**L I T E R A C Y B R I D G E ‘ S**

**Talking Book**

**B E S T P R A C T I C E S G U I D E**



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# Before You Begin

Literacy Bridge has conducted extensive research in developing the Talking Book, and we hope the following information will maximize the benefits for all users. This summary is primarily intended for program planners and trainers; we welcome your comments at [info@literacybridge.org](mailto:info@literacybridge.org)

The purpose of the Talking Book is to make knowledge accessible to all, especially people who do not read or write easily, and who lack reliable electric power sources. It’s a tool than anyone can use, regardless of experience with technology.

This guide is about the process of localizing a Talking Book’s audio instructions to a new language and creating content that achieves the desired outcomes for end users. If you would like to receive relevant research in the field of technology, communication and education for development, please email [info@literacybridge.org](mailto:info@literacybridge.org)

It is important to note that having the ability to read this may make it difficult to fully understand how differently nonreaders think and learn. Because persons without literacy rely on memory and how things are normally used, some new words, including category names, may confuse users who don’t read.

Literacy Bridge’s Best Practices Guide focuses on engaging end users to create, adapt and test information for the Talking Book. This Guide is based on the principles of using familiar people and stories to garner the attention and respect of the Talking Book target populations, so they can achieve positive results.

# Localizing the Audio Instructions

The audio instructions are the first thing you hear when using the Talking Book. Therefore, it’s important that the user can easily understand the words and voices used in the recordings. Before you start the process, please consider what languages, dialects, pacing and vocabulary are most appropriate.

* **Dialect**. It will be easiest for Talking Book users to follow the audio instructions and learn how to use the device if the instructions are recorded by someone from the immediate village (with the exact same dialect). This is also true for the messages in each category.

In rural, remote areas where people do not often hear a variety of dialects, a different accent or new words may cause confusion, making it difficult for a person to follow the audio.

* **Gender of the narrator**. A woman’s voice is easier for many people to understand because the higher pitch is more clear and crisp. If male voices are used in the audio instructions, be aware that the lower tones may sound raspy when recorded and can be harder to understand.
* **Speed**. The audio instructions should be spoken slowly and clearly, with brief pauses that enable users to think. Slower speech allows new Talking Book users to guess the definition of unfamiliar words and it helps them follow the audio instructions (especially when in a different dialect) more easily.
* **Number and type of categories**. Because oral people do not categorize information in the same ways as literate people, please choose category titles that apply to situations that are common for the target users. We suggest limiting the number of categories to simplify use of the Talking Book. Additonal categories can be added later (see Literacy Bridge’s Talking Book User Manual).
* **Buttons**. The ten buttons have simple icons, but finding the right word to refer to each button takes effort, depending on the language. Here are a few alternative explanations:
  + Up and Down arrows: refer to the earth for down and sky for up
  + Play/Pause: the center button; the two sticks
  + Plus: the cross (esp. useful in Christian areas, but obviously not a good comparison in other areas)
  + Minus: the stick below the cross
  + Selection button: the black circle
  + Asterisk: the star

**Technical considerations when recording:**

* + **Find a Quiet Place.** Background noises are distracting.
  + **External Microphone**. Literacy Bridge recommends plugging a small, inexpensive external microphone into the jack (1/8”/2.5mm) on the left side of the Talking Book -- near the internal microphone, which may not record as clearly.
  + **Speak Across the Microphone**. When using any microphone, speak across the front of the microphone instead of directly into it. This is especially important with “P” and “S” sounds that can become distorted or distracting. Please listen to every message after recording to avoid this and other common mistakes.
  + **Speak Immediately**. Start speaking immediately after the beep and the red light turning on. This is very important because the recording must play when a user presses a button on the Talking Book. If you delay speaking, the resulting silence may confuse a Talking Book user.

