Tips for Producing Print, Video, and Radio Materials

SMOG Readability Formula

Note: Some dictionaries in word processing programs can check readability when also set to check grammar. To access this feature in Microsoft Word, for example, click "Options" in the spell-check dialog box, choose "check grammar," then select "readability."

G.H. McLaughlin developed the SMOG (Simple Measure of Gobbledegook) formula to determine readability in the English language. The adaptation used here has been tested with Spanish and three African languages. The results show that the SMOG formula is also a very good indicator of reading difficulty in these languages. Try it in your language to determine whether it will be a useful tool for you. If not, read your document and try to eliminate long sentences and long words. Do not write in a childish way, but do write in a way that makes the message very clear even to people who rarely read. Checking for readability **before** pretesting can save time and effort.

Below are instructions for assessing readability using the SMOG formula.

For written materials at least 30 sentences in length:

1. Select ten sentences near the beginning, in the middle, and near the end of the material.

2. You now have a sample of 30 sentences. Circle all the words containing three or more syllables in this sample, including repetitions of the same word.

3. Count the number of words circled.

4. Take this number and compare it to the SMOG Conversion Table to determine the estimated reading level of your material.

5. Estimate the educational level of most people in your target group. Rewrite your text, if necessary, to the appropriate readability level for these readers.

SMOG Conversion Table*	
Total Number of Words with 3+ Syllables	**Estimated Reading Level**
0-6	Low-literate
7-12	Primary school
13-30	Some secondary school
31-72	Secondary school graduate
73+	University or post-graduate education

Adapted from Harold C. McGraw, Office of Educational Research, Baltimore County Schools, Towson, Maryland.

Adapted from *How to Conduct Effective Pretests: Ensuring Meaningful BCC Messages and Materials*, AIDSCAP, Family Health International.

Tips for Preparing Print Materials

The following tips may be useful in developing print materials, particularly for low-literate or non-literate audiences.

1. Design, Layout, and Illustrations

Present One Message Per Illustration. Each illustration should communicate a single, distinct message. (See Figure A4-1.)

Figure A4-1. **Present One Message Per Illustration**

Immunization protects children from disease.

Courtesy of PATH and Becton-Dickinson

La vaccination protège les enfants contre les maladies

Limit the Number of Messages and Pages in Each Material. If there are too many messages, readers may become restless or bored—or may find the information hard to remember. Try testing different formats with members of your intended audience to determine what is most appropriate for them. The number of pages in a document can affect the cost of printing. Sometimes, wasted paper and higher costs can be avoided if the total number of pages in your printed piece is a multiple of four. Check with your local printers before you decide on the number of messages and pages in your material.

Make the Material Interactive Whenever Possible. An interactive material is one that encourages exchange between the health worker or facilitator and members of the audience. If appropriate, include question-and-answer sections, or review questions that allow readers to use the information in the material.

Leave Plenty of White Space. This makes the material easier to read, follow, and understand.

Arrange Messages in the Sequence that Is Most Logical to the Audience. People who learn to read from right to left, top to bottom, as well as those who are not used to reading at all, will have different ways of viewing pages. (See Figure A4-2.)

Figure A4-2. **Arrange Messages in the Sequence that Is Most Logical to the Audience**
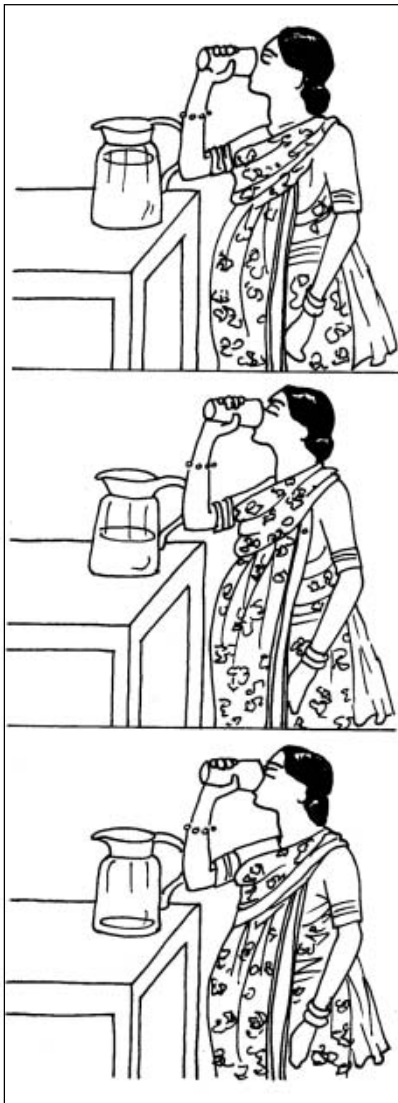

