

Assessing Health Materials

Eliminating Barriers - Increasing Access

Tools for Workshop Facilitators
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Background

Reading

Reading

Reading is a complicated task – whether we are reading on paper or on line. The components of reading include the following:

Alphabetics: recognizing letters and links to sounds in the spoken word.

Fluency: reading with speed [rhythm of speech] and ease.

Vocabulary: knowing the meaning of a word/phrase. Understanding less common words requires background knowledge.

People who do not read well often read one word at a time. As a result, they may have difficulty grasping the meaning of a sentence. In addition, poor readers sometimes skip over unfamiliar words, leading to errors or misinterpretations

Reading Ease

Adults come in contact with a variety of print materials in the course of daily life. They may turn to these materials for pleasure, information, directions, and for multiple tasks related to home, work, and civic activities.

Readability formulas offer some insight into the complexity of print materials. These tools offer a first step in the assessment process to help us judge the difficulty of a text. However, reading is supported by many text characteristics such as font size, density of print, and length of lines, Writing style, tone, and voice affect the communication of ideas. Organization and design components make it easy or difficult for a reader to find information.

How we write and design materials influences people's access to needed information and adds to the pleasure or frustration of any number of tasks. In health, of course, access to information can be critical.

Background

Skills and Demands

Skills of US Adults

The 1992 National Adult Literacy Survey (NALS) and the 2003 National Assessment of Adult Literacy (NAAL) examined the functional literacy skills of US adults.

The literacy surveys, conducted among a rigorous sample of adults in 90 minute interviews at home, focused on people's ability to use commonly available materials from everyday life (such as news articles, advertisements, product labels) to accomplish everyday tasks.

Findings shocked the nation in 1993 and again in this century. While most adults in the US are literate – a majority have difficulty using print materials to accomplish every day tasks with accuracy and consistency

Demands of Health Materials

Over 1,000 studies published in health journals indicate that the reading level of health materials generally exceeds the reading skills of adults who graduated from high school.

This mismatch between demands and skills may well be responsible for the documented links between limited literacy and poor health outcomes.

Overview

Objectives

The workshop will focus on the application of specific tools most helpful for materials assessment. It is important to help participants understand what the various tools can and cannot do. Participants will also gain insight into how to develop materials once they become familiar with the assessment tools. For example, working with the SMOG will make participants more sensitive to words and encourage them to question the value of writing 'utilize' rather than 'use'

At the end of the workshop, participants will be able to do the following:

1. Identify three design elements that support reading ease
2. Identify three organizational elements that support reading ease
3. Describe how to use the SMOG, SAM, PMOSE/IKIRSCH tools and a numeracy demand scale
4. Determine a readability score for health materials in prose format
5. Determine a grade level score for health materials in document format
6. Determine a suitability score for health materials
7. Estimate the numeric demands in health materials.

Overview

Tools

McLaughlin developed the SMOG Readability Tool. It is considered by many to be the best tool for assessing comprehension of texts. It focuses on word as well as sentence length and can be easily used in the field because it does not require a chart. There is now a Java application that calculates a SMOG score for any length of text that can be typed or pasted into the calculator. This tool does not assess many critical components of materials such as organization, layout and design, cultural relevance, use of visuals, or relevance to the reader.

The SAM, developed by Len and Ceci Doak, offers a tool for assessing texts. The SAM enables reviewers to move beyond mere readability assessments and consider the many important aspects of materials such as organization format, design and culture-that ease or hinder reading, comprehension and use. Information on SAM can be found on pages 49-60 of the Doak, Doak and Root book Teaching Patients with Low Literacy Skills. This tool is best used by 2 or more reviewers who first review the tool, do individual assessments, and then reach consensus about final rating.

Educational researchers Peter Mosenthal and Irwin Kirsch developed the PMOSE/IKRSCH Document Readability Formula. This innovative assessment tool focuses on materials in the form of lists, charts and graphs. Unlike prose, which is full sentences, documents provide different challenges based on format. This formula offers a scoring mechanism for assessing documents. This tool does not assess the difficulty of vocabulary within the document.

NUMBERS: Hierarchy of Numeracy Demands. We draw from work of Apter and colleagues about numeracy demands in health contexts. Although no formal assessment tool has been developed as yet, this chart will enable reviewers to gain insight into numeracy demands. A rating scale has not yet been tested.

Overview

Planning

Participants

Workshop participants should be comprised of people who prepare materials and/or are responsible for making decisions about the production and/or use of materials within health and healthcare organizations. Be sure that they have administrative support for their participation and that they have opportunities to report back to others within their organization.

Timing

The workshop is planned as a morning or afternoon session lasting approximately 3-hours. You might consider admitting some administrators to the session for the first half hour so that they can participate in the introductory discussion and icebreaker activities. Thereafter, participants should be prepared to fully participate in all the workshop activities for the remaining time. Plan on short breaks and provide snacks /drinks during the SAM assessment group exercise.