# Creating Messages on the talking book

* **Speak immediately after the beep and the red light turning on.** Read the section above.
  + If you are interrupted during the recording of a message, you can pause while you are recording without affecting the content. by pressing the middle button. When you press it again, the Talking Book continues recording from the exact same place, without any noticable difference.
* **Record messages with a conversational tone**. A person who typically speaks/delivers the information to others should record the messages. It’s best if this person is part of the target community. Good recordings sound like a conversation with a friend, not presented in a formal lecture, or reading from a book.
  + People who don’t have literacy only use familiar words and phrases, so even one new word can confuse a Talking Book user. This is why Literacy Bridge suggests that local people record the messages in their own words.
* **Keep messages fairly short**. Brief, clear messages on a single topic have been more effective than longer messages. We recommend that messages be shorter than 10 minutes – sometimes, 5 minutes can be too long for listeners, depending on the topic. For example, consider breaking up a 20 minute message into 4 or 5 parts.
* **Consider including a personal introduction with each message**. People in oral cultures pay close attention to who is giving the information they hear. Introducing yourself at the beginning of messages with your name, your position, and where you are from, may help the Talking Book users to trust the recorded information more.
* **Incorporate peer testimonials**. A Talking Book user may trust the information in the messages more when a peer of the user speaks about the usefulness of the message.
  + **Oral people often want to know the source of the information they hear**. For example, when farmers demonstrate agricultural best practices, listeners may want to know what is the farmer’s name, and which village she or he is from.
* **Make sure the information in messages relates to common local experiences, and use specific examples**. Lists of things people should do are not as effective as describing a local person who faces that particular situation. For instance, instructing mothers to continue breastfeeding when their babies have diarrhea, would be most persuasive in a story about specific characters with names that people recognize from their own culture. Using local stories and examples may help people remember the information so they can use what they learn from the Talking Book.
* **Use simple phrases to connect parts of the story or message** Oral people use “and,” “or,” “so” when speaking. People with literacy may use words like, “while,” “although,” “since,” that could confuse users of the Talking Book.
* **Consider repeating concepts that you want to make sure users hear – even a few times within the same message.** The Talking Book is designed to enable users to replay information because redundancy is an important part of oral communication. Even within a single message, you can emphasize key points by saying them again.
* **Consider creating dramatic and entertaining messages**. Drama and games may keep Talking Book users interested in the message. In addition, remember that rhythm helps people retain what they’ve heard. It is not necessary to create an entire song. Using rhymes and alliteration (words that all begin with the same sound) helps oral users to remember and understand.
* **Remember the differences between written and oral messages**. Recorded messages that are meant for people with literacy may not be effective for oral cultures. The above practices will help you organize and present information in a way that everyone can understand clearly.

# TRAINING

## What affects a person’s ability to learn how to use the Talking Book?

Literacy Bridge research shows that the following may impact the time it takes a new Talking Book user to learn how to use the device:

* **Age**. Children typically learn how to use the Talking Book most quickly and they require less instruction, while the elderly need more instruction—particularly for those who have little to no access to other technology.
* **Schooling / literacy level**. It is generally easier for those with more schooling and literacy skills to learn compared to those without either.
* **Access to technology**. People who have access to, or who have used mobile phones, tape players, video games, etc, may learn more easily.
* **Eagerness / desire to learn**. A person’s desire to learn or excitement about the Talking Book can have a positive influence on their persistence in learning. A person’s eagerness can be influenced by the following:
  + **The content on the device**. The information on the Talking Book will play a crucial role. If the information is valuable, a person may be more likely to persist in learning. Also, having voices on the Talking Book that sound familiar, especially to elders, may increase interest.
  + **The project that brings the Talking Books**. If a person wants to be part of the program itself, and the Talking Book is a requirement, the user may be more excited to learn.
  + **Technology**. Some people are eager to use any new gadget, and that’s why they are interested in the Talking Book.
  + **Peers**. Seeing someone else use the Talking Book can make a person want to use it him or herself. Sometimes, a person may believe the Talking Book is only for a particular group, but it is designed for ages, genders, and social classes.
  + **Age**. If adults see children using the device too much, they might see it as juvenile, which will make them less interested in learning to use it.
* **Confidence**. Those who are less confident in their own ability or who are intimidated by the Talking Book will struggle more.
* **Repetition**. Like with all new technology, using the Talking Book over time will help make the operation more concrete in someone’s mind. Illiterate people may forget some of what they have learned the next day, and repeating the same instruction will help.
* **Training**. A good training program can overcome any obstacles to easy use of the Talking Book. People with little access to technology, low confidence, who are older in age quickly become Talking Book users.

