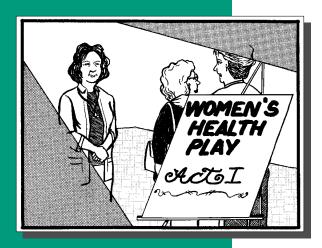


A Guidebook



Beyond the Brochure:

Alternative Approaches to Effective Health Communication





prepared by

AMC Cancer Research Center 1600 Pierce Street Denver, Colorado 80214

in cooperation with & supported by Centers for Disease Control and Prevention

Beyond the Brochure

Alternative Approaches to Effective Health Communication

1994

prepared by:

AMC Cancer Research Center 1600 Pierce Street Denver, Colorado 80214

in cooperation with & supported by

Centers for Disease Control and Prevention Cooperative Agreement #U50\CCU806186-04

-

Contents

Acknowledgements		
About This Guidebook	1	
Section 1 - Getting to Know the Audience, and Vice Versa		
Ways of Learning about the Audience	5	
Literature Reviews		
Observations	6	
Informal Conversations	7	
Surveys	7	
In-depth Interviews	7	
Focus Groups		
Section 2 - Involving the Audience	11	
Who Should be Involved		
Involving the Community in Materials		
Adaptation and Development		
Section 3 - Adapting Existing Materials		
Text, Narrative, Captions		
Visuals		
Format		
Pretesting Adapted Material		
Section 4 - Developing Original Materials		
Sizing Up Program Resources		
General Guidelines		
Visual Materials		
Posters, Flip Charts, Talk Boards		
Real Objects and Models		
Display Boards		
Fotonovelas	33	
Action-Oriented Exercises	34	
Role-Play		
Theater	37	
Songs		
Storytelling		
Games	40	



Audiovisual Materials	
Videotapes	
Slide-tape Programs	
Interactive Multimedia Programs	
Audio Materials	
Audiotapes	
Radio Docudrama	
Section 5 - Pretesting Materials	
Why and When to Pretest	
How to Pretest	
Pretesting Methods in the Development Process	
Sample Size and Design Considerations	52
Basic Guidelines for Questionnaire/Discussion	
Guide Development	
Summary	
References	
Nonprint Health Education Resources	
Visual Materials	
Action-Oriented Materials	
Audiovisual Materials	
Interviewees	
Additional Resources	
Comment Form	

Research for this guidebook was conducted by Kimberly Riley, MPH and Mischelle Stricker. Sections were written by Cathy A. Coyne, MPH; Holly Halvorson, MPH; Kimberly Riley, MPH; and Laurie Schneider, MPH.

For their manuscript reviews and comments, the authors thank Pamela Brown, MPA; Linda Burhansstipanov, DrPH; John Burklow, MPH; JoAnn Dickson-Smith, MPH; Jill Elnicki, MPH; Marcia Griffith, MPH; Arnold Levinson, MJ; Wendy Mettger, MA; Randy Schwartz, MSPH; Martha Tenney, MPH; and the staff from Divison of Cancer Prevention & Control at the Centers for Disease Control & Prevention.

Content layout and cover design for this guidebook are by The Day Design Group. Illustrations were drawn by Christopher Smith.

A special note of appreciation is extended to the health educators, health providers and literacy professionals who shared with us their insights into health education materials development. The information that they provided is not found in textbooks nor journal articles. We appreciate their candor in relating to us their challenges as well as their achievements. We wish them continued success in their efforts to effectively communicate health information to individuals and communities who for too long have been underserved by efforts in health communication. One message that we heard over and over again from these experts is that we must listen to and work with our communities. Health communication must be a two way dialogue. A list of organizations contacted for information can be found in the back of this guidebook.

This research was conducted by the AMC Cancer Research Center under Cooperative Agreement No. U50/CCU806186-04 with the Centers for Disease Control and Prevention. Most of us obtain health information through many different sources, including printed media such as newspapers, magazines, books and brochures. But for at least 90 million Americans who demonstrate low levels of literacy (Educational Testing Service, 1993), or for individuals who have learned to rely upon oral forms of communication, written information sources are of little or no use.

For such audiences, health educators and communicators need alternative approaches with appropriate visuals and activities that stimulate learning, are interesting and fun, and motivate the intended audience to experience new behaviors.

The AMC Cancer Research Center, with collaboration and support of the Centers for Disease Control and Prevention (CDC), Division of Cancer Prevention and Control, has developed **Beyond the Brochure** to assist health educators and health communicators in conceiving and producing educational materials and activities that do not rely solely on the printed word. The intent is to present innovative intervention ideas and strategies that can be used to reach audiences who are not benefitting from current health communication efforts.

The guidebook addresses issues that commonly arise when public health programs seek to reach low-literate and oral-culture populations. Two central questions, whether and how to adapt existing materials or create new ones, are discussed in detail in sections 3 and 4. Two other vital matters that precede these central decisions — getting to know the audience, and involving audience members in every facet of program planning — are discussed in sections 1 and 2, respectively. The final section provides some guidance for pretesting newly adapted or created materials.

This is not a definitive "how to" manual, but rather a vehicle to increase awareness of alternatives to print materials that health educators and program planners can use for chronic disease prevention and control. Resources that offer more extensive information on materials development are listed in the Nonprint Health Education Resources and Bibliography sections of this guidebook.

In developing **Beyond the Brochure**, the authors found few books and articles that address the development and use of non-print media. The guidebook's recommendations are thus based primarily on discussions with health providers, health educators and literacy professionals from the United States and Canada who have developed non-print health education materials.

- 2

Section 1 - Getting to Know the Audience, and Vice Versa

Characteristics of Low-literate Audiences

- Tendency not to seek information from printed materials.
- Literal interpretation of information.
- Insufficient language fluency to comprehend and apply information from written materials.
- Difficulty with information processing, such as reading a menu, interpreting a bus schedule, following medical instructions, or reading a prescription label.
- Tendency to think in concrete/immediate rather than abstract/future terms.

The National Cancer Institute, 1994.

Characteristics of Oral Cultures

- The spoken word is the medium of communication.
- Real-life situations provide frames of reference for classifying information.
- Information is mnemonically formulated.
- Information is stored primarily in memory, rather than the written word.
- The individual identifies with traditional wisdom.
- Thoughts and expressions are simple and concrete.

Maxwell, 1983.

As health educators and communicators, we routinely use materials in our program activities, and some fundamental things about them are obvious. Every brochure, poster, videotape or other piece of material represents a decision to deal with a specific health concern, and each piece is crafted - from theme and language to illustration and design to be well-received and persuasive among a specific audience.

These obvious underpinnings - selecting the health problem and reaching the audience - become more challenging when low literacy or oral cultures are involved for the same reasons English-only speakers would stare, uncomprehending, at a Tokyo subway schedule - the messenger and audience do not share common language and culture.

With low-literate and oralculture audiences, then, effective program planning starts by developing a mutual acquaintance with the audience - by working with audience members to determine the community's health needs and identify appropriate messages, methods, and channels for communicating health information.



A program's success depends largely on this partnership between the audience and program planner. Working with audience members from the beginning and throughout the development of health education strategies and materials helps ensure that a program meets the needs of the intended community and is culturally sensitive and appropriate. Getting to know the audience helps determine:

- what to include as program content;
- how to make the content culturally appropriate;
- what strategies might be useful in implementing the program.

Gonzalez, et al., 1991

Here are some things to look for when getting to know a low-literate or oral-culture audience:

- Cultural health beliefs specific to the problem being addressed.
- **Treatments, remedies** or other ways the audience deals with the health issue. Are there treatments, remedies and local mores that differ from the health messages the professionals want to provide?
- **Environmental circumstances** (i.e. social and home environments) that may influence health-related behaviors and beliefs.
- **Potential barriers** to personal involvement in the program (e.g., cost, transportation, child-care, issues related to privacy, other obligations).
- Perceived benefits of particular health behaviors.

- 4 -

- **Preferred learning styles** (i.e. traditional vs. nontraditional, written vs. oral, visual, action-oriented, or audiovisual).
- **Community impressions of similar programs** (i.e. why they succeeded or failed, their motives, their inclusion of community members during development).
- **Opinion leaders and organizational gatekeepers** who are they and how are they reached?

Ways of Learning about the Audience

The needs assessment is the starting point for laying the groundwork for program planning and evaluation. Our determination of program effectiveness is only meaningful and useful if we have first accurately assessed needs. Green and Lewis, 1986 Several methods help reveal the lifestyles, health status, and other characteristics of an audience. These methods include literature reviews, observations, informal conversations, surveys (oral and written), indepth interviews, focus groups, or a combination of these methods. Not every method is appropriate for every audience; for example, oral but not written surveys may be appropriate for persons with limited literacy skills, while focus groups may not be appropriate in particular cultures that traditionally do not share personal opinions/feelings in a small group setting.

Literature reviews are often the initial fact-finding step. Community observations, informal conversations and surveys are usually conducted next and may provide background information needed to develop questions for in-depth interviews or focus groups.

The choice of individuals to be interviewed or included in research depends greatly on the type of information needed. Are you looking for general information about the community, or specific and detailed information? Will information from community leaders (i.e. gatekeepers, ministers, politicians, program directors) be enough, or do you need information from other community members (i.e. teachers, doctors, nurses, other professionals, block club presidents, block club members, patients, men, women, moms, dads, grandmothers, grandfathers, children of the intended audience)? Each type of source may provide a different kind of information.

Each research method is described briefly below.

Literature Reviews

Literature reviews are a good way to "do your homework" before going into the community. They are only a first step, though, and should not be an isolated method of learning about the community. In searching the literature on the intended audience, some topics to consider include:

• **Community demographics**, including age, sex, income, education, employment, cultural, ethnic, religious and other variables.

- **Social demographics**, including social and medical services available (or lacking).
- Lifestyles, health beliefs and health behaviors of the audience.

The types of literature to review include:

Medical and public health references, such as epidemiological and health intervention articles about the health problem(s) to be addressed.

Behavioral and social science literature, especially culturally specific information.

Additional sources of information which may bring your broad national understanding to a more locally-defined level include:

- local newspapers, magazines, newsletters;
- posted materials describing local interests and events;
- census data;
- maps;
- government documents, reports and statistics;

- 6 -

- marketing data, survey data (national and local);
- personal interviews or meetings with community leaders.

Observations

Community gathering places, businesses, worksites, and clinics are good places to begin to discover how audience members live dayto-day and good places to let audience members get to know you. When conducting observations, here are some guidelines the experts use: Visit the community at different times of day and night and on weekdays and weekends. Visit social gatherings, religious ceremonies, and other events. Always explain who you are and why you are there. Observe how people interact: children with adults, men with women, community members with health professionals. Record the observations and discuss them with a variety of community members.

Informal Conversations

Informal conversations are an unstructured way for health professionals and audience members to get acquainted, and provide valuable insight into the nuances of a community. Discuss what goes on in the community on a daily basis and other issues that may be relevant to the project. Explain what you are doing and let conversations run their natural course. As in any relationship, trust takes time, and people may need to interact with you several times before feeling comfortable talking with you. Listen to what people have to say, paying careful attention to key comments or anecdotes. Wait to record observations until after leaving the community - use a dictaphone on the way home or write down observations as soon as possible afterward.