Women who reviewed this sequence about the importance of drinking several glasses of water each day during pregnancy understood the message better when vertical rather than horizontal drawings were used.

Courtesy of PIACT/Bangladesh

Use Appropriate Colors. Use colors that have been pretested with the intended audience. Colors have different meanings in different cultures. For instance, in some Asian countries such as India, red is a symbol of happiness, while in parts of Africa, it is a symbol of death.

Use Illustrations to Reinforce Text. Placing illustrations throughout the text makes the material more appealing and can help the reader to absorb the information presented. For low-literate viewers, illustrations are critical in conveying the message. (See Figure A4-3)

Figure A4-3. **Use Illustrations to Reinforce Text**
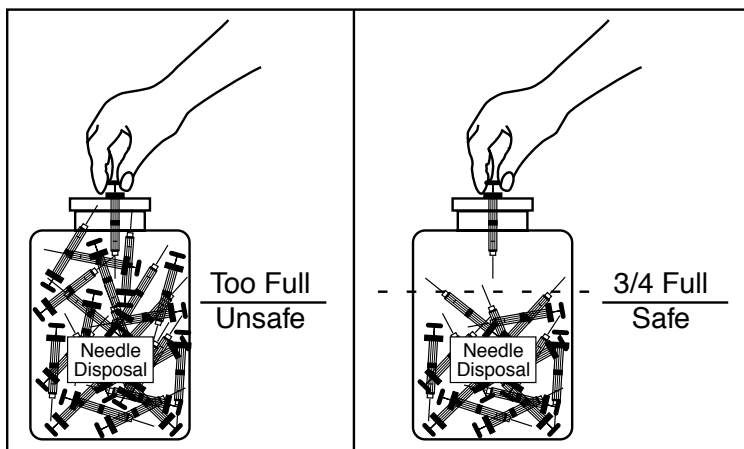
These illustrations from a manual for health care workers helped readers remember and understand the message: "When only three-quarters full, needle-disposal boxes should be sealed and discarded to prevent needle sticks that occur when the lid is pushed down against an overly-full box, or when people must put their hands too close to the points of contaminated needles."

Courtesy of PATH

Use Familiar Images. People understand and are attracted to pictures that seem familiar to them. Expressions, activities, clothing, buildings, and other objects in illustrations should reflect the cultural context of the audience. (See Figure A4-4.)

Figure A4-4. **Use Familiar Images**

This illustration of a well-positioned child getting a vaccination was well received because the clothing and hairstyle reflected local customs.

Courtesy of The World Health Organization

Use Realistic Ilustrations. People and objects portrayed as they occur in day-to-day life are easier to recognize than anatomical drawings, enlargements, parts of things or people, schematic diagrams, maps, or other drawings that do not resemble things that people normally see.

Use Simple Illustrations. Avoid extraneous detail that can distract the reader from the central message. For instance, it is easier to see an immunization clinic set against a plain background than against a crowded city street. (See Figure A4-5.)

*Figure A4-5.* **Use Simple Illustrations**

A woman from Sierra Leone walks to an immunization clinic carrying her baby.

Courtesy of the Ministry of Health and Home Economics Association of Sierra Leone

Illustrate Objects in Scale and in Context Whenever Possible. Although large pictures and text are easier to see, excessive enlargement of detail may diminish the reader´s understanding of the message. (See Figure A4-6.)