Preparation

Review the entire booklet and be prepared to walk participants through the analysis and application of all of the tools. You will want to read and review the noted citations as well as some relevant background information posted on line [www.hsph.harvard.edu/healthliteracy]. In addition, you will need to collect local materials for the various exercises.

- You will want multiple copies – enough for each participant, of at least one piece of prose material so that everyone can undertake and compare a SMOG assessment.
- You can ask participants to bring in 3 copies of one material from their area of specialty/institution to be used by small groups for the SAM exercise.
- You will want examples of various documents for the PMOSE/IKIRSCH.
- Be sure to have some materials that contain numbers.

Overview

Facilitation

This brochure is designed for the workshop facilitator. The suggested activities include brief didactic presentations, discussions, and small group work assignments with report out and analyses.

You will 'walk' participants through each of the tools and then serve as 'consultant' to individuals and the small groups as they apply each tool and assess an assigned piece of material.

When you use materials brought in by participants be sure to avoid assigning materials to a participant who might have developed the materials. This will help people distance themselves from their own materials and avoid feeling a need to defend them.

Be prepared to facilitate discussions about the value of the various tools so that participants can see both the positive use and the limitations.

All elements of this workshop have been piloted and have been received very well. Participants particularly enjoyed the hands-on work and appreciated the opportunity to 'brainstorm' ideas for next steps.

Pre-Workshop Assignment

Reading on line at:

www.hsph.harvard.edu/healthliteracy

Ask attendees to bring 3 copies of one piece of material from their organization and to read selections from an assigned book available on line.

1. Materials: choose a print material or prepare a printout of on-line material from your organization. Please bring 3 copies of the same material for group work. Consider one of the following:

- Orientation materials
- Health history forms
- Directions - such as those for medicines, for procedure preparation, for follow-up care, and for discharge
- Explanation – such as those for a procedure or an illness
- A brochure

2. Advance Reading: please go on line to

www.hsph.harvard.edu/healthliteracy

Click on the featured text **Teaching Patients with Low Literacy Skills** by Doak, Doak, and Root.

Please read **Chapter 1** The Literacy Problem and **Chapter 5** the Comprehension Process

Review other chapters of interest

Workshop Agenda

TIME	Topic & Activities
15 min	Introduction & Overview
10 min	Ice Breaker
5 min	Brief Discussion of Background Readings/Findings
2 hours +	Assessments – Directions, application and discussion of the following assessment tools SMOG [20 minutes] 5 min Break SAM [45 minutes] PMOSE/IKIRSCH [20 minutes] Numbers [15 minutes] 10 min Break
5 min	Summation: Insights and Value of Tools
15 min	Evaluation
10 min	Next Steps
10 min	Follow-up Plans

Workshop Activities

Introduction & Overview

Introductions

Make a sweep of the room asking participants to introduce themselves indicating their institution and their work related to health materials

You may wish to provide a brief overview of the health literacy field at this time and highlight the key finding from over 1,000 published studies: that the reading level of health materials far exceeds the reading skills of most US adults [see the website, the overview section, and materials in the appendix].

Overview of Workshop Objectives & Activities

Review the objectives: At the close of the workshop participants will be able to:

1. Identify three design elements that support reading ease
2. Identify three organizational elements that support reading ease
3. Describe how to use the SMOG, SAM, PMOSE/IKIRSCH tools and a numeracy demand scale

Review the activities: Let participants know that you will facilitate a follow up discussion after each application so that they can share their experience and lessons learned.

Begin with a short exercise to 'break the ice'.

Workshop Activities

Ice Breaker: Reading exercise

Ice Breaker Options

The goals of the icebreaker is to help participants feel comfortable, to provide a fun opening interactive activity, and to offer early insight into the topic at hand. Choose one of the following activities:

Reading Word by Word

Show the “Reading Word by Word” slide [directions written backwards]. Ask participants to read to themselves.

Slide Text:

Eht tseb yaw ot naelc ruoy sessalg si htiw paos dna retaw.

1. Tsrif, esnir ruoy sessalg rednu retaw. Neht esu hsid paos ro diuqil dnah paos ot hsaw ruoy sesnel dna emarf.

2. Esnir ffo eht paos dna yrd ruoy sessalg htiw a tfos, tnih-eerf htolc.

3. Od ton esu repap slewot ot yrd ruoy sessalg; yeht nac hctarcs eht snel.

Ask participants to comment on the experience. Highlight the following points:

- Many people with limited literacy skills read sentences word by word.
- Reading word by word can make it difficult to remember the information from the beginning of the sentence once you reach the end of the sentence.