Surveys

Surveys may include questions on community demographics as well as specific health issues. Written surveys may include pictures or may be read to respondents. Survey community members, community service agency representatives and local professionals, and/or others who may provide information about the audience. Remember to make the survey appropriate for the respondents (i.e. culturally appropriate, at the appropriate reading level).

In-depth Interviews

- 7 -

In-depth interviews provide detailed information about the community from its members. This form of qualitative research is characterized by extensive probing and open-ended questions, and is conducted one-on-one between a community member or respondent and a trained interviewer. Often, community members are trained to conduct the interviews, since other members of the community may be more likely to answer probing questions from someone they know or can "relate to" than from an "outsider." As the name implies, in-depth interviews are lengthy and detailed. From your informal conversations with community members, identify key people to interview who know about or have extensive experience in the primary issues of concern. Also interview public health and other professionals who have worked in the community.

Focus Groups

Like in-depth interviews, focus groups are characterized by extensive probing and open-ended questions. Unlike in-depth interviews, though, they rely on group interaction. Focus groups are the most widely used form of qualitative research. A skilled moderator guides a group of community members through increasingly focused issues related to the research topics (i.e. health beliefs and behaviors, barriers to health care, cultural influences, or review of health-related materials). The issues discussed in the focus groups may have been gleaned from in-depth interviews. Group interaction and a skilled and "sensitive" moderator are integral parts of focus groups.

- 8

Which Method is More Appropriate? Focus Groups or In-Depth Interviews			
Issues to consider	Use Focus Groups When	Use In-Depth Interviews When	
Group Interaction	interaction of respondents may provide more informa- tion or new and valuable thoughts.	group interaction would not be helpful.	
Group/Peer Pressure	group/peer pressure will be helpful in challenging the thinking of the respondents and will make conflicting viewpoints more apparent.	group/peer pressure would inhibit responses.	
Sensitivity of Subject Matter	respondents feel comfortable discussing the subject matter openly in a group without holding back or being cautious.	respondents would feel uncomfortable discussing subject matter in a group.	
Depth of Individual Responses	the topic requires brief (5-10 minute) responses from respondents.	the topic requires in-depth responses from individuals (as with complex subject matter or when interviewing respon- dents who are knowledgeable about the subject matter).	
Continuity of Responses	one or two subject areas are being examined in-depth and when it is not important to know how a series of behaviors are linked together.	it is important to know how a series of attitudes or behaviors link together.	
Logistics	respondents can be assembled in one location.	respondents cannot be assem- bled in one location (due to geographic distribution or for other reasons).	

Adapted from: Debus (1986).

-10-_

To be successful in community work we need a good sense of history, humility, and a deep respect for the people with whom we work.

Freire, 1988

Who knows an audience better than its members?

Health educators sometimes develop strategies and materials without involving members of the intended audience in the process. The most frequently cited reason is that involving the community "takes too much time". Involving others in the decision-making process may be more time consuming, but a program's success depends on it. Including community members in all phases of planning helps ensure the program's acceptance, relevance, and effectiveness.

Community members can make valuable contributions in the development of all components of the health education program, not just in the adaptation and development of materials. Members of the intended audience can be involved in:

- conducting the needs assessment;
- choosing appropriate strategies to reach the intended audience;
- developing the health messages;
- identifying appropriate delivery channels (e.g., face-to-face, group, organizational, community and mass media);
- identifying appropriate information sources (credible persons to deliver the information);
- identifying appropriate materials to use;
- adapting or developing materials;

- 11)-

• evaluating the program.

Who Should Be Involved?

Determining who to involve and how to involve them are important decisions that need to be made before the planning begins. One way to involve community members in the program is to convene a program Advisory Group made up of selected community members. This group can provide guidance on every aspect of the program. Select the Advisory Group members carefully. They should be knowledgeable about community lifestyles, attitudes, health status, and resources. Select individuals who are well respected in the community and are able to provide expertise in various areas (e.g., health educators, ministers, teachers, community organizers, and patients or clients who may be involved in the program).

There are many other opportunities for community members to be involved in a program besides serving on an Advisory Group. Select individuals who will provide relevant input to the program and who represent the program's intended audience. Other criteria for representation include, but are not limited to:

- income level
- educational level
- age
- marital status
- culture/ethnicity
- gender
- health behaviors
- access to health care
- personal experience with program topic

- 12 -

• personal experience with intended audience

Involving the Community in Materials Adaptation and Development

Once the needs assessment has been conducted and the Advisory Group and members of the intended audience have assisted in program planning, it is time to decide whether or not to adopt or adapt existing materials or to develop new materials. Including community members in this phase of the program development will help to ensure that the materials are not only appropriate and relevant for, but used by, the intended audience.

Materials Adaptation

After existing health education materials have been collected from both local and national resources, members of the Advisory Group and the intended audience should be involved in reviewing and pretesting the materials to decide if they are appropriate for use. Community members can be helpful in reviewing all aspects of health education materials, including the text, narrative, captions, visuals and format. Section 3 of this guidebook discusses in detail when and how to adapt existing materials.

Developing Original Materials

- 13 -

There are many roles for Advisory Group and other community members to play when developing original health education materials, from concept development through materials development and pretesting. After the materials have been developed, audience members should be involved in reviewing and pretesting the content of the material. Section 4 of this guidebook discusses materials development in greater detail.



Public health initiatives generate massive quantities and types of materials. Many of us have accumulated stockpiles, and most of us can readily tap someone else's cache by picking up the telephone.

Most new program initiatives thus begin with vows to "not reinvent the wheel"



and to use or adapt existing materials - only to conclude along the way that nothing in existence will quite do, for any number of reasons. To colleagues outside the program, some of these reasons seem quite sound, but usually it is unclear why a new material was needed.

In fact, though, few materials have been designed for low-literate or oral-culture audiences, and the truth may be that nothing available is quite right for a specific audience and locale in this category. Decisionmaking then turns to adapting an existing piece of material vs. starting from scratch.

Adaptation generally requires less time and resources than starting from the beginning. Often, a piece of the material contains some useful information but is not written at an appropriate reading level or contains too many concepts. Or it may contain suitable visuals or graphics, or a unique approach to presentation, without the appropriate message. The hard work that went into developing such materials can be enhanced by adapting them to meet the needs of a new audience.

- 15

When considering adaptation of all or parts of a piece of educational material, the following questions may be useful:

- Do the concepts and messages help meet the program's learning objectives?
- Does the material fit the audience's learning style (i.e. oral, written, visual, audiovisual)?
- Is the content limited to a few concepts that help identify the key messages?
- Are concepts presented simply in an organized manner?
- Are appropriate culturally-specific values and beliefs represented in the messages?
- Are visuals, photographs, and images culturally relevant?
- Do visuals, photographs and images correspond with the message in a way that is clear to the audience?
- Is text written or narrated at an appropriate reading/comprehension level?

As always, members of the intended audience can help answer these questions and ensure that materials and strategies will work. Audience members already working with the program can provide input; broader input from the intended audience should also be obtained via methods discussed in Section 5, "Pretesting Materials."

When incorporating text or visuals from copyrighted material, permission must be obtained from the original authors or artists. A small fee may be required, but many artists and authors will grant permission to non-profit organizations free of charge if they receive appropriate credit. Be sure to obtain permission in writing!

Government documents and materials are in the public domain and have no copyright.

- 16>

Here are some ways to involve audience members in the process of adapting materials:

• Ask Advisory Group members the most appropriate ways to review and pretest materials in their community (e.g., group vs. individual interviews).

• Ask Advisory Group members how and where to reach members of the intended audience.

• Involve Advisory Group members in developing the questionnaires or discussion guides to be used in review or pretesting.

• Recruit members of the intended audience to review existing materials and pretest adapted materials.

Materials and activities generally include three components:

Text, Narrative, Captions: written or spoken language that provides information or instruction about the topic or the use of the material/activity. Some materials contain only the written word (e.g., brochures) or narrative (e.g., audiotapes), and some contain both (e.g., games, videotapes).

Visuals: photographs, cartoons, drawings, images, graphics and other representations of people, places and things that communicate a message or action to the viewer.

Format: the style and amount of "white space" (or empty space) in a piece of material; the sequence of events and length of time of an activity.

The following guidelines may be useful in adapting materials to become appropriate for a program and its audience. The questions can help identify specific areas that need modification. (These questions are provided as examples of issues to be explored through focus groups, indepth interviews, or other pretesting methods.)

Text, Narrative, Captions

1. Examine the messages or content.

Determine whether the material contains too many concepts. Each paragraph should contain just one message or action.

• Are the concepts accurate?

- 17-

- Do the messages provide too little, too much, or adequate information?
- Are the concepts presented in logical order?
- Are the concepts and their sequence appropriate for the audience?

Include only a few concepts and only information that enables the user to follow the message.

2. Examine how the text or narrative is written.

Text or script should be written with the intended audience in mind. Keep it simple and understandable. Perform a readability test (e.g., SMOG, Fry).

- Is the reading level understandable to the intended audience?
- Does the information use appropriate local idioms?
- Are statements made in an active voice?
- Are statements community specific?
- Is the audience's preferred language used?

Use short sentences and words. Use active language. Use words and phrases familiar to the audience. In narratives, be sure the pace and intonation are appropriate.

3. Determine whether text or narrative matches or corresponds to visuals.

Visuals should complement, not compete with, text or narrative. They should enhance the message being delivered.

- Does the text/narrative/caption describe what occurs in the visual?
- Do the visuals compete with what is written or spoken?

Use visuals that reinforce text and/or narrative. Visuals should make sense to the audience. Visuals and text should be clearly related.

4. Determine whether the message is believable/credible to the audience.

When adapting material, the audience's preferences should be known and considered in the selection of the channel used for message delivery. The message source should be known and credible to the audience.

- Is the narrator a respected peer or credible community member?
- Will the audience view the message as believable?

- 18>

• Is the message suggesting a behavior change that is possible for the audience?

Quote credible spokespeople in written text. Make messages believable and practical. Promote behaviors that are appropriate in the cultural, social and economic environment.

Inexpensive Options for Adapting Text/Narrative

- Ask some members of the intended audience to write the text/script. Test the results by asking other audience members what they think the main points are and how to make the text and visuals more appropriate and easier to understand.
- When recording a new narrative for a video or radio piece, find a quiet room with good acoustics. Interview a few members of the intended audience with good reading abilities and dramatic skills. Use rented or donated sound equipment. University students, college or local radio stations, drama clubs, or local actors may make good narrators. A university communications laboratory or local radio station may dub in the new soundtrack at little or no cost.

Visuals

- **1. Decide whether visuals correspond with text/narrative.** Visuals must be culturally appropriate and should enhance the message being delivered, not compete with it.
 - Do the visuals correspond to the text without being abstract or cluttered?
 - Do the visuals provide additional information about how to adhere to the message being delivered?

Choose photographs, images or drawings that are clear and easy to understand. Use visuals that show specific examples of the behavior described. Cartoons and drawings should be life-like. Avoid diagrams, graphs and other complicated visuals. Illustrate only the desired behaviors, not those to be avoided.

2. Illustrate the important points.

Visuals should highlight only the most important points made in the text, in order not to confuse the learner.