Figure A4-6. Illustrate Objects in Scale and in Context Whenever Possible

Illustration A   **Illustration B**
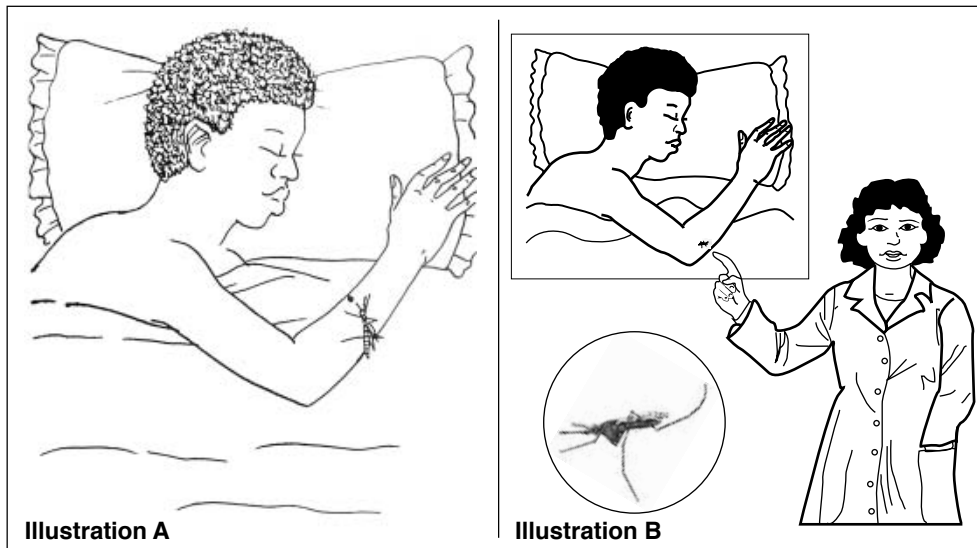
During pretesting of a brochure on malaria prevention, viewers were confused about what was biting the sleeping man in Illustration A because the bugs were so big. Illustration B places the mosquito in context.

Courtesy of the Ministry of Health and Home Economics Association of Sierra Leone

Use Appropriate Symbols. Carefully pretest all symbols with the intended audience. "X′s," arrows, check marks, inserts, and balloons that represent conversations and thoughts usually are not understood by people who have not been taught what they mean. Likewise, symbols that represent time are culture specific: in some countries, calendar pages may be used to represent months, while moons and stars may be more appropriate in other countries. (See Figure A4-7.)

