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### (3) Ensuring the Effectiveness and Quality of Learning Materials: How to Use and Evaluate Literacy/ CE Materials

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#### 1. What is Quality?

**What does a Quality Material Look Like?  
How do I Know that What I've Got is Quality  
Material?**

Quality is a characteristic defined by the user. In the case of a learning material, it is defined by the learner who uses the material to learn new facts, new skills, new attitudes or new behaviors.

A learner at the basic level has a different set of requirements from the neo-literate learner, just as a learner from one age group or locality may have another set of requirements. There are common characteristics of learners in literacy classes but there are also unique characteristics that a material developer should consider.

To be considered of quality, a learning material must fulfill at least four requirements. First and foremost, a learning material must be able to achieve its instructional objectives. It must be able to do what it is intended to do. It must be effective.

Secondly, a learning material must be able to attract learners and sustain their interest. It must be presentable. Its approach should be user-friendly. It must contain creative ways of teaching and evaluating learning performance to avoid boredom. It must engage the learner's prior knowledge, experience and current thinking. It must involve the learner's participation.

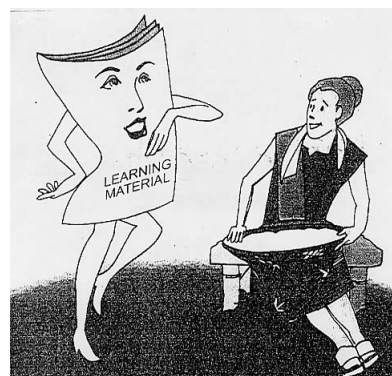
Thirdly, a learning material must be reliable. It must be error-free because it is a crime to teach an inaccuracy. Information must be accurate and up-to-date. Lastly, the cost of producing it must be reasonable.

#### 2. What's in It for Me to Have Quality Materials? What's in It for Learners?

There are a number of reasons for subscribing to quality. A major reason is that quality is the expected. Government expects it, funding agencies expect it, learners expect it. As a matter of fact all our stakeholders expect it.

Anyone at all involved in the development and use of learning materials should therefore be committed to quality at every step of the material development process.

If the materials being used are quality materials, learning is more or less assured. You, as material developer, would have the satisfaction of providing a material that works. Learners would be delighted at using a material that is highly acceptable to them. They will enjoy what they are doing; consequently, learning is facilitated. The overall literacy or continuing education program is enhanced.



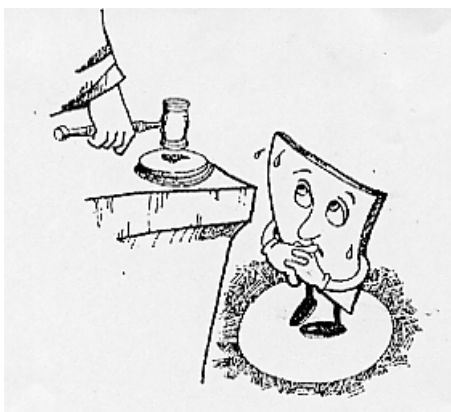
### 3. Is This the Reason for Evaluating Learning Materials?

Yes. There are many good reasons why you should evaluate the learning material you have developed. First, you owe it to the users of your material to provide them with a quality product. Secondly, you owe it to your funding agency to utilize their money most wisely, especially if costs were extensive. Thirdly, you owe it to the general public to provide them with a validated material, especially if it is going to be used in one or more sites.

We evaluate an educational material mainly to gather information about it. The material might be a leaflet, booklet, study guide, handbook, poster, module, audiotape, videotape or some other kind of instructional or learning material for literacy or continuing education.

We evaluate to be able to make intelligent decisions about the material. What is its quality?

- (1) Is it ready for adoption in its entirety?
- (2) Does it need some form of adaptation?
- (3) Does it need further improvement?
- (4) Or is it better terminated... thrown away, relegated to the trash can?



### 4. What do I Evaluate?

For our purposes, we focus on the literacy or continuing education material used either for teaching or learning. We evaluate in order to measure and predict its success. In this regard, the question to which we would be interested in having some answers is the following:

Who learns what under which conditions and in how much time?

- (1) WHO is the target user of the literacy material?

Identify the target user population. Test your material on a representative sample. If a literacy material is targeted for a certain literacy group, it should be effective for that group. Go easy on generalizing its effectiveness with other age or ability groups. It does not automatically

follow that what works with one group type works with another group type.

- (2) WHAT does the literacy material teach?