- Do the graphics or photographs illustrate the most important concepts?
- Do the visuals enhance rather than confuse the message?

Limit the number of visuals in order to emphasize the most important points, and place them in an order that the learner would under-stand.

3. People and places should represent the intended audience and their culture.

Members of the intended audience must be able to identify with the message. Visuals can assist in this process by reflecting culture and ethnicity.

- Do images of people look like members of the intended audience?
- Do geography and setting represent where the audience lives, works and plays?
- Are people shown doing things that are realistic in the lives of the audience?
- Are the images familiar and acceptable to members of the audience?

Illustrations should reflect the ethnic and cultural background of the intended audience. Place the people in everyday settings, using familiar belongings and wearing familiar clothes. Show the full body of a person illustrating a behavior. Use symbols that are appropriate and understandable to the audience.

Inexpensive Options for Adapting Visuals

- Ask an artistic member of the intended audience to draw visuals or take photographs. Offer to compensate the person for his/her time and effort.
- Ask advertising or marketing firms to donate photographs or illustrations. Give them credit on the material.
- Seek donated time from local art institutes, university or high school photography or art classes, or local art galleries. Give them credit.
- Use several members of the intended audience, rather than formal focus groups, to determine acceptability of a mockup with visuals (e.g., find people in a natural gathering place in their community and ask them to review the visual).

- 20-

- **1. Make materials inviting, visually appealing and easy to follow.** If the text appears too dense, members of the intended audience are less likely to read it. Visuals and format are also very important in making material appealing.
 - Are text and/or visuals clear and easy to read?
 - Is the type big enough to be easily read?
 - Is the typeface appropriate for the reader?
 - Are colors attractive?
 - Are people/situations represented realistically for the intended audience?

Use only a few concepts and pages. Leave enough space between text and visuals to allow the eye to move easily from one to the other. Place related messages and illustrations together. Use large type for written text. Typeface with serifs, such as Times Roman and Century Schoolbook are generally considered easier to read. Use colors appropriate and acceptable to your audience. Use everyday people or situations that represent your audience.



2. Use quality materials when possible.

- Are photographs, drawings or images accurate, up-to-date and realistic?
- Are props or models realistic?
- Is the weight of paper heavy enough for repeated use?

Use a paper that is thick enough to withstand repeated use (i.e., 20-60 pound bonded paper). Use current and realistic visuals. Incorporate props/models that are used in everyday life.

Inexpensive Options for Adapting Format

- Choose production materials that may be discontinued but for which sufficient stock is available. Order bulk quantities for lower prices.
- Ask local printers, art supply stores, university art departments, university computer departments, local photography shops to donate or discount supplies.
- Contact high schools, universities, churches, civic or social organizations for individuals who might be willing to be photographed.
- · Ask appropriate organizations or businesses for donated props or models.

Pretesting Adapted Material

Pretesting Methods

Focus Groups: Group interviews with 8-10 people to obtain insight into the perceptions, beliefs and language of the intended audience.

In-depth Interviews: One-on-one interviews with members of the intended audience to obtain in-depth information regarding attitudes, beliefs, and perceptions.

Theater testing: A large group of people typical of the intended audience is gathered to react to audio or audiovisual materials.

Gatekeeper review: Health professionals or other "intermediaries" who will be responsible for using or distributing the material are asked to provide comments and suggestions. This can be accomplished either by a short, selfadministered questionnaire on the material, or by personal or telephone conversations.

Adapted from: National Cancer Institute, 1989

Pretesting should be conducted at several stages: planning and strategy selection, concept development, draft review, materials comparison, and final production. Mock-ups (cut and paste) and storyboards are good ways to pretest ideas before creating an expensive final version. Focus groups, in-depth interviews, theater testing, and gatekeeper reviews can also help determine whether the material is acceptable to the intended audience, the general community, and individuals charged with using or distributing the material. Each pretesting step and strategy is discussed in Section 5.

The following case studies illustrate how materials were pretested and adapted to meet the needs of two breast cancer programs.

- 22 -

Case #1

In adapting materials for participants in its breast and cervical cancer control program, a state health department started with a low-literacy flyer developed by another organization. The flyer had been pretested using one-on-one interviews and found to be written at an appropriate grade level. However, staff noted that women in the breast and cervical cancer program folded the flyers to fit them in their purses, and many women left the flyers behind in the clinic.

The department adapted the low-literacy flyer by modifying its format but keeping the original text, producing a low-literacy brochure that easily fit into a woman's purse.

Case #2

A state health department found that educational print materials were written at too high a reading level and were not culturally appropriate for the older, low income African-American women in its target community. Focus groups were used to identify appropriate communication channels, credible information sources, and the acceptability of breast cancer materials among the target audience. One piece of material reviewed by the focus group was a showercard illustrating how to do breast self examination (BSE).

Women in the focus groups felt the shower-card illustration of a young woman did not represent them, and the wording was too complex. A professional graphic artist was hired to create illustrations of older African-American women, and text was simplified. After adaptation, the shower-card was acceptable to women in the community.



-

Section 4 - Developing Original Materials

If existing materials cannot be made appropriate for a program, it is time to consider developing original materials. The process can be timeconsuming and resource-intensive, but when resources are available, materials and strategies that best suit an audience can be most effective.

A good starting point, then, is an assessment of the resources needed to develop various types of materials and the program's ability to obtain the resources.

Sizing Up Program Resources

Working with Professionals

If program budgets allow, the use of professional writers, illustrators/ photographers and/or designers can greatly enhance the effectiveness and impact of a piece of material. And even when a program cannot afford to pay for materials development, large advertising/ marketing agencies sometimes require employees to donate a portion of their time to community service.

Here are some suggestions when considering the use of paid professionals:

- Interview candidates with an audience member present, and look for good three-way communication.
- Review portfolios together with an audience member.
- Ask for detailed proposals from the most promising two or three candidates.
- Obtain clear agreement with the finalist on what work will be done, the timeline and how much it will cost.

The checklist below describes some resource considerations for developing original materials - including another last look at existing materials to make sure they cannot be made appropriate. Although financial resources are listed first, they are not necessarily the most important. A program may have very little money but may have talented and dedicated staff and community members who can create materials.

Financial

- □ What program funds are available for materials development?
- □ Are there other sources of money (i.e. grants, donations, other programs)?

Existing Materials

- □ What publications, videos, fact sheets, or other materials do you already have that would be appropriate?
- □ What materials have been developed by others that would be appropriate?
- □ What materials can be adapted for your intended audience?

Staff

- □ Who on your staff has actually developed materials?
- □ Who are the creative people on your staff?
- □ Who is artistic?
- □ Who writes well and appropriately?
- □ Who is interested in working on the project?
- □ Who can devote the time to materials development?

Members of the Intended Audience

- □ Who has experience in developing materials?
- □ Who can help develop design, layout, artwork, and wording?
- □ Who is artistic and is able to design appropriate artwork?
- □ Who writes well and appropriately?
- □ Who is interested?
- □ Who has time to work on the project?

Community Contacts

- □ What other community resources would be helpful?
- □ Are there agencies that will illustrate, print or produce the materials?
- □ Do members of the staff or intended audience know who to
 - contact at each community resource or agency?

General Guidelines

Members of the intended audience can play several roles in the materials development process. Here are a few suggestions:

Developing Concepts, Messages and Learner Objectives

• Involve Advisory Group members and others from the community in developing concepts and messages, and pretest with members of the intended audience.

• Involve Advisory Group members and persons from the intended audience in developing appropriate objectives for the material.

Developing the Materials

• Use local talent (e.g., artists, writers, and graphic designers) whenever possible.

Pretesting

• Ask Advisory Group members the most appropriate ways to pretest materials in their community (e.g., group vs. individual interviews).

• Ask Advisory Group members how and where to reach members of the intended audience.

• Involve Advisory Group members in developing the questionnaires or discussion guides to be used in pretesting.

• Recruit members of the intended audience to pretest materials.

When addressing low-literate or oral-culture audiences, every medium has advantages and disadvantages. Knowledge of the intended audience and availability of resources will help determine the preferred choice. It is especially important to consider traditional learning styles of various ethnic/cultural groups. If the materials development process is not thorough, with substantial audience involvement and extensive pretesting, the resulting material may not be effective.

Assuming the background research has been done and members of the intended audience are involved (see Sections 1 and 2), the next steps are to identify the key points to be imparted and choose a key message that focuses on what the audience needs to know. The tone and content of the key message depend on whether the intent is to increase knowledge alone, teach a skill, or motivate behavior change.

With the key message defined, choose a medium and create an outline of the material (e.g., a flipchart outline might list four panels, the first three showing breast self-exam steps and the last showing a mammogram or a clinical exam; a theater outline might describe the main plot and characters). The medium and outline will be based, of course, on audience needs and available resources. In creating the outline and expanding it, consider whether the results will be:

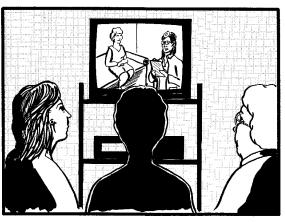
clearly presented

Illustrations should be one-dimensional with minimal shading and background scenery. Adults with limited reading ability often have trouble with drawings that require depth perception (Younger and Haffey, 1990; Gustafson, 1986).

logically sequenced

Non-readers may not follow the sequencing of messages considered logical by others in their community (Younger and Haffey, 1990). Appropriate sequencing is necessary for both text and visuals.





The upper illustration is an example of too much background scenery. The lower illustration has been redrawn to make it more clear and easy to understand.

easy to understand

Show people, actions, objects, and workplaces that are familiar to the audience. Avoid stylized pictures or drawings (Fetter et.al., 1987). Make messages easy to understand. Non-readers have difficulty inferring meaning and tend to think in concrete, literal terms. Symbols such as an "X" can be misunderstood - pretest them.

interesting, familiar, and realistic

Low-literate individuals tend to respond best to personal experience (Doak, et. al., 1985). Objects and figures should be common and based on the audience's experience.

positive

Learners, low-literate or not, often react negatively to pictures showing an unfavorable action (Zimmerman and Steckel, 1985).

Things to Consider for Special Populations

Oral Cultures

- Use narrative, storytelling to relate message.
- Symbols and imagery may have special meanings.
- Retention of spoken information may be higher than for non-oral cultures.

Low-Literate Groups

- Use of printed material should be limited.
- Written material should be at or below a 5th grade reading level.
- Visuals are useful for illustrating desired behavior.

Older Adults

- Type size should be at least 14 points.
- Narrative/audio may need to be louder than normal, depending on audience.
- Room acoustics should be considered when presenting to a group.

When writing text, have members of the intended audience help write and/or review drafts. Review by other health professionals who have worked with the audience may also be helpful.

Finally, a mock-up should be pretested with members of the intended audience. After gathering feedback, make appropriate revisions and pretest again!