## Who should train new users?

Consider the following when selecting people to serve as Talking Book trainers:

* **Rapport**. Trainers who have connections with communities and who are experienced in teaching specific user groups will be most effective.
* **Gender**. Respect the local population and traditions, and consider the benefits of having women training women as you choose trainers.
* **Age**. We have seen that some adults feel intimidated or discouraged if the Talking Book trainer is younger than the trainees.
* **Patience**. Trainers need to be patient both 1) when conducting a single training session -- it will be necessary to consistently repeat instructions to help users learn, and 2) on an ongoing basis because users will forget all or a portion of what they learned the previous day. Studies show that oral people learn more by practicing than by being told. If they can help others (with a trainer’s supervision), that also helps them learn.
* **Higher literacy level**. It may be convenient to have people with some education serve as trainers. However, it is also important to use trainers who have lower literacy levels -- they help prove to new users that it’s possible learn to use the Talking Book.
* **Train the trainer**. Each trainer should have the benefit of instruction on the basic steps to follow as well as the concepts that trainers need to explain to the new users they teach.

# Conducting Usability Tests

## Before you begin

### Understand the process

The Talking Book is being tested, not the users. Usability tests show how Talking Book features work for different users.

This process can be simplified to confirm that the names of the buttons on the Talking Book, and the audio instructions are clear to different users.

Usability tests include some basic training, and are conducted by a moderator (who is a a trainer, or familiar with the Talking Book), who is there to observe users and help in a friendly manner, free of judgment or prior expectations. There may also be a notetaker to record exactly what the users say (in local language) and do during the session.

### Define what you intend to learn from the user tests.

Usability is training users and observing how quickly they learn and where they get stuck. You may observe:

* How to improve audio instructions
* How to train new users most effectively
* How to improve the messages on the Talking Book

### Decide whom to test

Use the demographics of your target population to determine whom you would like to study. Ideally, usability tests include people with diverse attributes: gender, age, familiarity with technology, and proximity to a city (urban vs. rural villages). The tests may be done with several people, but not at one time.

The Talking Book may not be familiar, but the users probably have experience with similar devices, and it’s important that they feel comfortable. Be sure to emphasize that the Talking Book is meant to help them share knowledge easily, without any pressure, even in new situations.

### Find a moderator and note takers

* Persons who know the culture and community well are best as moderators and notetakers for usability tests. They should also understand why the Talking Book is valuable.
* We recommend:
  + Keeping the session informal so new Talking Book users feel comfortable.
  + The moderator (and notetaker) speak the local dialect and participate for the entire session
  + Having female staff if/when there are female users—preferablly, the moderator would also be female.
* Notetakers should write down:
  + Verbatim quotes of users’ stated thoughts and feelings.
  + Their observations about what the users struggle with (to prompt everyone’s memories later)
  + Their ideas about why users struggle
  + Ideas they have for how to improve the device.

## Running the usability test session

1. The moderator introduces the session and helps the participants understand the process:
   1. Show the Talking Book to participants and ask how many have seen it or used it before.
   2. Briefly explain that the Talking Book is to help them easily share important information and they can help to improve it by participating.

**Note**: The moderator should be as casual and informal as possible to help the participants avoid “performance anxiety”. When users are unable to complete a task or when they struggle, use positive and encouraging phrases to make them feel at ease. “A lot of people have struggled with the same thing”. The key here is having users feel at ease. If a user is struggling, the moderator may decide to continue to the next step without criticizing someone for not fully understanding.

1. Explain what the Talking Book is and is not, and how it differs from other devices users may have. Tell a story that illustrates specifically how the Talking Book helped people in a similar village. Instead of saying “the Talking Book is for health information when you need it,” say that a traditional birth attendant used the Talking Book to make sure that a pregnant woman who was frightened about losing her baby cared for herself in her seventh month. If possible, use an example of a situation that local people remember as a problem. People will see the need for the Talking Book when they hear stories like:

* A person who was affected by an illness that no one knew how to cure
* A recent h1n1 outbreak of swine flu among animals
* Someone who had seen a doctor and was expected to remember when and how to take different pills and medicines
* Farmers who had problems recalling all of the detailed instructions for their different kinds of crops.

