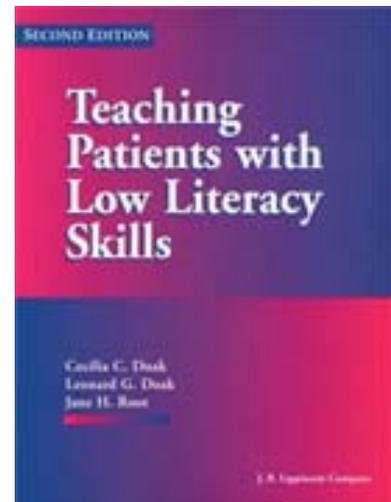
We have many tools at our disposal to help us assess the reading grade level of written materials. Most of these tools have been used extensively in the education field and have been well-tested. In addition, we have several guides available to help us make a broader assessment of written health materials.

Reading Grade Level Assessments: offer some insight into the level of difficulty of written material. Most reading grade level scores focus on the length of sentences and the vocabulary [generally assessed by number of syllables in words] in a text.

Long sentences: often contain phrases set aside by commas, multiple ideas, and/or lists. Poor readers often read slowly. They have problems with long sentences because they can lose the main idea part way through the sentence [short term memory issue]. Very poor readers struggle with sounding out words and may not be able to derive meaning from simple sentences.

Multi-syllabic words: are considered an indicator of vocabulary difficulty [e.g. *utilize* for *use*]. Poor readers often need to sound out words and longer words present a bigger challenge. Vocabulary development requires background knowledge and exposure.

Featured Resource



[Teaching Patients With Low Literacy Skills, Second Edition by Doak, Doak & Root. 1996.](#)

Assessing Readability of Text: There are a number of formulas to assess the readability of a text. The formulas fall into two major categories: those that are computer generated and those that are calculated by hand. The most frequently used computerized formulas include the Flesch Grade Level Formula and the Flesch-Kincaid Index. Word processing programs often have the Flesch formula built into the software for easy use. For those who do not have a computer, or conduct readability tests in the field, there are a number of formulas that can be calculated by hand. Hand-calculated formulas include the FOG method, Fry formula and the SMOG. The SMOG was created by McLaughlin in 1969 and predicts 100% comprehension. The Health Literacy Studies Group often uses the SMOG in its research, and finds the formula easy to compute and well designed for field work. Once you know the formula, you do not need any charts for reference.

Suitability of Materials: Grade-level readability is one of many factors that contribute to the overall readability of materials. Even materials written on a low grade level may be difficult to comprehend if proper attention is not also paid to organization, layout, and design. To address the overall suitability of materials, including reading grade level, Doak and Doak developed the Suitability Assessment of Materials (SAM). Although the SAM was developed for use with print materials, it has also been used to assess video- and audio-taped instructions to patients.

The SAM scores materials in 6 categories: content, literacy demand, graphics, layout and typography, learning stimulation and cultural appropriateness. The SAM yields final percentage score. This score falls into one of three categories: superior, adequate or not suitable. The SAM can be used to identify specific shortcomings that reduce the suitability of

materials- either in the development stages or with existing materials. A full description of the SAM and a scoring sheet is available in [Doak, Doak & Root's *Teaching Patients with Low Literacy Skills, Second Edition*, J.B. Lippincott Company, 1996.](#)

Readability of Charts and Graphs: The readability tools noted above are used for prose documents – information presented through sentences organized in paragraph. However, adults must grapple with documents. Document literacy was one of the measures on the NALS. Documents include forms, tables, graphs, charts, and lists. We now have a tool to measure the readability of information organized in rows and columns.

Researchers Mosenthal and Kirsch developed a measure for assessing document complexity, called the PMOSE/ IKIRSCH document readability formula (*Journal of Adolescent & Adult Literacy*, 41(8), May 1998). The formula uses the number of rows and columns, the structure, and the number of labels and items to assess the chart or table. Scores range from Level 1 to Level 5 Proficiency. The Proficiency Level can be translated into a grade-level equivalent.

The Health Literacy Studies Group uses the PMOSE/ IKIRSCH in research and finds it to be a useful tool. Attention to information presented in rows and columns is especially critical given the large number of forms and charts needed to navigate health care. It is important to note that the formula does not examine the type of language (such as long, technical words) used in charts and tables.