Check the aims and purposes for which the material was prepared. The instructional objectives will tell you what it is supposed to teach. Measure to what extent learners achieve the objectives. If there is a pretest and a post test, a comparison of scores can indicate the amount of learning obtained; so can written exercises or any performance tasks the learner is able to do.

Additionally, you can ask: Are the learners' needs met?; What are their reactions to the material?; Did they find it stimulating?

You can ask verbally a few learners for their opinions or you may use a form which can be easily scored, analyzed and interpreted.

- (3) UNDER WHICH CONDITIONS does the literacy material function best?

Find out how the literacy material should be administered. Is it designed to be taught by a literacy teacher or facilitator? Will learning take place at home or at the Literacy Center? Will the learner use the material by himself or with others? Does the material require equipment or adjunct materials? These are some questions that should be posed.

- (4) HOW LONG will it take a learner to successfully complete the learning material?

Approximately how much time is needed to learn the material? The time estimate is very important especially since most learners are working to earn a living. Scheduling becomes very crucial.

## 5. When do I Evaluate?

The answer to this question certainly takes into consideration the purpose or intent of the evaluation. If the purpose is to influence decision, the evaluation information should come at the time it is needed. You evaluate at every stage of the material development process.

Evaluation is a built-in or integral part of any educational development project. At every stage of the way, there pops up the need to evaluate a certain component. Below is an example of what you might evaluate when:

### A. *Planning Stage*

Formulating goals and objectives.

Do the instructional objectives meet the needs and concerns of the learners?

### B. *Developmental Stage*

Writing the trial materials, formulating the model intended to address learners' needs and concerns.

How is the quality of the materials in terms of the following:

- Logical sequences,
- Comprehensiveness,
- Relevance to user's experience,
- Relevance to real life situation,
- Language appropriateness,
- etc.

### C. *Tryout Stage*

Validating the materials with representative samples before implementation with the target population.

Formative Evaluation:

- Can the users follow all tasks and activities as planned?
- What is the result of the performance?  
Is it as was expected?
- Is there anything of difficulty which needs modification?

Summative Evaluation:

- Can it produce the kind of changes called for by the objectives?
- Should the material be implemented or terminated?
- Is there anything that should be revised?



### *Formative and Summative Evaluation*

When we talk about evaluation, invariably two kinds come up. We refer to formative and summative evaluation. Both kinds lead to scientific or research-based validated products such as learning materials.

By formative evaluation is meant evaluation undertaken during the developmental stage of the learning material. The result of the evaluation tells the author/developer where and how to make necessary changes. In contrast, summative evaluation is evaluation that provides information necessary to make a decision at the end, whether to disseminate, redevelop, modify, adopt or adapt, or do away with the learning material.

At the interim stage of material development, there is a way by which the learning material being developed

could be checked right away for fitness. This has alternately been called developmental testing, individual student tryout, and oral problem solving.

During this stage, the author or developer goes through the material with one or more learners. The learners are told to think aloud as they work through the materials. By observing the learners' reactions and eliciting direct feedback on the material, the author/developer is able to note any ambiguities, errors of sequence, and the like.

Formative evaluation is usually undertaken during the formative stages of development, that is, when the prototype product or learning material is being developed, tried out and field-tested.

## 6. How do I Evaluate or Check for Quality?

A simplified way of evaluating a learning material utilizes two major steps, as follows. A third and a fourth step can be added for materials that are intended for use in many different sites:

(1) Step 1: Expert Appraisal or Judgment by Peers (This step aims to elicit expert opinion that will guide you with what to do with respect to the material.)

- a. Prepare a rating scale for the evaluation of the qualities of the learning material

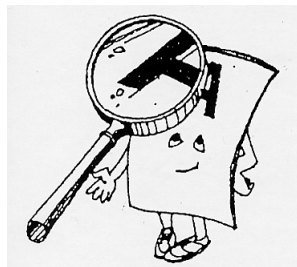
An inventory such as the one shown at the end of this chapter should be developed for the use of your peers or colleagues who will conduct the expert appraisal of the learning material. The rating scale helps to assess the experts' views on specified qualities of the learning material. Not all characteristics or elements of a component may appear in one learning material. Include only those quality factors particularly relevant to the material.

You may use this 4-point rating scale as follows:

3	=	VS	(Very Satisfactory)
2	=	S	(Satisfactory)
	=	U	(Unsatisfactory)
0	=	VU	(Very Unsatisfactory)

In addition to accomplishing the scale, ask the experts to do the following:

- 1) List three strong points of the learning material.
- 2) List three major points needing improvement.
- 3) Give any general remarks you consider to be appropriate.