Comment

Your experience just now mimics the reading process for many poor readers. You may have found yourself reading one word at a time at a pace that is unusual for you. This process is very tiring and you might have given up had the text been longer.

Workshop Activities

Ice Breaker: Vocabulary exercise

Plain.word Game

Play a short form of the Canadian Plain.Word game. Ask participants to form partnerships. Person A reads from a list of hard words and Person B offers a plain language substitution. Then ask participants to change roles with the second group of words.

You may want to play with a list of commonly found words such as:

- Obligated to[must]
- Utilize [use]
- Consequently [as a result]
- Facility [hospital]
- Physician [doctor]
- Medication [medicine]
- Request [ask]
- Assist [help]
- Recommend [suggest]

Ask:

- What lesson can be drawn from this exercise?
- Why might someone write the word 'utilize' instead of 'use'?
- How do we avoid jargon?
- How do we identify jargon in a text? [especially if comes from our area of specialty]

Workshop Activities

Initial Discussion

Reading

Everyone was asked to read the opening chapter of the Doak, Doak and Root book.

Ask: Did anything in the introductory reading surprise you? Ask:

- What kinds of design elements support reading?
- What kinds of organizational elements support reading?

Define Terms

Functional literacy: the ability to use the written word to perform tasks with accuracy and consistency.

Prose literacy: the knowledge and skills needed to understand and use information from texts in prose format. Prose format uses full sentences and paragraphs. Patient education brochures are generally in prose format.

Document literacy: the knowledge and skills required to locate and use information contained in documents. Documents include lists, bullets, charts, and graphs. Some health materials in document format are: labels, directions, forms, and health charts.

Quantitative literacy: the knowledge and skills required to apply arithmetic operations, either alone or sequentially, using numbers in printed materials. Some health examples are: vital sign measures, medicine dosage, directions related to timing, and use of percentages [often to convey risk, a math concept].

Jargon: words that are used by special groups; jargon may be common terms but have a special meaning in context [e.g. stool]

Active voice: the sentence has a noun and a verb [e.g. we suggest that you..... vs. it is suggested that]

Workshop Activities

Time: 20 minutes

Focus: SMOG

Citation:

Online SMOG:
<http://www.harrymclaughlin.com/SMOG>

SMOG Overview

Note that all published studies of materials assessments focus on or include a reading level assessment. There are many tools that provide a readability level.

Note that different tools use different formulas. They cannot be compared and contrasted. It is important to identify a tool that suits you and your group and to use the same tool consistently.

Note that the SMOG is considered to be the most rigorous of the reading assessment tools because it focuses on words and sentences rather than on words alone. Note too that the SMOG formula can be memorized and used in fieldwork – thus, not requiring a table.

Tell participants that they will first identify 30 sentences in the text and then count the syllables in every word, highlighting those words that have more than two syllables. They then count the total across all 30 sentences. Finally, they apply the SMOG formula to obtain a grade level.

Keep in mind that this is only one step in the assessment process.

SMOG Activities

- Distribute highlighters to each participant
- Distribute a patient education brochure to each participant
- Present an overview of the SMOG process
- Ask each person to assess the reading level of the materials using the SMOG
- Move about the room to check in and to answer questions
- Ask volunteers to report out.

Workshop Activities

SMOG

SMOG Step-by-step

1. Identify 30 Sentences

- *Tip:* A sentence is defined as a string of words punctuated with a period (.), an exclamation point (!) or a question mark (?).

2. Count the syllables in all words

Use your fingers to count out the syllables in the word. Counting this way helps us overcome a natural slurring of syllables in some common words.

3. Highlight every word with more than 2 syllables

Highlight or circle the period at the end of 10 consecutive sentences at the beginning of your document. Do the same for 10 consecutive sentences in the middle of your document and similarly for another group of 10 consecutive sentences towards the end of your document.

- *Tip:* Hyphenated words are considered as one word.
- *Tip:* Numbers should also be considered, and if in numeric form in the text, pronounced to determine if they are polysyllabic.
- *Tip:* Proper nouns, if polysyllabic, should be counted, too.
- *Tip:* Abbreviations should be read as unabbreviated to determine if they are polysyllabic. determine if they are polysyllabic.

4. Count total number of polysyllabic words.

Count each of the words that you highlighted for a total number of polysyllabic words for your 30 sentences

Workshop Activities

SMOG

Formula:

- Identify 30 sentences
- Count polysyllabic words
- Determine nearest square root
- Add 3

SMOG Step-by-step, continued

5. Next, estimate the square root of the total number of polysyllabic words counted. This is done by finding the nearest perfect square and taking its square root.

6. Finally, add 3 to the square root.

This number gives the SMOG score/reading grade level assigned to text.