Figure A4-7. **Use Appropriate Symbols**
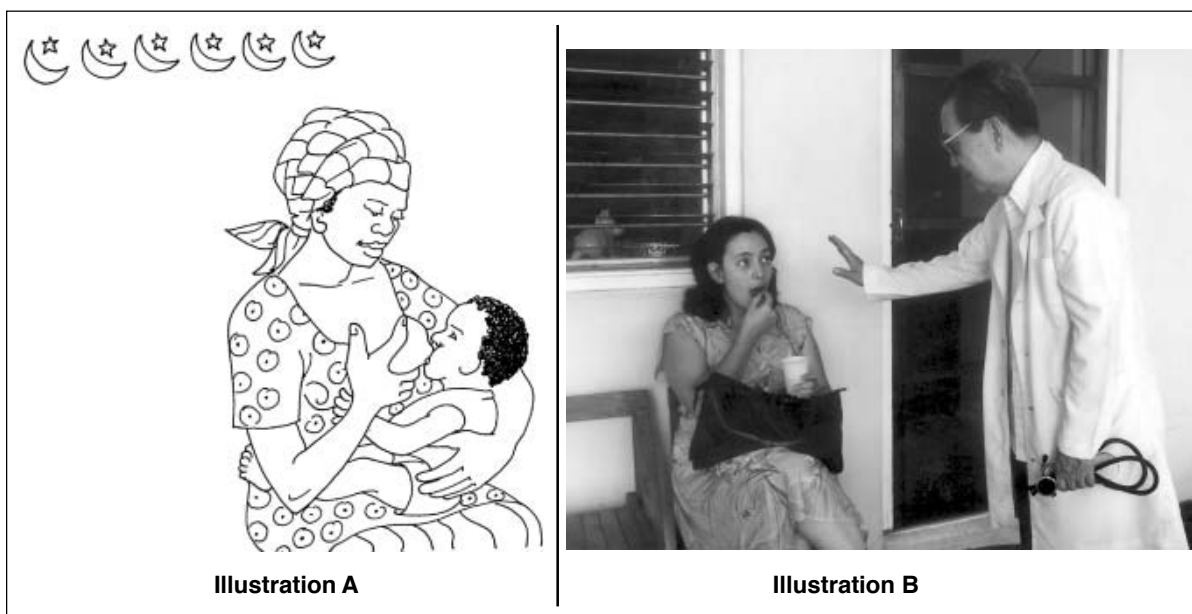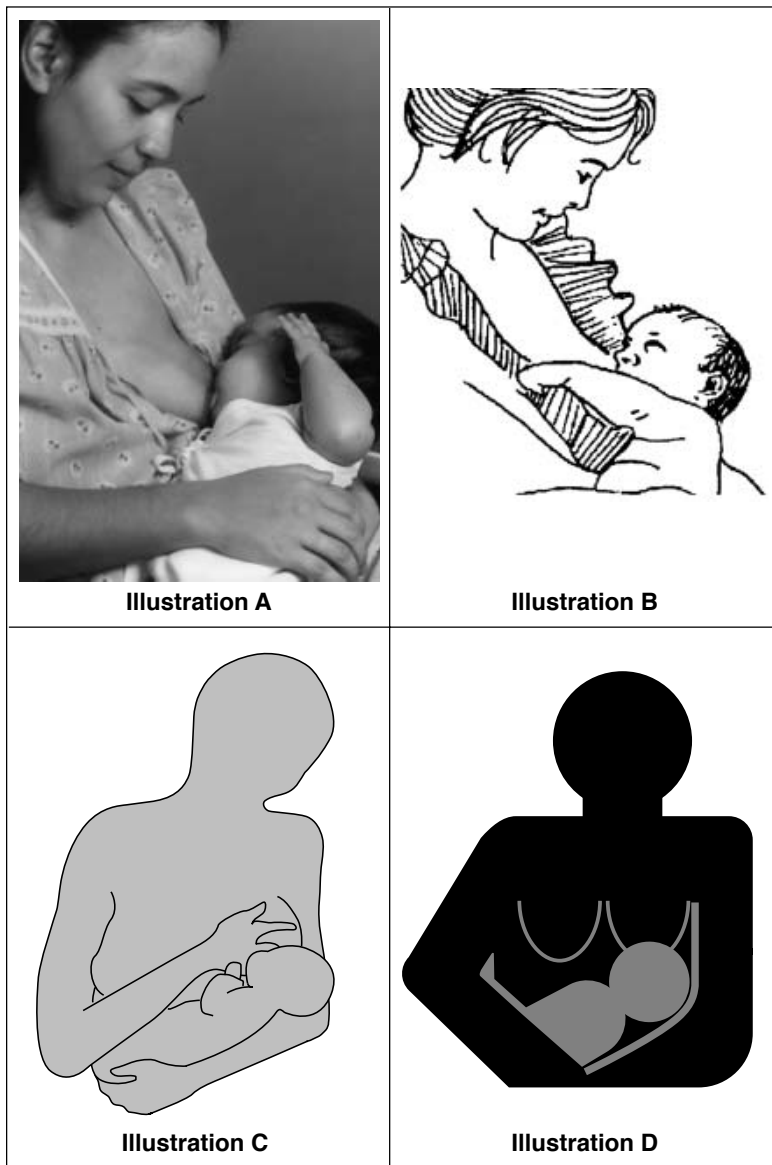

| Illustration A | Illustration B |

Illustration A uses a moon and stars to illustrate that a woman should breast-feed her child for six months. Illustration B shows a doctor telling a woman that, during pregnancy, she should take only medicine prescribed by a doctor. The use of the familiar hand gesture for "no" or "don′t" was understood, while an earlier image of a pregnant woman taking a pill with the abstract symbol of an "X" superimposed over it was either misinterpreted or entirely overlooked.