- b. Ask three or more of your colleagues or peers who you deem experts at material development to read through the draft and give general comments

Give each one a copy of the material to facilitate time and to make sure of independent judgments. Ask your "judges" to actually go

through the material as though they were learners themselves, following all instructions, undertaking all activities, answering all questions, and completing the post test.

Ask them to provide feedback on the relevance of the material; suitability of the objectives; language appropriateness; level of difficulty; accuracy of content and information; up-to-datedness; suitability of methodologies in relation to experience and maturation levels of learners; and likely overall effectiveness.

- c. Request your peers to write marginal notes and provide qualitative comments on the material itself

The intention is to get as much valuable comments and suggestions for improvement as possible, not only on the text but also on the illustrations. Your peers should go page by page and make notations; editorial comments on style and wording; suggestions for alternative activities or exercises; suggestions for improving instructions, visuals, questions and test items, etc.

- d. Transfer all notations, comments, and suggestions on a master copy of the draft

Write down on the appropriate pages all notations, comments and suggestions given by the experts. For easy reference, using color coding or some other identification mark to refer to the source. Be sure to have all their suggestions recorded.

- e. Analyze the qualitative comments

Where two or more experts agree on certain suggested changes, it is highly likely that there is indeed a need for the change. Go to the end of the inventory scale. Do not forget about the qualitative comments you have asked. The answers to those open-ended questions provide supplementary information and pinpoint to you where exactly revision needs to be done.

It is important for you to remember that not everything that may have been suggested is for you to follow. The author/developer is the final judge of the modifications, considering his/her professionalism, expertise and experience as a writer, and his/her knowledge of the project or program where the material is going to be used. As a rule, if in doubt, ask for clarifications.

f. Analyze the quantitative data

Tally the responses on each quality statement. The total frequencies per column (degree of satisfaction on the 4-point scale) indicate how the raters feel about the material. There is no need to compute for central tendencies. An ocular inspection of your summary will tell you about their ratings.

g. Interpret the data

All items given low ratings by majority of the raters are noted as potential problem areas and must be carefully considered. Those with very unsatisfactory ratings get double attention. These kinds of data tell the author or developer exactly where to look at and how to revise it.

h. Revise accordingly

The author/developer now makes modifications on the original according to the feedback provided by experts or by peers.

(2) STEP 2: Small Group Tryout or Preliminary Field Test (This step tests how learners are able to use the material as intended and elicits reactions regarding their use.)

a. Prepare the second draft for trial use by a group of 5 to 15 learners coming from one site

The chosen learners and site should be representative of the target users and locality. Be sure to provide each learner with a copy of the material. The evaluator(s) should also have a copy each where to write observations.

b. Make the learners go through a learning session and observe their behaviors

Watch out for indicators of difficulties, such as: long pauses, troubled faces, frowns, confused look, constant flipping of pages, blank staring on a page, overt mistakes, reading over and over again, dwelling too much time on an item, and so on and so forth.

Take note where specifically these difficulties appear. Look at their written responses. Where are they having problems? Look into these portions of the material again and decide how best to correct the deficiencies.

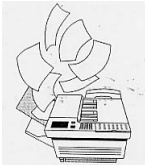

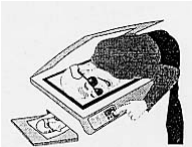
You can simplify and translate your rating scale such that you can elicit feedback from the users. Analyze their responses and note where revisions might be indicated.

c. Make the necessary corrections on the second draft

The revisions may be minor and, therefore, the clean draft may be finalized. If the material requires major surgery, this third draft should again be subjected to another tryout by a small group.

There are bigger steps to follow in the validation of learning materials for wider use. These are the main field test that usually requires a control group, and the operational field test, which is optional. They may be skipped for materials at the village level.

**WHAT THEN DO WE MEAN BY QUALITY?**  
*In everyday life, when we buy a PRODUCT, we ask ourselves:*

<p>1) <b>Does it do its job well?</b> <b>(Effectiveness)</b></p>		<p>(3) <b>Is it trouble free?</b> <b>(Reliability)</b></p>	
<p>2) <b>Does it look good?</b> <b>(Presentation)</b></p>		<p>(4) <b>Is it reasonably priced?</b> <b>(Cost)</b></p>	