Note: if you do not have 30 sentences, do the following:

- Count the number of sentences in the text.
- Highlight all words with more than 2 syllables.
- As in step 4: Count your total number of polysyllabic words for your document.
- Find the average number of polysyllabic words per sentence by dividing the total number of polysyllabic words by the total number of sentences in your document.
- Determine how many sentences short of 30 you have.
- Multiply the average number of polysyllabic words per sentence by the number of sentences short of 30.
- Add this number to your total number of polysyllabic words.
- Estimate the square root.
- Add 3 to find the reading grade level.

Hand out the same brochure to everyone and ask each participant to calculate the SMOG score

Workshop Activities

SMOG

SMOG Group Reports and Discussion

Ask participants to share their experience with the process.

Ask participants to report on findings.

- Note that most high school graduates read below grade level -
- on average at a grade 8 reading level.
- Ask: Would you use this material for your intended audiences?
Why or why not?

Ask participants: What did you learn about writing from this exercise?

- Highlight the importance of avoiding complex words
- Highlight the importance of avoiding long and complex sentences

Ask participants: What does this tool miss?

- Note that no attention is paid to jargon. Some jargon looks relatively simple such as: 'empty stomach' as in "take this medicine on an empty stomach.
What is an empty stomach?
How many people know that this means 2 hours after eating and two hours before eating?
- Note that there are many other elements of a text that support or hinder reading.

Summary:

Value: How will this tool help you?

Limitations: What does this tool ignore?

NEXT: SAM -

Workshop Activities

Time: 45 minutes

Focus: SAM

Citation:

Doak, CC, Doak, LG, Root, JH (2007). Teaching Patients with Low Literacy Skills. Philadelphia: J.B. Lippincott Co.

Available on line:

www.hsph.harvard.edu/healthliteracy

SAM Overview

Feeling that readability formulas did not do quite enough, Ceci and Len Doak developed and validated the SAM so that professionals could engage in a more comprehensive overview of health materials developed for patients and for the public. The authors of the SAM suggest a 30 to 45 minute process. The total score will offer insight into the suitability of the materials. At the same time, the authors note that any item deemed 'deficient' can and should be revised.

SAM Activities

- Divide participants into groups of 3
- Distribute a copy of the text chapter to each group [pages 49-60] so that group members can follow the outline and read/discuss the evaluation criteria for ratings.
- Distribute a patient education brochure to each group so that each member of the group has the same copy of the same material
- Present an overview of the SAM process
- Ask each group to discuss the various SAM components
 - Have each person in the group assess each category
 - The group members can then share their ratings, have a discussion about criteria and reach consensus for a final score.
- Move about the room to check in with the groups and to answer questions
- Ask volunteers to report out to discuss process and findings

Workshop Activities

SAM

Considerations:

- Content
- Literacy Demand
- Graphics
- Layout & typography
- Learning stimulation
- Cultural appropriateness

SAM Step-by-Step

Each small group should work together on an assigned material for individual evaluation, discussion, and consensus for scoring the 22 SAM factors.

Use the following criteria/score for each factor

- Superior - 2 points
- Adequate - 1 point
- Not Suitable - 0 points
- Calculate % based on score and number of factors
 - NOTE: score N/A if the factor does not apply and subtract 2 points from 44 total

Score the factors within each of the 6 categories and refer to the criteria/score in the text.

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

Workshop Activities

SAM

Scoring for Content:

- Purpose _____
- Topics _____
- Scope _____
- Summary & Review _____

Scoring for Literacy Demand:

- Reading grade level _____
- Writing style _____
- Vocabulary _____
- Sentence construction _____
- Organization _____

Scoring for Graphics:

- Cover graphic _____
- Type of illustrations _____
- Relevance of Illustrations _____
- Graphics _____
- Captions _____

Scoring for Layout and Typology

- 5/8 factors are present _____
- 4 type factors are present _____
- Subheadings are used _____

Workshop Activities

SAM

Scoring for Learning Stimulation & Motivation

- Interactions included _____
- Behaviors modeled _____
- Tasks are 'doable' _____

Scoring for Cultural Appropriateness

- Cultural match _____
- Cultural images/examples _____

Total SAM SCORE: _____

SAM Group Report and Discussion

Ask participants to share their experience with the process.

Ask participants to report on findings.

Ask participants to discuss process issues.

Summary:

Value: How will this tool help you?

Limitations: What does this tool ignore?

Short Break

Workshop Activities

Time: 20 minutes

Focus: PMOSE/IKIRSCH

Citation:

Mosenthal, P. and I. Kirsch. (1998). "A new measure for assessing document complexity: The PMOSE/IKIRSCH document readability formula." *Journal of Adolescent and Adult Literacy*, 41, 638-657.

PMOSE/IKIRSCH Overview

Many health materials such as medicine labels, directions, dose charts – are in document format. Documents are print materials structured as lists, charts, or graphic displays.