Visual Materials

Visuals Help:

- Enhance learning
- Stimulate audience participation, discussion and interest
- Teach about something that cannot be easily seen in everyday life (e.g., female internal anatomy, cell morphology)
- Illustrate an important point
- Specify steps to follow in completing a task
- Present real-life situations

Fretter et al, 1987

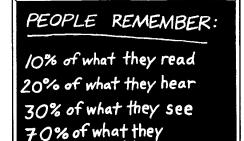
Visual materials help people learn by seeing (Fetter et. al., 1987). Visuals can, but do not always, contain words, pictures and/or numbers, but if words are displayed, they are not the emphasis of the medium. This feature distinguishes non-print from print medium. Different visual media include posters, flip charts, and talk boards; real objects and models; display boards; and fotonovelas. (Videotapes, which are highly visual but also contain audio, are discussed in the audiovisual section of this guidebook.)

Visuals help all learners remember important information better than if they only read or hear it.

Visual materials are particularly useful for people with limited literacy skills and people from oral cultures. For low-literate individuals, even the simplest text sometimes cannot be understood. Low-literate individuals, therefore, tend to be more dependent on graphic or visual information (Michielutte et. al., 1992) than on information provided through print media.

Designing effective visual material is a complex task. Focus groups or one-on-one interviews with members of the intended audience can

assess appeal, acceptability, persuasiveness, possible offensiveness, and relevance. If formal pretesting isn't possible (see Section 5), the material may be shared with people at clinics or grocery stores in the neighborhood. **Visuals should not be used without testing them first with the community!**



see and hear

Visual Materials			
Туре	Benefits	Limitations	
Poster	Stands-alone. May be distributed and posted in a variety of settings.	Typically informational and does not generally influence behavior change	
Flip Chart	Tells a story or teaches skills in a step-by-step manner. May be used as a guide for presentations by trained facilitators.	Requires a trained facilitator. Not appropriate for larger audiences.	
Talk Board	Enables learners to share experiences through the telling of a story.	Requires a trained facilitator. Can be time- intensive because of the experiential-based interaction that use creates.	
Real Objects and Models	Makes concepts and ideas easy to understand.	Requires creativity to make objects, funding to buy objects.	
Display Board	Involves the learner.	Transport can be cumbersome.	
Fotonovela	Entertaining, often shared with family members. Portrays real-life situations and emotional, sensitive, and private subjects.	Not appropriate for large group presentations. Individuals should read the booklet on their own. Group discussions can be conducted based upon the story presented.	

Posters, Flip Charts, Talk Boards

Posters are a common example of visual media. These large pieces of paper or board primarily contain illustrations, drawings or photographs and a minimal amount of text. They are mostly used as stand-alone media. Their effectiveness is generally limited to raising awareness about a certain health problem or providing information.

29



Using Posters to Reach Native American Women

A poster was developed as part of a breast cancer screening program to encourage Native American women to get Pap tests and to inform them of where the tests could be obtained. The poster, designed by a Native American artist, is based on the traditional medicine wheel, with women representing different tribes in each quadrant. As a result of pretesting initial drafts with members of the community and clinic staff, multiple colors were used rather than a single color. The text of the poster reads:

"We are the Circle of Life. Pass on the gift of health. Get yearly Pap screenings at: ______"

Each participating clinic fills in the blank in the last line.

The poster has been very well received by the community. Native American men are also drawn to it and ask if they can have their wives come to the clinic to talk about what the poster is telling them to do.

American Indian Health Care Association

Flip charts are series of posters put together in sequence to tell a story or provide step-by-step instructions. They are used by a facilitator giving a presentation to a group or an individual. They can be designed for use either on a desk top or an easel, depending upon group size.

A Patient Education Flip Chart

The "Habits for Health" Patient Education Flip Chart was designed to help physicians counsel patients from diverse backgrounds about how habits can affect health. The Flip Chart is divided into five sections. The first section is designed to help establish a good learning atmosphere for all patients. The other four sections are specific to certain ethnic groups, including African Americans, Asian Americans, Hispanics, and Native Americans. Each section presents facts on the major disease categories, followed by patient tips for reducing the risk of disease.

The flip chart is highly visual, with simply worded key phrases. It is intended to trigger patient-physician discussions.

Hoechst-Roussel Pharmaceuticals, Inc.

Talk boards are posters without words. They can be used singly or in series. Photographs or drawings are used to depict an action or behavior, or to show an everyday scene or situation. Talk boards are used by a trained facilitator to elicit discussions among a group on a health issue of concern.



Reaching the Hispanic Community with HIV and AIDS Information Using Talk Boards

The American Red Cross has developed talk boards or "Talking Posters" to educate Hispanic adolescents and adults about HIV and AIDS. The Talking Posters, used with a trained facilitator, display only pictures. A facilitator presents a poster and asks the participants what they see. The responses become a basis for discussion. The objective is to create an environment in which participants teach themselves.

A series of nine Talking Posters was based on the traditional Hispanic "plática" or dialogue and the methods of Hispanic educator Paulo Freire. Participants learn through talking with one another, becoming aware of both the facts concerning HIV and AIDS and the way they feel about the disease. The Talking Posters are used in workplaces, schools, and community organizations.

Each talking poster has its own story line and is large enough to fit on an easel. The posters were designed to be used in sequence as educational building blocks. They start with a non-threatening situation (not AIDS-related) and end with participants talking about AIDS and their responsibility to children and the community. Depending upon the time available and the audience, the facilitator can use all, one, or a few posters.

Facilitators are extensively trained in Freire's methodology and how to listen and elicit responses from participants. An instructor's manual (for facilitators) and a trainers manual (for instructors of the facilitators) have been developed. National field testing led to substantial revisions prior to final production.

American Red Cross

Resources or materials needed for production:

Posterboard or some sort of background material on which to mount photographs or drawings.

Camera and film if using photographs. Photographs can give a sense of reality to a message. They are often more expensive to reproduce.

Photographer or artist who has access to community people to create pictures of real-life situations. Some cultures believe a photograph captures and takes away the spirit of the person photographed. Permission for taking photographs must be obtained.

Materials for drawing pictures. Drawings can be less costly than photographs if using amateur artists. Illustrations drawn by a professional artist can be expensive but are generally more easily reproduced than photographs.

Printing and/or reproduction facilities. Reproduction or printing costs can be high, depending upon the complexity of the material. Multiple colors throughout a piece increases the costs considerably and makes duplicating more difficult.

Real Objects and Models

Real objects or models are three-dimensional, real-life or to-scale teaching aids. Examples include food,models of the breast or uterus, CPR models, speculums, and mechanical smokers.



Using Breast Models to Teach BSE

The Kentucky Cancer Program uses breast models to show community women how to conduct breast self examinations (BSE). The models are used to help explain the amount of pressure needed to feel a lump in the breast. Women attending the program's community education sessions enjoy using the breast models and find them helpful for understanding how to do BSE.

Kentucky Cancer Program

Resources or materials needed for production:

Funding to purchase manufactured objects or models.

Local materials. If local materials are used to make the model or object, production costs can be minimized.

Audience members who are willing to help make objects or be models. Learners are more likely to be interested in the project if they get involved.

Creativity and imagination. Making and inventing appropriate teaching aids with local materials can be a challenge. Ask the audience for suggestions.

Display Boards

Display boards make use of flannel, felt or other sticky material (sprayon-glue) to attach pictures or other materials for display.

Use of Flannel Boards or Display Boards in Developing Countries

Flannel boards have been used extensively by community health workers in developing countries. In their book *Helping Health Workers Learn*, David Werner and Bill Bower describe different ways of making and using flannel boards. Large flannel boards are suggested for training programs and they can hold signs and objects large enough for a larger audience to see. Werner and Bower say teaching methods must be adapted to the needs and circumstances of the local community. For example, nutrition workers in Guatemala found that many people were uncomfortable standing in front of large groups. Instead, a small flannel board is passed around an audience so each participant can have the chance to see and touch without embarrassment.

Helping Health Workers Learn

Resources or materials needed for production:

An easel, wall or other firm vertical surface.

A large **sheet of flannel or soft cloth** stretched over the firm surface. A large piece of newsprint can be taped to a wall, and spray glue used as the "sticky" medium.

Drawings or photographs to place on the display board.

Fotonovelas

A fotonovela is a story told with photographs and dialogue, similar to a comic book in format. With its conversational approach, a fotonovela can be a good low-literacy educational medium if dialogue is written at a low reading level. The story is told through a realistic, entertaining and educational plot.



Fotonovelas are generally most effective in communities that are familiar with the medium.

Designing a Fotonovela

When designing a fotonovela, four basic elements must be considered: plot, dialogue, characters and visual content. The plot, or story line, should be developed with the message woven in as part of the story. Scene changes should be clearly marked to help the reader follow the story. The dialogue between characters in the story consists of short sentences in words that are familiar to the reader, located in "balloons" within each frame. The characters in the fotonovela should be based on thorough research. They play a critical role in making the message understood by the reader. The visuals, whether photographs or drawings, should appeal to the intended audience. They should motivate readers to pick up the fotonovela. The visual on the cover is important in motivating the reader to pick up and read the story.

The fotonovela should be pretested with members of the intended audience before final printing. Be sure that readers can follow the frames and understand the story line.

The Johns Hopkins Center for Communication Programs, Population Communication Services

Resources or materials needed for production:

Talented individual who can write an action-filled plot with interesting dialogue in the language (incorporating colloquialisms, linguistic and cultural nuances) of the intended audience group.

Photographer and photographic equipment (or illustrator) to provide pictures appropriate to the story line. Often a person from the community volunteers to serve as the photographer.

Access to printing facility.

Action-Oriented Exercises

Action-oriented exercises are helpful when:

- Learners need to practice skills or behaviors.
- The audience is hard to engage in learning.
- Learners do not mind interacting with each other.
- Social support is needed to learn a skill or behavior.

Action-oriented exercises or strategies can be defined as educational materials and methods that require the learners to be actively involved. These exercises include role play, theater, songs, storytelling, and games. Physical objects or materials need not be part of the interaction or learning activity except to direct it (e.g., instructions, discussion guide).

Action-oriented exercises are very effective with any audience. They allow people to practice actual skills or behaviors and can help keep people involved and interested in what they are learning. Research has found that people often learn best through practice and by "doing" things repeatedly (Werner and Bower, 1982). Action-oriented strategies are particularly useful with low-literate audiences because they engage the audience in the simulation of real-life situations. The learner is relating, interacting, and formulating relationships with others while acting out a situation.

Key to educating:

Use methods the learners are familiar with and enjoy. Before deciding to use an action-oriented strategy, talk with members of the intended audience. Test the concept of using role play or song in focus groups of community members. If the community agrees that song is a great idea, look for someone in the community who has some talent and may be interested in writing the lyrics or the music. If games are identified as a good approach, find out what is the most frequently played game. Who in the community could help to design the game? Who has some artistic talent to illustrate the game board? As always, involve the community in every aspect of the project's development.

Because action-oriented materials require audience participation, some people may feel threatened and uncomfortable. It may be more comfortable to listen and observe, rather than to "act out" if talking and acting with other people is not a learned or valued practice within one's experience or culture.

