How to Evaluate Educational Reading Material

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Information is like medication. It can increase the effectiveness of most treatments, if it is appropriate to the condition and the patient, and if it does not conflict with something else the patient already is taking. Information you dispense must be compatible with your organizational philosophy and style, risk management practices, and budget. Giving your patient/client materials that she will not read or cannot understand amounts to an expensive gesture. Consider first the factors that determine the reader's ability to learn and incorporate new knowledge and behaviors into everyday living:

Appearance

Before medicine or information can have any effect, the patient/client has to focus attention on the pill or page. She has to hold it in her hand and decide to "swallow" it. Good design is the spoonful of sugar that makes the medicine go down; so consider appearance first.

Design is the organization of color, type and graphics on the page - the appearance of the materials. Every printed page has a design, by intention or by default. The first function of design is to capture and focus the intended reader's attention. Take a cue from the venerable "Gray Lady." The New York Times now uses color graphics to keep readers' eyes from straying to more attractive papers. Only one major US daily, the Wall Street Journal, remains exclusively two-tone.

In addition, before a word is read, the appearance of printed materials visually conveys strong messages. The appearance of your educational materials tells patients how important you think the information is, and whether they should take time to study it. Pages of type run off on the office printer and copier say loudly, "This does not warrant an investment of attention or time."

Another reason to invest in well designed materials is that the materials represent you and your organization. They speak for you, and they speak about you, accurately or not. Look for materials that reflect the quality of your care and service. If you want patients to refer friends and family, select materials that let you imprint your name, address, phone number, and the facts you most want patients to remember and repeat about you.

Page through the materials whose covers compel you to pick them up. Look for effective use of color and type. Again the newspaper can be your guide. Color on the front page moves you to pick up the paper, and may attract your eye to certain sections. On interior pages, bold type leads you to headlines and main ideas. Boxes and graphics show you essential information.
How to Evaluate Educational Reading Material

Once you have narrowed your choices to well designed materials that accurately reflect the importance of the information and the quality of your care and service, consider whether patients can easily read and understand the information.

Appearance Checklist

- Design attracts the eye, captures the interest, moves the hand to pick up the material.
- Type and graphics guide the attention and aid learning.
- Easy, reliable documentation is designed into the materials.

Reading Level

Reading level is typically expressed as the grade of education a reader needs to understand the information. Most Americans read at a sixth to eighth grade level. In any given population, there will be a mix of reading ability. Even for sophisticated populations, materials designed to educate readers about health conditions and medical care need to be easy-to-read.

One reason to select a reading level below most clients' potential ability is that understanding decreases when the topic or the terms are unfamiliar. That includes the most basic medical subjects. Reading level decreases further with high anxiety and low interest. Doctor visits are stressful by definition, and health information rarely scintillates.

Also, a high reading level (say, over grade 12) does not indicate the writing is appropriate for college-educated readers. Rather, it indicates the writing is complex and hard to read. Simple sentence structure and common words make understanding easier for any reader. Better readers can easily "read down," while poorer readers will have difficulty "reading up." Information presented at a fourth grade reading level will be useful for a broad range of patients.

Measuring Readability

Numerous formulas measure reading level. All readability formulas are based on the average number of syllables per word and words per sentence. They are most easily and accurately applied using computer software. Three formulas useful in rating health education materials are the Fog index used mainly in education, the Flesch Reading Ease scale, designed for adult materials and used in the insurance industry to check the readability of policies, and the Flesch-Kincaid formula used to check manuals produced for the US armed services.

Reading Level Checklist

- Reading level tests lower than the ability of most readers.
How to Evaluate Educational Reading Material

- Reading level is consistent throughout the material.
- Language is simple, direct, conversational
- Words, sentences and paragraphs are short

Comprehension
To improve understanding and increase compliance, look for common language that builds on what a patient/client already knows, and sounds like something you might say sitting face-to-face with her. Compare the following sentences:

1. Miscarriage is the involuntary expulsion of the fetus before the 20th week of pregnancy.
2. Miscarriage means that pregnancy ends before the fetus develops enough to survive on its own.

The sentences have the same number of words and syllables, and therefore, the same reading level. But sentence #2 is less technical, more conversational, easier to understand, and so more informative.

Cultural factors and personal feelings toward content influence acceptance of information, too. Content that ignores or runs counter to the reader’s experience and culturally held beliefs invites disregard. For example, a friend of mine wants to know when health information materials will stop showing all black people with hair like broccoli.

Compare these two statements about exercise during pregnancy and note your personal feelings as you read them:

1. Participate carefully, if at all, in sports that risk bodily injury or require balance. Apart from the risk to the baby, imagine going through pregnancy and delivery in a cast!
2. Usually, you can continue with sports or activities that you are good at and enjoy regularly. Being fit will make it easier to adjust to your increasing weight and changing balance.

Statement #1 plays on fear and induces anxiety. It presents the woman as incompetent and threatens her with increased helplessness and discomfort if she exercises wrong. Statement #2 enhances feelings of control. It presents the woman as capable and affirms her ability to affect a positive outcome.

Like medicine, information is more effective when administered in absorbable doses. Adults learn more readily, and remember longer when information is immediately applicable and brief. Easy reading and learning require clear, concise writing free of unnecessary qualifiers, uncommon words, and complex sentence structure.
How to Evaluate Educational Reading Material

For a quick test, read aloud a few paragraphs from various sections of the material you are considering. If you run out of breath between periods, or the words tangle your tongue, continue your search for effective materials.

Comprehension Checklist

- Tone is conversational
- Information starts with what the reader already knows.
- Advice and examples fit the readers' experience and cultural beliefs.
- Focus is on behavior, not facts.
- Content builds the reader’s confidence and enhances feelings of control.
- Writing is consistently strong, clear, and concise.

Accuracy

No review would be complete without an assessment of scientific accuracy. Consider the authors’ and reviewers' reliability. Be alert to the distributor’s purposes, and to assumed or directly stated values in the materials.

Finally, read the full text with a sharp eye on the facts and recommended actions.

Accuracy Checklist

- Information is scientifically accurate and medically reliable.
- Information complies with national guidelines
- Information is up to date, not more than 3 years old

Summary

Take this advice from journalist Joseph Pulitzer:

*Give it to the briefly so they will read it, clearly so they will appreciate, picturesquely so they will remember it, and above all, accurately so they will be guided by its light.*