Two scholars and researchers in adult education, Peter Mosenthal and Irwin Kirsch, developed a formula that can be applied to documents. This formula considers and rates structure, density, and dependency of materials in list format or in graphic display.

PMOSE/IKIRSCH Activities

- Distribute copies of the PMOSE/IKIRSCH [see appendix]
- Distribute copies of a document to each participant OR show a sample document on slide so that everyone can work on the same material as you review the process [see sample in appendix]
- Present an overview of the entire process – leaving time for the participants to examine and rate the document
- Encourage participants to raise questions and work with the group to resolve issues
- Discuss the value and limitations of the tool.

Workshop Activities

PMOSE/IKIRSCH

PMOSE/IKIRSCH Step-by-Step

The PMOSE/IKIRSCH document readability formula offers a rating based on three different criteria:

1. Structure: the score is based levels of difficulty for either a list or a graphic display depending on the very design of the document. Question: What is the design of the document?
2. Density: the score is based on number of labels and on number of items. Question: How many titles and items are presented to the reader?
3. Dependency: the score is based on whether or not any important information is to be found outside the document. Question: Does the reader have to look outside the document for important information?

The assessment process involves the following steps:

- Determine type of document and score
- Determine density of document and score
- Determine dependence and score
- Sum all three scores and use chart to determine complexity level

Workshop Activities

PMOSE/IKIRSCH

Process:

1. Determine type of structure *and rate*
 - a. *Lists*
 - b. *Displays*
2. Examine density and rate
 - a. Number of labels
 - b. Number of items
3. Determine dependency
4. Sum scores and use chart to determine complexity level

PMOSE/IKIRSCH Step-by-Step

Step 1. Structure -- examine the structure of the document

Determine the type of document you want to assess: list or graphic display. The PMOSE/IKIRSCH formula asks you to consider different kinds of structures and offers a score for each type. The score increases with the level of difficulty assigned to that structure.

- Lists: determine type and score [see examples in appendix]
 - Simple: score 1
 - Combined: score 2
 - Intersected: score 3
 - Nested: score 4

OR

- Display
 - Pie chart or time line: score 2
 - Bar chart, line graph, or map: score 3
 - Bar chart and line graphs with nested labels: score 4

Workshop Activities

PMOSE/IKIRSCH

Step 2. Density -- examine the density of the document

Density is measured by two factors: the number of labels and the number of items:

First: Count the number of labels within the document and assign the following scores depending on the number of labels:

- Score **1** – if 15 or fewer labels
- Score **2** – if 16 to 25 labels
- Score **3** – if 26 to 35 labels
- Score **4** – if 36 to 46 labels
- Score **5** – if more than 46 labels

Next: Count the number of items within the document and assign the following scores depending on the number of items:

- Score **1** – if 75 or fewer items
- Score **2** – if 76 to 125 items
- Score **3** – if 126 to 175 items
- Score **4** – if 176 to 225 items
- Score **5** – if there are more than 225 items

Workshop Activities

PMOSE/IKIRSCH

Step 3. Dependency -- check if references is made to information not included in the document

Sometimes readers need information not included in the document in order to use the document. If reference is made to information found elsewhere [outside the document], then Add 1 additional point to the score.

SUM the three Scores

Step 4. Determine the Document Complexity Level Using Table Below

Proficiency Level	Level 1	Level 2	Level 3	Level 4	Level 5
Grade/ Schooling	Range including Grade 4 or ~ less than 8 years of schooling	Range including Grade 8 or ~ high school degree	Range including Grade 12 or ~ some education after high school	Range including 15 years of schooling or ~college degree	Range including 16 years of schooling or ~ or post college degree

Workshop Activities

PMOSE/IKIRSCH

PMOSE/IKIRSCH Group Reports and Discussion

Ask participants to share their experience with the process.

Ask participants to report on findings.

Ask participants to discuss process issues.

Summary:

Value: How will this tool help you?

Limitations: What does this tool ignore?

(note: the tool does not consider vocabulary]

Workshop Activities

Time: 15 minutes

Focus: Numbers

Citations:

Apter AJ, Paasche-Orlow MK, Remillard JT, Bennett IM, Ben-Joseph EP, Batista RM, Hyde J, Rudd RE. Numeracy and communication with patients: They are counting on us. *Journal of General Internal Medicine*, 23(12):2117. 2008.

Watts, V. Rudd, RE, Colditz G., Sequist T. An assessment of printed diabetes prevention materials available to a northern plains tribe. *Journal of Health Communications*. 2010. in Press.

NUMBERS Overview

Findings from adult literacy surveys indicate that large percentages of US adults have difficulty with basic math tasks. Apter and colleagues explored communication challenges between doctors and patients around numerical concepts. They suggest that we consider five levels of numerical information and the level of difficulty involved for each.