Action-Oriented Exercises				
Туре	Benefits	Limitations		
Role play	 Can bring learning close to real life. Requires few props or special objects. Learners can represent objects through pantomime. Useful for developing practical and social skills. Requires learners to combine a range of skills and understanding. Stimulates discussions. 	 Used exclusively in a group session. More than one person takes part in the role play itself, and an audience group watches the role play and participates in the discussion. Requires a well-trained facilitator. May become too real and too emotional for participants, and as such, becomes a barrier to participation. Requires audience participation in a group activity. Audience members must feel comfortable being in front of a group. 		
Theater	 Brings people together, including those who do not typically go to meetings or health talks. Provides entertainment. Holds people's attention and makes them think. Realistic if based on true, personal stories and experiences. Presents information and encourages discussion about sensitive issues. Learners watch others who are "just like us" perform on stage and discuss topics that are not typically discussed in the community. Draws on people's emotions, which can motivate behavior change. Real people are up on stage, talking about and acting out real experiences and feelings. 	 Requires rehearsals and thus a large time commitment. Keeping the theater troupe together and managing it can be difficult and time-intensive. Theater productions are often performed more than once by the same group of actors. Recruitment of community participants may be difficult. Acting requires performing in front of groups, and this may be uncomfortable for some people. 		

Action-Oriented Exercises (continued)				
Туре	Benefits	Limitations		
Song	 Easy for most people to remember songs and rhymes. Can be very up-beat and positive. Does not require reading or writing skills. Requires few resources to develop. Effective for reaching communities with oral traditions. 	 Requires someone skilled in song-writing to write lyrics and music. Requires recording equipment if song is to be recorded for broadcasting. Requires someone willing and able to lead a group in song if it is to be learned by the audience. 		
Storytelling	 May take less preparation time than other forms of action-oriented exercises. Learners can tell their own stories that are related to the topic of discussion. Can teach lessons through the use of parables. Parables are often used as traditional methods of learning among communities that have a strong oral tradition. Avoids confronting learners with inadequate knowledge. Allows learners to identify with story characters who find solutions to the similar personal problems. Can be used by learners to gain confidence in themselves and pride in their own culture. 	 and describe characters, problems, actions and solutions. Requires a storyteller who is sensitive to and aware of community patterns, customs, beliefs, and traditions. 		
Games	 Provides entertainment. Encourages interaction among the learners, providing peer support. Can involve a group of participants of different ages. 	 Use of symbols must be handled carefully. Symbols often have specific meanings in different cultures. Requires audience participation. 		

Role Play

Role play involves a problem-solving activity in which audience members act out a situation, either real-life or fictional. Typically, a scenario is provided with specific characteristics identified in a role. Each participant assumes a role and tries to act as that person would. For example, an individual may play the role of a per-



son with a particular problem or illness, while others may play the role of health workers, family members or friends. Role play is often used to show an example or pose a problem and a solution. Questions and group discussion should follow role play.

Resources or materials needed for production:

A group of learners willing to participate.

Special objects, materials, or props. These materials are not always necessary, but they can be helpful at times. (e.g., BSE breast model).

Theater

Theater is a form of public play acting. A story or play is usually planned and practiced in advance. Parts can be memorized, but it can be more effective in some situations for learners to understand their roles and speak in their own words. Attitudes, feelings, and behaviors are explored by actors in the play. Usually,



discussion among the actors and audience follows the play.

Resources or materials needed for production:

- 37

- A script that tells the story line and provides the health message.
- A **group of people** willing to participate in the production. This group can range from trained actors to willing theater audience members.
- A **skilled facilitator or director** who can direct rehearsal and performance of the play and manage a group of people over time.
- Props or other materials for use during performances.

Theater: Personalizing Education

Theater is an effective way to present information on sensitive issues. Theater can dramatize situations that people have a hard time putting into words. Theater can break through and transform the fear that can surround difficult and controversial issues. Illusion Theater has created plays which have educated audiences about healthy sexuality, about preventing family violence, HIV/AIDS and sexual harassment. Using theater the audience experiences the effect of a social issue on an individual - a daughter, a mother, a son, a care provider, a grandfather, a brother, a co-worker. Performances have taken place at crisis centers, schools, churches, community centers and colleges. Discussions follow the performances where the audience is invited to participate more deeply in responding to the information, events or issues of the play.

Illusion Theater Company

Songs

Songs are words or stories set to rhythm and music, and sometimes to dance. Wording is simple, and tunes are familiar and easy to learn and remember. Songs can be used in the classroom or other settings where a group is present.



Resources or materials needed for production:

- **Lyrics**. A talented individual must write words that effectively deliver the desired message.
- **Musical score** original, or permission to use existing music (if required).
- **Audio equipment** if the song is to be recorded and played for different audiences in a variety of settings.
- Musical instruments.
- Musical talent (singers and musicians).

- 38

Using Rap to Teach Teens About BSE

Recognizing the need to reach young women with breast health information, Johanna Ehmann, an oncology nurse, came up with the idea of "BSE RAP". This music video sets breast self-examination instruction to music. It is designed to teach teens about breast health awareness and early detection and to motivate them to teach their mothers about breast health. Rap was chosen to create a positive message about a health habit that could save lives. Ms. Ehmann sought the assistance of a songwriter/guidance counselor to produce "BSE RAP" on audiocassette. Ms. Ehmann feels that not only is the music upbeat and attention-getting, it also helps people remember the message. Writing the song took several months of communication via the telephone and mail between Ms. Ehmann and the songwriter. A music video and audiotape were then developed.

The music video is shown in inner city and rural schools, churches, community groups, and BSE certification programs. Evaluation by a random sampling of 425 program participants was very positive.

Johanna's On Call to Mend Esteem

Storytelling

Storytelling is the act of telling a narrative about personal, real-life experiences. A story can be told by an instructor to teach a lesson to a group, or by learners themselves who relate their own experiences to others in the group. Stories are constructed to include traditional knowledge, beliefs, and attitudes of the learners.



Stories are intended to move through to an action that helps solve a problem. As with song, role play, and theater, storytelling is used in group settings in which learners listen to a story and discuss it afterward, or tell and discuss stories among themselves.

Resources or materials needed for production:

- A skilled facilitator and a participatory learner group.
- **Props** (e.g., photographs, pictures, flip charts, posters) can enliven or guide a story but are not absolutely necessary.

Using Stories to Reach the Native American Community

Little Sister Mouse tells the story of a mouse, who lives in the here and now, and the noble eagle, who teaches us to listen and look. The story emphasizes that it is good to be like a mouse, doing things with all our might, as well as the noble eagle, watchful of keeping the enemy of cancer away. The story presents the seven possible warning signs of cancer.

Northern Cheyenne Public Health Nurse

Games

Games are activities in which learners participate and discover things for themselves. The players usually aim for a goal or endpoint (e.g., a puzzle is solved, a Bingo game card is filled with the appropriate matching pictures). Sometimes learners compete against each other to reach the endpoint first.



Resources or materials needed for production:

- Creativity
- Materials to make game boards, flash cards, Bingo cards, etc.

Using Games as a Health Education Strategy

A "loteria", or BINGO game was developed by the Ventura County Health Department (VCHD) and the Ventura County Community College in California for the Great American Smokeout. Thirteen different 4" x 6" cards, each with a different mixture of 9 pictures, were developed. Pictures included: "the dying man" (half head/half skull); an ashtray; lungs; a sick man in a hospital bed; a lady smoking a pipe; a baby in the womb smoking a cigarette; a happy, healthy family. Instead of calling out numbers, the person leading the game calls out a picture and reads a brief health message that explains the picture. The game was originally developed for children, but parents often play the game too.

- 40 -

Ventura County Health Department Ventura County Community College

Audiovisual Materials

Audiovisual materials involve both hearing and sight. Since most people learn through visual communication, audiovisual materials effectively increase knowledge. In addition, by visually representing a desired behavior, audiovisual material can teach a learner how to perform a behavior. The audio portion can add several dimensions, including motivating the viewer to watch the presentation, increasing identification with the characters or message, and helping the viewer retain the information.

Focus groups or in-depth interviews can help determine whether videotapes are used by members of the intended audience. Consider whether existing programs have used videos or slide-tape presentations in the community effectively. Audience input is, of course, important in selecting the most appropriate visuals. When using a narrator, pretesting with audience members can reveal if they will identify with the speaker and find him/her credible. As always, pretest with members of the audience before producing any materials.

Audiovisual materials are helpful when:

- 41 -

- The learner has limited reading and/or visual capabilities.
- Learners need to observe how to perform a behavior.
- Learners need to identify with others like them.

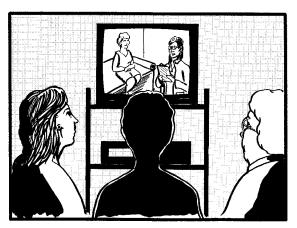
	Audiovisual Materials				
Туре	Benefits	 Limitations Are expensive to produce. Many learners are exposed to high quality video media which places a demand for high quality videotapes. Requires production equipment. Requires VCR and monitor to use. Videotapes are appropriate only in certain environments where the viewer has time to watch the video and perhaps discuss it with a facilitator. Can be "tuned-out" by viewer. Continuously running videotapes are sometimes ignored by patients in waiting rooms. Collaboration with production companies can be difficult. They may have a different agenda than that of a health professional. Requires a trained facilitator if used as a "trigger" for discussion. 			
Videotapes	 Can include issues and topics that are culturally acceptable to the intended audience. The language, dialect, characters, and scenery used in a videotape can help the viewer to identify with the message or story being conveyed. Can be used in group settings when appropriate equipment is available. Distribution may be simplified because of common access to VCRs in families, schools and libraries. Can be used as "triggers" for group discussion. Can help viewers to feel comfortable stating their feelings on topics without personalizing their comments. 				
Slide-tape Programs	 Appeals to both hearing and visual senses. Does not rely on the printed word to get message across. Can be used in conjunction with workbooks. Can use sound effects to enhance message. Can use local language, dialects, accents, and references which enhance the listener's ability to identify with the message contained on the tape. Use of visuals can be specific to the intended audience to enhance viewers identification with the message. Can be stopped periodically to allow viewer time to absorb information presented or for discussion opportunities. Can be used in a group setting or as a stand-alone. 	 Are less sophisticated than videotapes, so that audiences may be less satisfied with them. Requires an automatic advance slide-projector and screen. Uses still photography and therefore is not as engaging as videotapes. Updating can be time consuming if both slides & audio portions of the slide-tape program must be changed. Can be "tuned-out" by viewer. 			
Interactive Multimedia Programs	 Can be fun to use. Learners may feel they are receiving computer training as they use the program. Provides learner opportunity to choose topics or receive responses to questions which enhance thought processing and motivation to continue with the lesson. Are usually self-instructional, and require minimal staff support. Can incorporate new technology: graphics, photographs, movies and music, which are likely to entice users to investigate the program. 	 Requires self-motivated learners to approach and use the program. Requires some computer literacy on the user's part. May not provide the help the learner needs if placed in an unstaffed kiosk or station. Can be damaged by inappropriate use. Requires technical skills in its development. Requires a secure location to prevent theft. 			

- 42 -

_

Videotapes

Videotapes incorporate moving pictures and sound. They can be used to inform audiences of new information, demonstrate desired behaviors or as triggers for discussions on sensitive issues or health concerns. Generally, the more engaging or entertaining a videotape is, the more likely it will be viewed by the



intended audience. Most audience groups are very familiar with this medium.

Resources or materials needed for production:

- Scriptwriter.
- Story boards of script and illustrations for pretesting.
- Video production team.
- Recording/taping equipment.