1. Let the users describe their first impression as they hold/touch the Talking Book
2. Show the user(s) all of the buttons and interact with them. Ask questions like: “What do you think this button looks like? Do the buttons resemble anything you know?” to keep them engaged.
3. Before playing Talking Book messages, let users know that there are X categories they can select. Discuss the categories and explain the types of information within each and why/when it may be useful. Have each user speak the category names out loud, and explain their own words what type of information is in each.
4. Start the Talking Book and explain the buttons based on what the audio instructions say.
5. Explain the use of the home button. If possible, give a hint of how users can remember what it is for “You live at home so whenever you are not sure, you should press home.”
6. Show the users every step to find and listen to a recording. This is a good time to repeat an explanation of the categories (5. above), when each one is playing. Repeat the task several times, listening to the instructions, and noting each step. Each time the moderator presses a button, she or he explains why that button was pressed. The moderator may pause and ask the users to decide which button to press next.
7. After the procedure for listening to a recording has been communicated, ask one person to be the focal point and complete the task in front of the others. This way, the other group participants can watch and learn. Ask each user to find a recording in one of the categories; making sure that the next message to locate is in a different category than the one that just played. This will help users to understand the concept of the task, instead of just memorizing the button press order.

Note: As users perform the tasks themselves, watch and observe more, and talk less. Let them struggle briefly with a task, and allow the other users to help if they can. Please be sure to wait before offering more instruction. If it’s clear users need help, prompt them with hints. Notice how the other users explain or give instructions – the moderator may learn better ways of describing things next time. Pay attention to reasons WHY the user is struggling and take notes -- this may help improve the audio instructions. It might be helpful to ask the user why he or she did something. Give the users as much instruction as they need (tailored in whatever way seems to work the best for them) until they complete the task.

1. After your first user completes (successfully) the task of finding a recording, have another person try to find another message in a different category. Repeat until everyone in the group has had a chance (as time allows).
2. The moderator then asks for the users’ attention to teach them how to record a message of their own, and how to change categories (when one category is playing, press home first, and move to another). Go through each step of how to make a recording, then go home, then return to the category to retrieve the newly recorded message.
3. Choose a different user to be the focal point and record her or his message, then go home, and back to the category to listen to the message. Again, have each person complete the recording and playback.

## Concluding the usability test session

1. The moderator thanks the users for their time. If the project does not already have information about the users, it is useful to collect basic demographic information. For example:

* 1. Name:
  2. Age:
  3. Years of schooling (if appropriate—omit this if it would embarrass users)
  4. Occupation (If a farmer, do they do any off farm activities?)
  5. Technology use and access:
     1. Do they own a radio? Do they ever use a radio? How often? Daily, weekly, monthly, rarely, never
     2. Do they own a cell phone? Do they ever use a cell phone? How often? Daily, weekly, monthly, rarely, never
  6. Gender:

1. If possible, we recommend that the Talking Books be left with the users after they’ve received the training on specific tasks. The moderator or project staff may wish to observe the users as they practice with the Talking Books independently—it may be that new Talking Book users actually learn more quickly on their own and/or from instruction given by a friend/family member.

* The decision to leave the Talking Books with users should be consistent with the program policies. If users will be allowed to take da evice home later, then let them take it home for the evening and return it in the morning. If users will only learn at a specific place, let them practice freely there -- on their own for some time so they are under less pressure. In our experience, illiterate users may forget some of what they have learned the previous day or week, and the amount of repetition required to remember may vary among user groups.

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## Debrief

After training and observing, discuss the following questions with all who were present:

* Audio instructions
  + What tasks did most users have the most difficultly completing? Which tasks did they catch on more quickly?
  + Which buttons were most difficult for users to locate?
  + How could the audio instructions be modified to make it easier for users?
  + How could the buttons be described differently to make it clearer?
* Messages
  + What did users think of any of the messages they heard? What lessons can you glean about how the messages could be improved?
* Training
  + What did you learn about effective training? Which ways of explaining tasks or processes seemed to work best, and why? How did the users teach each other—was there anything to apply to future sessions?
  + What about the entire training session—from the length, to the area you chose, and the people you taught. What changes, if any, should be made?