Watts-Simons, in her doctoral study, assigned scores to these categories to assess numeric difficulty in diabetes materials. This approach has not yet been validated in studies but provides insight for a materials assessment process.

NUMBERS Activities

- Present an overview of the numeric categories
- Ask participants to offer an example for each
- Ask participants to review the brochure used for the SAM assessment to identify and score the use/challenges of numbers in the text.
- Discuss value of attention to use of numbers and numeric concepts

Workshop Activities

Numbers: Computations and Concepts

- Reading & counting
- Arithmetic operation
- Estimates, trends, reading graphs
- Percentage, relative vs. absolute values
- Probability & risk

NUMBERS Step-by-Step

Review each of the five categories or numeric challenges

- Reading numbers & counting
- Arithmetic operation [add, subtract, multiply, divide]
- Estimates, trends, graph reading
- Percentage, relative vs. absolute values
- Probability, risk

Ask participants to offer a health related example for each:

Ask participants to score the numeric challenges in the materials they used for the SAM assessment – using the following score assignments:

- Score 1: Reading numbers & counting
- Score 2: Arithmetic operation [add, subtract, multiply, divide]
- Score 3: Estimates, trends, graph reading
- Score 4: Percentage, relative vs. absolute values
- Score 5: Probability, risk

NUMBERS Group Reports and Discussion

Ask participants to report on findings.

Ask participants to discuss process issues.

Summary:

Value: How might this tool help you?

Review & Summation



Consider engaging participants in a discussion of all or some of the following:

Ask participants to discuss their experience with the various tools.

Be sure to discuss how the tools may be used and what insight they will [and will not] provide.

Ask participants what they learned about writing from the application of the various tools.

Ask participants what they learned about developing materials as a result of using the various tools.

Ask participants to contribute to a list of what can be done to avoid 'attacking' the reader. Add the following if not provided:

- ✓ Pay attention to words and sentences
 - Use everyday words and avoid jargon
 - If unusual words are used – be sure to include a clear definition
 - Use a sentence to convey one idea or fact
 - Keep sentences reasonably short
- ✓ Pay attention to the organization of ideas
 - Group like ideas together
 - Use organizational cues such as headings
- ✓ Pay attention to layout and design
 - Avoid distracters [such as irrelevant pictures]
 - Use a 12-point font size and other design elements that ease reading
- ✓ Keep the audience in mind: culture, needs, preferences
- ✓ Apply professional rigor: be sure that materials have been piloted with members of the intended audience

Evaluation



Evaluation Exercise [proximal evaluation]

This friendly evaluation exercise gets people on their feet and offers a critical summary of workshop activities. This proximal evaluation captures the fresh impression of participants just as the workshop comes to a close. A distal or follow-up evaluation is recommended with a month's time.

Head – Heart – Hands – Feet – Take Away

Ask Participants to use post-its to write and then post answers to the following questions:

Head– What new information did you learn?

Heart – What did you like?

Hands – What skills did you learn?

Feet -- What would you kick-away [omit]

Take Away – What is the take home message?



Follow-up

Next Steps



Next Steps: What will you do now?

Engage Participants in a 'brain storm' -- encouraging them to offer ideas of what they might be able to do when they return to their work.

Here are some activities other participants undertook after training:

- Formed a materials review committee in their department
- Developed guidelines for materials in production
- Provided training for IRB committees

Follow-up

Distal Evaluation

Follow-up [distal evaluation]

This friendly evaluation exercise gets people on their feet and offers a critical summary of workshop activities.

Ask participants complete an evaluation on line or through the mail so that you can assess the value of the workshop and make future workshops more relevant to people's needs. The following questions are noted as suggestion only. Feel comfortable developing a shorter or more expanded version.

1. Do you have responsibility for any of the following [please check all that apply]?
 - Distribute materials to patients or clients
 - Choose materials for patients or clients
 - Write materials for patients or clients
 - Review materials for patients or clients
 - IRB review committee
 - Other:

2. With whom did you share information/resources from the Health Literacy Materials Assessment Workshop?
 - Supervisor
 - IRB committee
 - Supervisor
 - Fellow workers
 - No one

3. Please indicate any changes you have made in your own work as a result of the workshop.

4. Please indicate any changes you have brought about in your department/agency/institution as a result of the workshop.

Appendices

Appendix 1: Sections from the PMOSE/IKIRSCH – examples of list structures

Appendix 2: Short Examples

Appendix 3 Additional References and Resources

Appendix 1

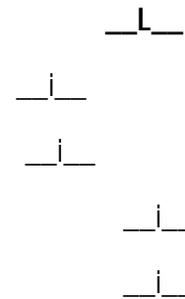
Appendix 1 Selections from the PMOSE/IKIRSCH

Examples of types of lists

Lists: The authors provide you with 4 options in order of difficulty (simple lists, combined lists, intersected lists, and nested lists)