Illustration A courtesy *of Nestle*
Illustration B *courtesy of the Ministry of Health and Home Economics Association of Sierra Leone*

Use Appropriate Illustrative Styles. Illustrations come in different styles, from line drawings to shaded drawings, photographs to cartoons. Photos without background detail are more clearly understood by some audiences than are drawings. When drawings are more appropriate, some audiences might prefer shaded line drawings rather than simple line drawings. Test shading carefully to make sure that it is acceptable and obvious enough that it is not mistaken for poor-quality printing. Similarly, cartoon figures or highly stylized drawings may or may not be well understood, depending on the audience´s familiarity with cartoon characterizations and abstract representation (see Figure A4-8). Test identical messages, using the same symbols, in several graphic styles to determine which style is most acceptable to, and understood best by, the audience.

Figure A4-8. **Use Appropriate Illustrative Styles**

Illustration A

Illustration B

Illustration C

Illustration D

Here, the same message, ``Breast milk is best for your baby,´´ is shown using different illustrative styles: photograph (A), simple line drawing (B), minimally stylized drawing (C), and highly stylized drawing (D).

Courtesy of Nestle

Take a Positive Approach. Negative messages may be alienating or discouraging rather than motivating. (See Figure A4-9.)

This illustration uses a positive message to depict that pregnant women should carry less weight than non-pregnant women should. Illustrating a pregnant woman with a heavy load and putting an "X" going through the picture is a common, negative technique that is often misunderstood by people with low literacy skills.

Courtesy of Maendeleo ya Wanawake, Kenya

Figure A4-9. **Take a Positive Approach**
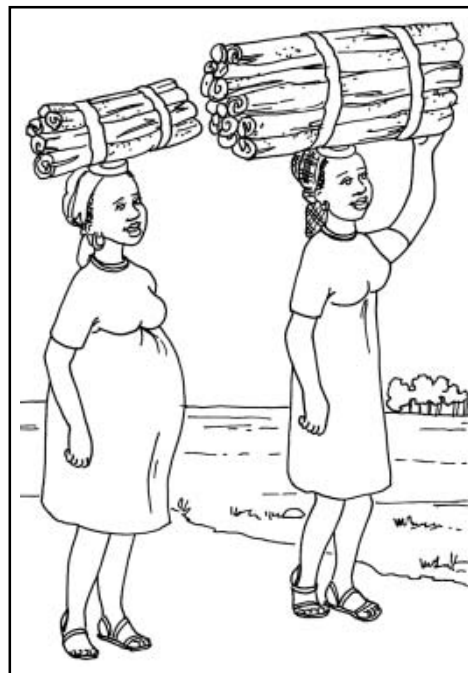
2. Text

Choose a Type Style and Size that Are Easy to Read. Choose a type style that is clear and easy to read, especially for audiences with low literacy skills. Remember that italic and sans serif type styles can be more difficult to read. Also, use a type size that is large enough for the audience to read: a 12-point font for text.

Use Uppercase and Lowercase Letters and Regular Type. Text printed in all upper case letters is more difficult to read. For emphasis, use underlining or distinctively **bold** typeface.

Test the Reading Level. For low-literate audiences, use short words whenever possible, and keep sentences short. For a literate audience, use more complex language, since they may be offended by overly simplified language. If the material has a lot of text, draft materials may be tested with standard readability tests such as SMOG or Fry. Appendix 3 explains how to apply the SMOG test. Proper pretesting with the intended audience usually will indicate whether the language level of a material is appropriate for that audience.

Columns or Wide Margins. Use columns, or allow wide margins around text so the reader has a shorter distance to read from left to right.

Sidebars and Pullout Text. Use sidebars, boxes, and pullouts to tell stories and highlight examples.

Tips for Producing Video Materials

For any type of video:

- **Plan before the production phase.** The production phase is usually the shortest but the most costly. Make sure every step is planned well in advance of the actual shoot date—and that actors, locations, props, and technical equipment are ready before production begins.

- **Repeat, repeat, repeat.** The golden rule with videos is to repeat your key message(s) three times: (1) in a synopsis at the head of the show, tell the viewers what you are going to tell them; (2) in the main body of the video, describe your key message(s) in detail; and (3) at the end of the video, summarize what you just told them.