- 43

- Actors/actresses people from the community are preferred.
- **Videotapes** (for stand-alone videos, some health educators suggest "self-rewinding" tapes).
- VCR and monitor.

Using Videotapes to Reach the Cambodian Community

A videotape was developed by Khmer Health Advocates, Inc. to educate Cambodian families about how to deal with alcohol abuse. The project was funded by a grant from the Office of Substance Abuse and Prevention. Video was selected as the medium because many Cambodians living in the United States do not read but avidly watch Cambodian videos. One of the first surveys done in a Cambodian community in Connecticut showed that the first equipment purchased by Cambodian refugees were a television and VCR.

The script for the video was written by children from the community, based on real-life experiences. A production company was hired to work with the community in producing the videotape. Some problems arose because the production company and the community had differing agendas. The production company had difficulty understanding the importance of some details that were very significant to the community. Community members served as actors and actresses in the video.

Language in the video was very important. Adults in the community are proficient in Khmer but know only basic English, whereas children are much more proficient in English. Both languages were therefore used. When children speak among themselves in the video, they use English with Khmer subtitles. When adults speak, they use Khmer with English subtitles.

The video was pretested with community members in focus groups, and no modifications were needed, presumably because extensive groundwork and community involvement preceded production.

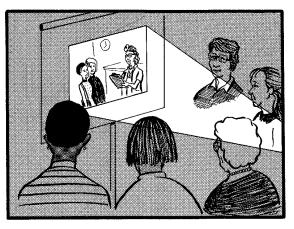
Copies were distributed by Khmer Health Advocates, Inc. to community members. People are free to copy the video to share with others. The 35 minute video cost approximately \$40,000 to produce, \$10,000 of this cost was for subtitles.

Khmer Health Advocates, Inc.

Slide-tape Programs

A slide-tape presentation involves an audiotape synchronized to a series of slides that advance automatically through a projector.

Slide-tape programs were very popular before the introduction of the "easy-toload" videotape. Some audiences are now too media-sophisticated to be



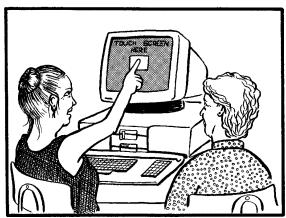
satisfied with still-life presentations, even those with audio. But slidetapes can still be produced to be very engaging and entertaining when used in the appropriate setting with a facilitator.

Resources or materials needed for production:

- Real people or illustrations for slides.
- Professional photographer preferred.
- Equipment for processing and developing slides.
- Professional narrator and sound booth for recording audio.

Interactive Multimedia Programs

Multimedia combines audio, video, graphics and text. Interactive multimedia programs are computerized lessons or training that provide information and skills in a lesson format. Typically, one or a few learners sit at a computer monitor and start the program by touching the screen or using a simple keyboard. The learner may



have the option of choosing topics or lessons, or may simply respond to questions and receive answers. Learners may move back and forth within different topics in some programs.

Multimedia programs may be produced in many formats, such as a compact disc to be played on a computer (CD-ROM) or a television (CDI), or a hard drive program for a computer. Other, less interactive programs can be found on laser discs, which are played on a television.

Resources or materials needed for production:

- A pretested **script** to be used for text or narrative.
- **Photographs, graphics, background artwork or models** for programming and shooting.
- **Sound and production studio** and **programmers** for assembling the program.
- Appropriate **equipment** for playing (e.g., CPU and monitor, touch-screen or keyboard/mouse, CD-ROM or CDI player, television).
- Appropriate **set-up for presentation** (e.g., kiosk station, exhibit set-up).

Developing an Interactive Computer Program Communicating Cancer Information

An interactive computer-based CD-ROM program was jointly developed by the AMC Cancer Research Center and the Time Warner Interactive Group. This multimedia program provides the user with easy access to specific information on breast cancer. Users select a topic by touching colored "buttons" on a touch-screen monitor. Topics include mammography, breast self-examination, clinical breast exams, treatment options, and financial assistance. Touching the "button" starts a narrative presentation with accompanying still photographs.

A usability test found that low-income women felt the program was easy to use and to understand. However, the use of words on the screen made the program difficult for non-readers. Further testing is required in order to identify barriers to the use of multimedia programs among different population groups at different sites, and how effective this medium is in motivating behavior change.

AMC Cancer Research Center Time Warner Interactive Group

Audio Materials

Audio materials rely upon hearing. They are useful when an audience has limited reading and/or visual capabilities. Audio materials are also useful in reaching very busy people, who can listen in their cars or at home during convenient times.

Members of an intended audience can tell you if either audiotapes or radio docudramas would work in their community. Would people listen to an audiotape if one were given to them? Would music get more people to listen? Do people in the community listen to the radio? Would they listen to a health message in radio docudrama format? As always, ask the audience.

Audio Materials					
Туре	Benefits	Limitations			
Audiotapes	 Can be reviewed by listener as often as is needed for full understanding of the message. Does not rely on the printed word or visuals which can be misinterpreted by the intended audience. Can be used in conjunction with workbooks and slides. Can use sound effects to enhance the message. Can use local language, dialects, accents, and references which enhance the listener's ability to identify with the message contained on the tape. Accessible to a large audience because of the prevalence of cassette tape players. Can reinforce a message that was orally communicated to a patient or client by a health professional in the clinic setting. Tells a story and engages audience. 	 Relies upon the match between the speech and language used on the tape and the language skills of the audience. May be "tuned out" by the intended audience if there are no visuals to watch. Requires equipment for production. 			
Radio Docudrama	 Very entertaining. Does not rely on the printed word or visuals to relay a message. Can use local language and slang which help listeners to identify with the message. Can use music to attract attention. 	 Requires commitment on the part of a local radio station to play the docudrama during times that the intended audience is listening. Requires good sound equipment for production. 			

Audiotapes

An audiotape is a dialogue/lesson recorded on a cassette-tape or other easily transported medium that communicates by sound alone.

Audiotapes are increasingly popular among many health educators and health professionals, especially those who seek to reach individu-



als who have difficulty reading or are visually impaired. Depending upon the audience, they can be used in conjunction with a simple booklet or work sheets that encourage the listener to pay close attention to what is being said on the tape. They can also be used in conjunction with talk boards or slides.

Audiotapes, generally in the form of cassettes, rely primarily on the sense of hearing. For this reason, this form of communication may not be appropriate for older people who may have difficulty hearing.

Consider the following when producing audiotapes (Doak, et.al., 1985):

- Dialogue format can be very engaging for the listener.
- Voices used should have a friendly quality, with delivery neither too fast nor too slow.
- Keep the program short 5 to 10 minutes.

- 47>

- Be careful with humor, it can be misinterpreted by the listener.
- Don't use cliches or colloquialisms without testing them with the audience. Regional sayings and cliches can be misinterpreted or taken literally.
- Make sure vocabulary is consistent with that of the intended audience.

Resources or materials needed for production:

- Scriptwriter.
- High quality tape recorder.
- Items for **sound effects** (optional).
- Voices (actors/actresses or "real people").

Audiotapes to Reach Visually Impaired Audiences

The National Cancer Institute's Cancer Information Service worked with the Massachusetts Association for the Blind to record audiotapes of cancer information fact sheets. The audiotapes were designed for people who are blind or visually impaired. The fact sheets are also available in braille. Topics include breast exams, mammograms, Pap tests, and pelvic exams.

National Cancer Institute Cancer Information Service, Massachusetts Association for the Blind

Radio Docudrama

Radio docudramas use radio to deliver health messages in an entertaining manner. They are similar to fotonovelas in that they rely on a good story line to engage the audience. Unlike fotonovelas, they rely exclusively on auditory communication and require no visual or reading ability.

Radio docudramas are effective with audiences that use the radio as a primary source of information. Drafting the script and serving as actors and actresses are roles in which community members can readily become engaged.

Resources or materials needed for production:

- Scriptwriter.
- Actors and actresses.
- Recording equipment.
- **Props** for sound effects, if appropriate.
- Musical score, if appropriate.

- 48 -

Section 5 - Pretesting Materials

Why and When to Pretest

Pretesting can help determine whether the material or strategy is both appropriate and acceptable to the intended audience. Because health behaviors are imbedded in a social culture of beliefs, values, and traditions, it is important to use materials and strategies that are consistent with the cultural norms of the particular community or group of peo-



Using Focus Groups as one method of pretesting.

ple. Pretesting reveals whether a message, material or channel is culturally acceptable.

For these reasons, audience input is important throughout the development of a program and its materials. Pretesting should occur during:

- **concept development:** to determine current behaviors of the intended audience in order to develop concepts.
- **planning and strategy selection:** to evaluate the acceptability of messages, visuals and strategies.
- **draft review:** to determine the appropriateness of the draft materials, outline, or program strategy after "concept" is accepted.
- **comparison:** to decide among several options for materials, visuals, narrative or strategies.
- **final development:** to test the near-complete product before extensive printing or distribution occurs; mock-up versions may be used.

- <u>49</u>

How to Pretest

Interpreting Your Results:

Cultural values, beliefs and behaviors vary among groups within the same community. Care should be taken not to generalize results from one region to another. Many useful evaluation methods, both qualitative and quantitative, exist for pretesting materials and strategies. The larger the group of people that provide pretesting information, the more representative of the whole group the results will be.

A review of some forms of pretesting is found in Table 1. While each has advantages and disadvantages, additional issues regarding the intended audience should be taken into consideration. These issues are:

- **Respondent characteristics**: Some audiences may be less willing to express true thoughts and perceptions in a group or even individually. Plan carefully the number and mix of respondents when considering methods involving group discussions. Also, surveys, questionnaires and interviews should be sensitive to the literacy level and acculturation of the audience. Either duplicate the tests for each specific neighborhood/region, or recruit from these different areas to gather information particular to that region.
- **Logistical arrangements**: In choosing pretesting locations, consider audience comfort, and need for transportation, child care and other daily necessities. Provide reimbursement or incentives to entice respondents to participate when possible.
- **Interviewer/facilitator characteristics**: All interviewers and recruiters should be sensitive to the group's cultural makeup. Ideally, the interviewers and recruiters should be of the same background as the intended audience (e.g., ethnicity, age, income level, gender).