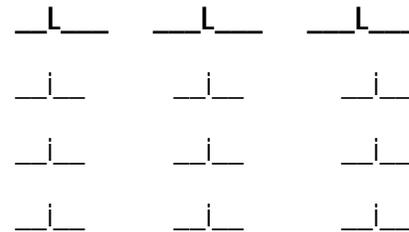
Simple list structure: Score 1

This structure, as you might expect, resembles a single column with label or heading followed by a list of items. Here is a pictorial image. "L" stands for label and "i" stands for item:



Combined-list structure: Score 2

This structure resembles a more complex list of items with several columns and a label or title for each column. Here is a pictorial image. "L" stands for label and "i" stands for item:

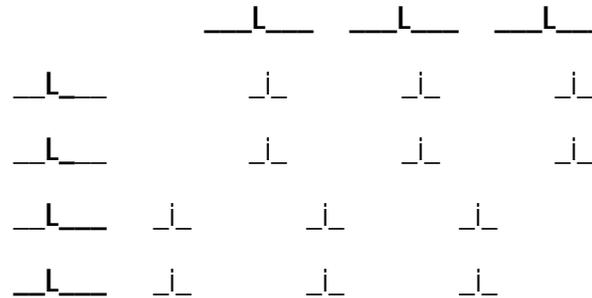


Appendix 1

Appendix 2: Sections from the PMOSE/IKIRSCH, continued

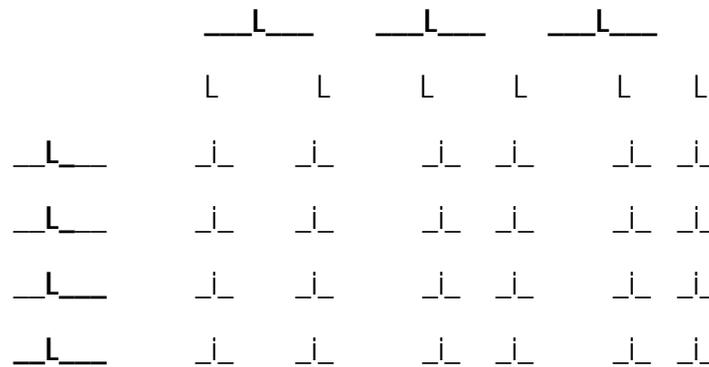
Intersected-List Structure: Score 3

This structure resembles a more complex arrangement of items that has label along at the top as well as along the side. Here is a pictorial image. "L" stands for label and "i" stands for item:



Nested-list structure: Score 4

This structure resembles an even more complex arrangement of items because each of the labels has more than one category. Here is a pictorial image. "L" stands for label and "i" stands for item:

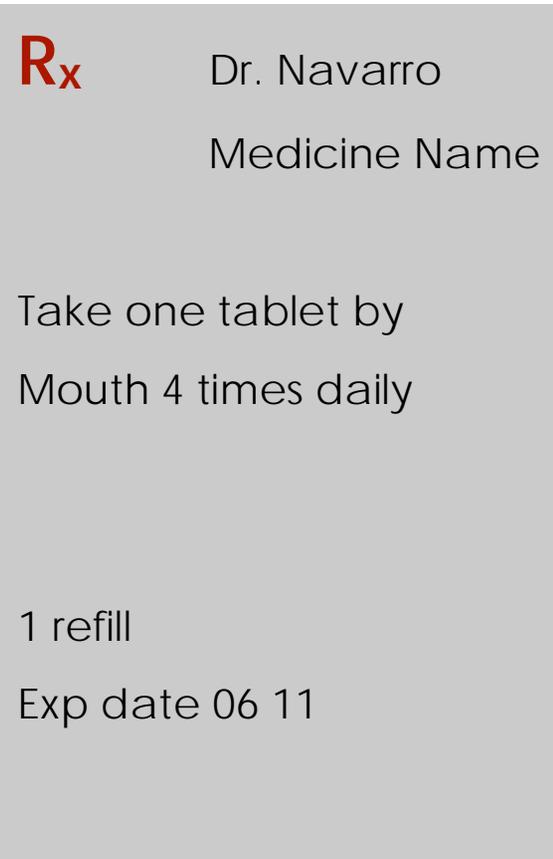


Appendix 2

Appendix 2: Examples and Questions

From a prescription label

What is wrong here? [Missing information: no indication of timing]



Appendix 2

Appendix 2: Examples and Questions

From a Consent Form

What is wrong here? [poor grammar, complex vocabulary]

CONSENT FOR PROCEDURE

Use Patient ID Card
PATIENT MUST BE IDENTIFIED BY
NAME AND MEDICAL RECORD NUMBER

PROCEDURE: COLONOSCOPY, +/- BIOPSY, +/- POLYPECTOMY

I have explained to the patient the nature of his/her condition, the nature of the procedure, and the benefits to be reasonably expected compared with alternative approaches.