- **Convey feelings and issue a call for action.** Remember that videos are a highly effective medium for conveying and creating feelings, motivating people, and issuing a call for action. They are not an effective medium for transmitting details.

- **Provide details in print material.** If you need to transmit details to your audience that are too laborious to cover in the video, create supporting print material.

- **Minimize reshooting.** Since reshooting is expensive and time-consuming, make sure plenty of extra footage is shot in case it's needed later.

- **How long?** Expect the process to take twice as long as you anticipated, especially post-production, which includes every step after the actual filming—editing, adding graphics, finding music, etc.

- **Consider involving celebrities and VIPs.** Getting celebrities or VIPs to participate in your video can add glamor and often create free publicity through other media channels such as newspapers or TV. Be sure to take photos to use in print media.

- **Reference Web sites**. If appropriate, include in your video references to Web sites where viewers can get more information on your topic.

- **Produce and duplicate only after all changes are made.** Final production and duplication of the video for distribution should take place only after all changes have been made and approved.

Special considerations for training videos

If you are developing a video to train people in a technical skill, it is helpful to follow these guidelines:

- **Find a technical expert.** Identify a technical expert to supervise the technical content of the film. The advisor helps to identify steps of the procedure, objectively evaluates variations in the procedure, decides which variations should be shown and recommended in the video, and consults other experts as questions arise during scriptwriting and editing. However, the advisor must have the time to devote to the project. It is helpful if the advisor is not personally invested in the procedure being shown. The advisor must be able to distinguish those parts of the procedure that are essential from those that can be modified without diminishing safety or effectiveness.

⇑ **Clearly identify steps in a technical procedure.** A training film of a technical procedure usually presents a recipe that describes every step in a sequence. But when planning for the video begins, the steps often have not been clearly identified. Consult various sources to identify the steps, including:

- Printed material and slides describing the procedure.

- Individuals experienced in the technique being demonstrated, such as clinicians. Ask them to describe the procedure step by step, and record the interviews for later consultation.

- Observe the technique being performed, and take notes.

- Before beginning scriptwriting, videotape the procedure several times using a simple camera and lighting. The producers, writers, and technical expert then review the footage to confirm the steps and procedures. The preliminary taping also gives the camera operator an opportunity to plan camera angles for final shooting.

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Sources: Vincent Dowd and Michael Vaughn, consultants; Harper.

Tips for Producing Radio Materials

Good sound quality in radio refers to the absence of hiss, clicks, rumble, unwanted fading, and distorted tone balance. Sound quality depends partly on technique, partly on equipment—although expensive, state-of-the-art equipment is by no means necessary for high-quality audio production. Definitions of good sound quality can be highly technical. Still, a few simple rules are helpful:

- **Take good care of equipment.** Tape recorders and microphones, the basic tools of radio, are delicate. They should be protected from dust and sand.

- **Mix sounds judiciously.** Radio production often involves combining, or "mixing," sounds in various ways. Background sound effects create atmosphere and help listeners visualize the setting of the action. While it is sometimes appropriate to mix music and voices, music should not overwhelm the voices.

- **Understand the meaning of audio techniques.** Every audio technique has a distinct meaning. For example, a hard splice is an abrupt change from one sound element to another and may suggest a change of place but not of time. A cross-fade, in which one sound element is faded out as another is faded in, may also suggest a change of place but not of time.

- **Avoid bad splices.** Radio production usually involves editing files to remove unwanted sounds.

- **Use microphones properly.** Omnidirectional microphones pick up sounds from all directions. Often they should not be used outdoors, because they will pick up extraneous sounds. Cardioid microphones are sensitive to sounds coming from only one direction and are sometimes better for outdoor work. During interviews, hold cardioid microphones about shoulder level and move them from person to person. The optimal distance is six to twelve inches from the speaker. Remember that microphones generate extraneous noise if something rubs against them or their cables.

- **Reference Web sites**. If appropriate, include references to Web sites where listeners can get more information about your topic.

Sources: HealthCom, 1995*b*; Church and Geller, 1989; Gilluly and Moore, 1986; Vincent Dowd, 2000.