		Т	able 1: Pretesting Metho	ds		_
Characteristics	Readability Testing	Focus Groups	Individual In-depth Interviews	Central Location Intercept Interviews	Theater Testing	Gatekeeper Review
Purpose	Determine reading grade level of text	Obtain insights into perceptions, beliefs, values and learning patterns	In-depth probing of attitudes, beliefs and perceptions	Obtain reactions to concepts and mes- sages from many respondents in short time period	Obtain reactions to concepts and mes- sages from many respondents at one time	Obtain reactions from distributors of materi- als for acceptability and utility
Materials/Strategies to be Pretested	Leaflets, booklets, articles or written text	Visual, audiovisual, print materials, and action-oriented materi- als, message channels, concepts and themes	Message concepts, visual or audiovisual materials, strategies, including sensitive issues	Message concepts, print, broadcast or visual materials	Audio, audiovisual or action-oriented materi- als or strategies	Print, visual or audio- visual materials or strategies
Ideal Number of Respondents	Not applicable	• 8-12 per group • Minimum 4 groups	10-25 respondents	50-200 respondents	50-200 respondents	10-25 respondents
Time Required	15 minutes	4-8 weeks for creating outline, arranging, recruiting, conducting, analyzing and report- ing	4-8 weeks for design- ing survey, arranging, recruiting, conducting, analyzing and report- ing	4-8 weeks to design survey, conduct sur- veys, tabulate, and report	4-6 weeks to design survey, recruit, con- duct test, tabulate and report	4-6 weeks to design surveys, receive self- administered surveys, tabulate and report
Resources Needed	• Readability formula • Trained staff	 Discussion outline Trained moderator Respondents Meeting room, recorder Incentives 	 Survey/ question- naire Trained interviewer Facility, tape recorder Respondents Incentives 	 Structured question- naire Trained interviewers Access to central location frequented by audience Interviewing stations 	 Structured survey Trained facilitator Respondents Theater facility 	 List of potential respondents Short, structured survey
Advantages	• Inexpensive • Quick	 Greater depth of information Information from several respondents at once Directed discussions provide useful information 	 Probe in-depth questions Discuss sensitive issues Good for low- income respondents Can test understand- ing 	 Quick method for large numbers Flexible technique Quick analysis using closed-ended ques- tions 	 Quick method for large numbers Flexible technique More generalizable method Quick analysis using closed-ended ques- tions 	 Inexpensive Provides direction from critical group
Disadvantages	 Does not measure reader's understand- ing Most formulas are not validated for non-English reading populations 	Difficult to generalize May provide only socially desirable answers	 Time-consuming to arrange, conduct, analyze Difficult to generalize 	 Not good for sensi- tive issues Must be short inter- views 	 Not good for sensi- tive issues May respond with socially desirable answers 	• May get low response rate • Not generalizable

51

Adapted from "Pretesting in Health Communications", USHHS, PHS, NIH, 1980; and "Making Health Communication Programs Work" NIH Publication 89.1493

Pretesting Methods in the Development Process

Pretesting must be conducted throughout planning and development. Here are examples of how different methods can be used:

Planning and Strategy Selection

- small scale surveys
- focus groups
- in-depth interviews

Concept Development

- focus groups
- central location intercept interviews
- in-depth interviews

Draft Review

- readability test for print materials and other text
 - central location intercept interviews
 - gatekeeper review

- 52 -

theater testing

Sample Size and Design Considerations

Recommended sample sizes are given in Table 1 for each type of test. However, because some tests are expensive, less formal (and less generalizable) tests may be undertaken that provide a "flavor" of audience perceptions and attitudes. Try to include individuals from different segments of the intended audience (e.g., opposite ends of the age spectrum, working/non-working). While co-workers and peers can provide important feedback, they do not represent the intended audience.

Respondents should include those individuals who would provide a "typical" viewpoint of the target population. Recruit from locations whose members or clientele represent the community. These may include religious organizations or churches; civic groups; small, locally owned businesses; and health organizations or providers that serve the audience. Develop criteria for selecting respondents and discuss the potential for recruiting with each agency.

The following case study illustrates how a state health department used pretesting throughout the materials development process for its breast and cervical cancer program.

Case #3

A state health department has used pretesting in several phases of its Breast and Cervical Cancer Control Program, including the development of marketing strategies for special populations, low-literacy education materials, and program evaluation methods.

During the initial phases, the health department staff developed and piloted approximately 25 different logos representing the project. Logos were pretested in two large inner city communities and one rural community. Respondents in the inner city communities were largely ethnic minority women attending federally funded health clinics, public hospitals, and churches. The respondents from the rural community were almost exclusively white and were receiving services at local health departments. The pretesting included questions regarding aesthetics, ability of the logo to stand alone without accompanying text, and cultural sensitivity. Survey results were compiled, and a logo was chosen to represent the project.

Similar methods were used to pretest educational materials developed by the health department staff, including a low-literacy brochure on mammography for ethnic minority women. In addition, health care professionals and cancer control coalitions pretested materials to ensure that they were medically accurate.

Finally, pretesting was conducted on two questionnaires. Pretesting results were obtained from two groups of economically disadvantaged African American women in two large inner city communities. One group was attending a federally funded health clinic, while the other group was attending a church service. Findings revealed that the questionnaires were comprehensible, addressed key issues, and were culturally sensitive.

Staff involved in the pretesting process encountered several challenges. For example, they received feedback that some logos and materials focused on too narrow an audience, rather than on all medically underserved populations. Other challenges included convincing other staff of the importance of pretesting in the project's overall outcome, and working with other professionals (not directly associated with the project) who were concerned about the demographic inconsistency between the health department staff and the project's target population.

Basic Guidelines for Questionnaire/Discussion Guide Development

When developing an interview questionnaire or focus group discussion guide, plan to measure certain characteristics of the materials, including attractiveness, relevance, persuasiveness, comprehension and acceptance by the community.

Attractive

Are the messages, visuals, colors, and voices appealing to the intended audience? Is the learner able to identify the most important points/messages?

Personally relevant

Are the messages and visuals/demonstrations culturally appropriate and meaningful to the learner? Do the pictures represent how audience members would do something?

Persuasive

Are persuasive arguments given to motivate change in behavior, beliefs, or attitudes among the learners?

Comprehensive

Is the text or narrative written at appropriate literacy levels, in the correct language and dialect? Are the intonation and speed appropriate for the learner's native language? Do visuals or demonstrations clearly depict the message's focus? Does the learner understand the message?

Acceptable

- 54 -

Are the messages believable and credible? Do the people shown look like someone audience members would know?

Summary

Alternative approaches to effective health communications are needed not only to reach low-literate and oral-culture audiences, but also the many individuals that do not obtain health information in a written form. Health educators and health communicators are challenged to develop strategies and design materials that are not only appropriate, but that stimulate thought and behavior change for these audiences. This can be an exciting opportunity in today's diverse world.

Beyond the Brochure was developed to introduce health educators to alternative approaches to reach communities with health messages. Visual, action oriented, audiovisual, audio or some combination of these materials or activities can be creative and effective ways to reach an audience. Using educational methods and forms of communication that are natural for the people that you are working with can greatly enhance the delivery of the health message.

Involving community members in all phases of the program - from development to implementation and evaluation - will help to ensure that the program meets the needs of the intended audience, and that the materials and activities developed are compatible with the community's culture, age, sex, and reading level. Community members can be extremely valuable in pretesting any concepts, materials or activities that are existing or that have been developed specifically for the program. Information obtained from this pretesting will help you in revising or designing health communications that are appropriate for your audience.

Health educators are encouraged to work together with members of their intended audience to develop materials and activities that stimulate learning, are interesting and fun, and motivate individuals to experience new behaviors. Several resources are listed in the back of this guidebook to assist you in selecting the appropriate health education strategies for the communities that you are working with.

- 55



References

Debus, M. (1986). *Handbook for Excellence in Focus Group Research.* Washington, D.C.: Porter/Novelli.

Doak, C.C., Doak, L.G., Root, J.H. (1985). *Teaching Patients With Low Literacy Skills.* Philadelphia, PA: JB Lippincott Company.

Fetter, K.A., Clark, M.H., Murphy, C.J., Walters, J.E. (1987). *Teaching and Learning with Visual Aids.* London, England: Program for International Training in Health, MacMillan Education Ltd.

Freire, P. (1988). Pedagogy of the Oppressed. NY: Continuum.

Gonzalez, V.M., Gonzalez, J.T., Freeman, V., Howard-Pitney, B. (1991). *Health Promotion in Diverse Cultural Communities.* Health Promotion Resource Center, Palo Alto, CA: Stanford Center for Research in Disease Prevention.

Green, L.W., F.M. Lewis (1986). *Measurement and Evaluation in Health Education and Health Promotion.* Palo Alto, CA: Mayfield.

Gustafson, M.B. (1986). "Visual Communication with Haitian Women: A Look at Pictorial Literacy," *Hygiene*.(V):9-13.

Leibtag, S. and Rigby, H. (1989). *Photonovels and Comic Books for Family Planning.* Center for Communication Programs, Population Communication Services, Baltimore, MD: The Johns Hopkins University.

Maxwell, K.B. (1983). *Bemba Myth and Ritual: The Impact of Literacy on an Oral Culture.* New York, NY.

Michielutte, R., Bahnson, J., Dignan, M.B., Schroeder, E.M. (1992). "The Use of Illustrations and Narrative Text Style to Improve Readability of a Health Education Brochure," *Journal of Cancer Education.* 7(3):251-260.

National Institutes of Health. National Cancer Institute. (1994). *Clear and Simple: Developing Effective Materials for Low-Literate Readers.* Washington, D.C.: U.S. Government Printing Office. (In Press).

National Institutes of Health. National Cancer Institute. (1989). *Making Health Communications Work: A Planner's Guide.* Washington, D.C.: U.S. Government Printing Office. NIH Publication No. 89-1493.

National Institutes of Health. (1980). *Pretesting in Health Communications*. Washington, D.C.: U.S. Government Printing Office. NIH Publications No. 81-1493.

Weiss, B.W., Hart, G., McGee, D.L., D'Estelle, S. (1992). "Health Status of Illiterate Adults: Relation Between Literacy And Health Status Among Persons With Low Literacy Skills," *Journal of the American Board of Family Practice.* Vol. 5:257-64.

Werner, D. and Bower, B. (1982). *Helping Health Workers Learn.* Palo Alto, CA: Hesperian Foundation.

White, J.V. (1988). *Graphic Design for the Electronic Age.* NY: Watson-Guptill Publications.

Younger, E. and Haffey, J. (1990). "Problems With Pictures," *People*, 17(2): 22-23.

Zimmerman, M. and Steckel, L. (1985). *Formative Research: Pretesting, Revising, and More Pretesting.* Development Communication Report, Autumn.

- 58 -

Nonprint Health Education Resources

Visual Materials

Flip charts

Hoechst - Roussel Pharmaceuticals, Inc. Route 202-206 P.O. Box 250 Somerville, NJ 08876-1258 (908) 231-2716

Fotonovelas (Photonovelas)

Leventis Photonovel Project Group Corporate Investments Division P.O. Box 159, Iddo House Lagos, Nigeria

Matiella, Matiella, Naegelin and Associates 33 Camarada Rd. Santa Fe, NM 87505 (505) 986-8817

Novela Health Education 1725 San Felipe Rd. Suite #1 Hollister, CA 95023 (408) 637-4798

Novela Health Education 934 East Main St. Stamford, CT 06902 (800) 677-4799.