I have discussed the likelihood of major risks or complications of this procedure including (if applicable) but not limited to infection, hemorrhage, drug reactions, complications of anesthesia, blood loss, loss of sensation, loss of anal function, perforation, organ damage and loss of life. I have also indicated that with procedure there is always the possibility of an unexpected complication, and no guarantee or promise can be made concerning the results of any procedure or treatment.

TYPE: NO INTRAVENOUS CONSCIOUS SEDATION IS PLANNED TO BE USED AND/OR MAY POTENTIALLY BE USED DURING THIS PROCEDURE.

I have discussed the use of sedative/analgesic (sedation). These medications are administered to help you relax and relieve discomfort you may experience. The risks include slower breathing, low blood pressure and occasionally respiratory depression.

Additional comments (if any):

- Bleeding
- Perforation (tear in bowel wall)
- Stroke (infarction)
- Organ perforation for complications
- Missed lesion

All questions were answered and the patient consents to the procedure.

Dr. _____ HAS EXPLAINED THE ABOVE TO ME and I consent to the procedure.

DATE: _____

I have discussed the likelihood of major risks or complications of this procedure (if applicable) but not limited to infection...

Appendix 2

Appendix 2: Examples and Questions

From a health history form

What is wrong here? [Stilted language, complex vocabulary]

I understand that fees are due and payable on the date that services are rendered and agree to pay all such charges incurred in full immediately upon presentation of the appropriate statement.

Health History Form For appropriate treatment of our child, please
provide the information, we will contact you.

PATIENT NAME Last First Middle Initial BIRTH DATE / /

PATIENT ADDRESS Street Apt. SEC. M OR F Weight

City State ZIP CODE SOC. SEC. #

PATIENT TELEPHONE NUMBER () AREA ADDRESS

PATIENT EMPLOYER DISABLED UNEMPLOYED RETIRED STUDENT

EMPLOYER PHONE () OCCUPATION

Married to a widow? Mother's Name Father's Name

EMERGENCY CONTACT

NAME PHONE ()

RELATIONSHIP TO PATIENT

GUARANTOR INFORMATION (Person who is responsible for payment)

GUARANTOR NAME Last First Middle Initial BIRTH DATE / /

Patent Relationship to Guarantor: SELF SPOUSE CHILD OTHER UNEMPLOYED

GUARANTOR ADDRESS Street Apt. SEC. SEC. #

City State Zip Code SEX: M OR F

GUARANTOR TELEPHONE NUMBER ()

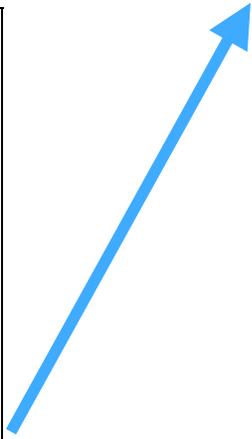
GUARANTOR EMPLOYER DISABLED UNEMPLOYED RETIRED STUDENT

EMPLOYER PHONE () OCCUPATION

Do you have Medicaid? Yes No

All professional services rendered are charged to the patient and are due at the time of service, unless other arrangements have been made in advance with the financial counselor. I understand that fees are due and payable on the date that services are rendered and agree to pay all such charges incurred in full immediately upon presentation of the appropriate statement.

Date Guarantor Signature



Appendix 2

Appendix 2: Examples and Questions

From a food label

Evaluate the following chart

- What is the PMOSE/IKIRSCH score?
- If your doctor put you on a salt free diet, would you buy this?
- What is the problem with this material?

Chili with Beans	
Nutrition Facts	
Serving Size: 1 cup (253 g) Servings per container: 2	
Amount per Serving:	
Calories 260	Calories from Fat 72
	% Daily Value
Total Fat 8g	13%
Saturated Fat 3g	17%
Cholesterol 130mg	44%
Sodium 1010mg	42%
Total Carbohydrate 22g	7%
Dietary Fiber 9g	36%
Sugars 4g	
Protein 25g	

Appendix 3

Appendix 3: Additional Resources

A Sample of Additional Resources

Benbow, A. 2001. Developing effective health communication pieces for an older adult audience. SPRY Foundation.

Centers for Disease Control and Prevention. 2007. Simply put: A guide for creating easy-to-read print materials that your audience will be able to read and use.

Centers for Disease Control and Prevention. 2007. Plain Language Thesaurus for Health Communications.

National Institutes of Health. 1994. Clear & simple: Developing effective print materials for low-literate readers. U.S. Department of Health and Human Services.

SPRY Foundation. 2002. Evaluating health information on the World Wide Web: A guide for older adults and caregivers.

Health Literacy Studies
www.hsph.harvard.edu/healthliteracy