Novela Health Foundation 2524 16th Ave. South Seattle, WA 98144 (206) 325-9897

- 59 -

The Johns Hopkins Center for Communication Programs Population Communication Services 527 St. Paul Place Baltimore, MD 21202 (410) 659-6300

Posters

American Indian Health Care Association 245 East Sixth St., Suite 499 St. Paul, MN 55101 (612) 293-0233

Talk boards

National Office of the American Red Cross 1709 New York Ave. NW Suite 2D Washington D.C. 20006 (202) 434-4068

Action-Oriented Materials

<u>Games</u>

Ventura County Health Department Health Education Department 3210 Foothill Rd. Ventura, California 93003 (805) 652-6503

<u>Songs</u>

Johanna's On Call to Mend Esteem 199 New Scotland Ave. Albany, NY 12208 (518) 482-4178

Theater

Illusion Theater 528 Hennepin Ave., Suite 704 Minneapolis, MN 55403 (612) 339-4944

- 60 -

"Sister Girl" Performance Art on Surviving Breast Cancer 2244 Live Oak Dr. East Los Angeles, CA 90068 (213) 469-0010

Audiovisual Materials

Audiotapes

The Conwood Group, Inc. 9 Mt. Pleasant Turnpike Denville, NJ 07834 (201) 361-1882

Interactive Videos

Adult Education Literacy Program 210 Lincoln Street Boston, MA 02111 (617) 482-9485

Agricultural Extension Service USDA Room 3444South Washington, D.C. 20250-0900 (202) 720-4124

AMC Cancer Research Center 1600 Pierce Street Denver, CO 80214 (303) 233-6501

Interactive Knowledge, Inc. P.O. Box 560865 Charlotte, NC 28256 (704) 549-9646

Macro International, Inc. 8630 Fenton St. Silver Spring, MD 20910 (301) 585-3180

- 61 -

National Cancer Institute 9000 Rockville Pike EPN #233 Bethesda, MD 20892 (301) 496-6667

University of North Carolina/Chapel Hill School of Public Health Health Communications Research Lab 246 Chase Hall CB# 7505 Chapel Hill, NC 27599-7505 (919) 966-3907

Lucille Parker Markey Cancer Center University of Kentucky Cancer Center 800 Rose Lexington, KY 40536-0093 (606) 257-5323

<u>Videotapes</u>

American Cancer Society Georgia Division 46 5th St. Atlanta, GA 30308 (404) 892-0026

American Indian Health Care Association 245 East Sixth St., Suite 499 St. Paul, MN, 55101 (612) 293-0233

Cancer Prevention Research Unit University of California/Los Angeles 1100 Glendon Ave. Suite 711 Los Angeles, CA 90024 (310) 825-3181

- 62 -

Columbia University Social Work Department 622 West 113th St. #712 New York, NY 10025-7982 Community University Health Care Center 2001 Bloomington Ave., South Minneapolis, MN 55404 (612) 627-4774

Good Samaritan Center 1600 S. Saltillo San Antonio, TX 78207 (210) 434-5531

Haitian Women's Program and the American Friends Service Committee 15 Rutherford Place New York, NY 10003 (212) 598-0972

Health Promotion Council of Southeastern Pennsylvania, Inc. 311 S. Juniper St., Room 304 Philadelphia, PA 19103 (215) 546-1276

Khmer Health Advocates, Inc. 545 Prospect Ave. West Hartford, CT 06105 (203) 233-0313

Ministry of Health, Ontario Canada 3rd Floor 15 Overlea Blvd. Toronto, Canada M4H 1A9 (416) 327-8797

Minnesota Department of Health P.O. Box 9441 Minneapolis, MN 55440-9272 (612) 339-7175

Native American Research Training Center University of Arizona/Tucson 1642 E. Helen Tucson, AZ 85715 (602) 621-5075

North Carolina Pharmaceutical Association P.O. Box 151 Chapel Hill, NC 27514-0151 (919) 967-2237

- 63 -

Philadelphia Department of Health Maternal and Infant Health 500 S. Broad St. Philadelphia, PA 11947 (215) 875-5927

UCLA Jonsson Comprehensive Cancer Center 1100 Glendon Ave. Suite 711 Los Angeles, CA 90024 (310) 825-3181

Division Of Internal Medicine University of California/San Francisco 74 New Montgomery, Suite 600 San Francisco, CA 94105

Lucille Parker Markey Cancer Center University of Kentucky Cancer Center 800 Rose St. Lexington, KY 40536-0093 (606) 257-5323

- 64 -

Interviewees

When conducting the background research for **Beyond the Brochure**, we found that little was written regarding the use of nonprint health education materials and strategies. Most of the information obtained for the content of this guidebook was obtained through telephone interviews. AMC Cancer Research Center deeply appreciates the information provided by persons at the following agencies for the development of this book.

- Agricultural Extension National Office
- American Cancer Society National Office
- American Cancer Society Georgia Division
- American Dietetic Association
- American Indian Health Care Association
- American Red Cross Mile High Chapter
- American Red Cross National Office
- California Department of Health, Office of Cancer Prevention and Control
- California Department of Health, Tobacco Control Program
- CDC, Division of Cancer Prevention & Control
- Cancer Information Service of Kentucky
- Colorado Action for Healthy People
- Columbia University
- Cooperative Extension Services/Colorado State University
- Cooperative Extension Services/University of California at Berkeley
- Cooperative Extension Services/University of California at Davis
- Cooperative Extension Services/University of California at Oakland.
- ETR Associates
- Good Samaritan Center of San Antonio
- Health Promotion Council of Southeastern Pennsylvania, Inc.
- Hoechst-Roussel Pharmaceuticals, Inc.
- Interactive Knowledge, Inc.
- Illusion Theater Company
- Johanna's On Call to Mend Esteem
- Khmer Health Advocates, Inc.
- Macro International, Inc.
- Maine Bureau of Health

- Matellia, Matellia, Naegelin and Associates
- Monterey County Department of Health
- National Cancer Institute
- North Carolina Pharmaceutical Association
- North Dakota State Department of Health
- Ontario Public Health Association
- Patient Learning Associates
- Philadelphia Department of Health
- Prospect Associates
- San Francisco Department of Public Health
- Southwest Border Rural Health Research
- The Conwood Group
- The Johns Hopkins Center for Communication Programs Population Communication Services
- University of California Los Angeles, Cancer Prevention Unit
- University of California San Francisco
- University of Kentucky Cancer Program

- 66 -

American Cancer Society. (1990). *Simply Stated: National Guidelines for Adapting Public Education Materials for Targeting Disadvantaged Audiences*. Atlanta, GA, American Cancer Society Publication No. 90-5C-No.2450.

California Department of Health Services Tobacco Control Section. (1991). *Guidebook to Effective Materials Development for Health Education*. Tobacco Education Clearinghouse of California.

DeSantis, L., Thomas, J. "Health Education and the Immigrant Haitian Mother: Cultural Insights for Community Health Nurses". *Public Health Nursing*. 9(2): 87-96.

Dunn, R. (1988). "Capitalizing on Student's Perceptual Strengths to Ensure Literacy While Engaging in Conventional Lecture/Discussion". *Reading Psychology: An International Quarterly.* 9:431-453.

Educational Testing Service. (1993). *Adult Literacy in America: A First look at the Results of the National Adult Literacy Survey.* Office of Educational Research and Improvement, US Department of Education.

Estes, T.H., Gutman, C.J., Harrison, E.K. (1988). "Cultural Literacy: What Every Educator Needs to Know". *Educational Leadership.* September 14-17.

Fishman, A.R. (1992). "Ethnography and Literacy: Learning in Context". *Topics in Language Disorders.* 12(3)67-75.

Gretes, J.A., Songer, T. (1989). "Validation of the Learning Style Survey: An Interactive Videodisc Instrument". *Educational and Psychological Measurement.* 49: 235-241.

Healthy Mothers, Healthy Babies National Coalition. (1982). *A Compendium of Program Ideas for Serving Low-Income Women.* Washington D.C.: Department of Health and Human Services, U.S. Public Health Service, Health Resources and Services Administration.

Hosey, G.M., Freeman, W.L., Stracqualursi, F., Gohdes, D. (1990). "Designing and Evaluating Diabetes Education Materials for American Indians". *The Diabetes Educator*. 16(5):407-414.

Landrine, H., Klonoff, E.A., Brown-Collins, A. (1992). "Cultural Diversity and Methodology in Feminist Psychology: Critique, Proposal, Empirical Example". *Psychology of Women Quarterly.* 16: 145-163. Martiella, A.C. (ed) (1990). *Getting the Word Out: A Practical Guide to AIDS Materials Development.* Santa Cruz, CA: Network Publications.

Nitzke, S. (1989). "Improving the Effectiveness of Nutrition Education Materials for Low-Literacy Clients". *Nutrition Today.* September/ October 17-23.

Nitzke, S., Shaw, A. (1986). "Developing Materials for Low-Income Low-Literacy Audiences". *Journal of Nutrition Education*. 18(5): 226B-226.

Northcutt, N., Selz, N., Shelton, E., Nyer, L., Hickok, D., Humble, M. (1975). *Adult Functional Competency: A Summary*. The University of Texas at Austin, Division of Extension.

Ontario Public Health Association. (1989). *Literacy and Health Project, Phase One: Making the World Healthier and Safer for People Who Can't Read*. Toronto, Ontario, Canada: Frontier College.

Partridge, S. (1989). *Consideration of Adults' Learning Styles and Lifestyles for Better Literacy Programs: A Discussion*. Washington D.C.: U.S. Department of Education, Office of Educational Research and Improvement.

Smith, S.B., Alford, B.J. (1988). "Literate and Semi-Literate Audiences: Tips for Effective Teaching". *Journal of Nutrition Education.* 20:238B-238C.

Tessmer, M. (1990). "Environment Analysis: A Neglected Stage of Instructional Design". *Educational Technology Research and Development.* 38(1): 55-64.

Weiss, B.W., Hart, G., McGee, D.L., D'Estelle, S. (1992). "*Health Status of Illiterate Adults: Relation Between Literacy & Health Status Among Persons With Loww Literacy Skills.*" J Am Board Fam. Pract. May/June 5(3): 257-264.

Zimmerman, M. and Haffey, J. (1983). "Simple But Not Easy". *Diarrhoea Dialogue*. 14:6.

Zimmerman, M., Newton, N., Frumin, L., Wittet, S. (1989). *Developing Health and Family Planning Print Materials for Low-Literate Audiences: A Guide.* Washington DC: Program For Appropriate Technology In Health.

Zimmerman, M., Steckel, L., Bashir, I. A. (1986). "Developing Visual Communications Material: Learning From the Target Population". *NCIH News.* Spring.

- 68 -

Comment Form

6

AMC Cancer Research Center would greatly appreciate any comments or suggestions you have about **Beyond the Brochure**. These suggestions will be used in the preparation of future documents.

- 1. Which sections of the guidebook did you find helpful? (check all that apply)
 - □ Section 1: Getting to Know the Audience and Visa Versa
 - □ Section 2: Involving the Audience
 - □ Section 3: Adapting Existing Materials
 - □ Section 4: Developing Original Materials
 - □ Section 5: Pretesting Materials
- 2. How have you used this guidebook? (check all that apply)
 - Personal Reference
 - □ Student Instruction
 - □ Staff Development
 - □ Library Resource
 - □ Community Training Resource
 - □ Other (please Specify)
- 3. How might this guidebook be improved?
- 4. What is your job title?
- 5. Where are you employed?
 - Federal Agency
 - □ State Agency/Health Department
 - □ Local Agency/Health Department
 - □ Community-Based Agency
 - □ Other (please specify)

Thank You.

Please return to: Cathy Coyne, MPH AMC Cancer Research Center 1600 Pierce Street Denver, Colorado 80214

- 69

____71____

_____72____

_____73____

____74____