A simple step-by-step procedure for making individual tapes for primary-school children is outlined. Sample scripts of "Teaching the Letter 'A'", "The Five Little Pigs," "Ears To Hear," and "A Tongue To Taste" are included. Behavioral objectives and materials needed for each tape also are given. Pitfalls in tape construction and methods for making better use of tapes are highlighted. (SK)
The Basics

The Basic Needs of Primary Children
Lynn, a remedial reading student, had just finished listening to a tape made by her special reading teacher and said, "You know, when I listen to a tape made by Miss Eberle, I feel just like she is setting there beside me. This is an important cue to take from a youngster in these busy days. More teachers want to personalize their teaching, but aren't aware of techniques for doing so. Learning to make tapes permits you to permeate throughout the room at all times.

Some of you may say, "But my voice is terrible on tape!" Your voice might not be the best quality for a radio announcer but the youngsters are accustomed to it, and it is that voice that gives them assurance, reinforcement, and encouragement. Tapes made by you have a special charm for your youngsters that cannot be duplicated by professional tape makers.

**Steps to Follow in Making Personalized Tapes**

In working with hundreds of teachers in institutes on Individualizing Instruction, I have found that a few guidelines are helpful in writing the script and making the tape. This monograph has been written to present some helpful hints.

**Tape Should Teach Just One Concept**

Educators often attempt to crowd too many concepts into one teaching tape. It is profitable to list skills to be taught in one academic area and then list concepts. Each tape should then be built around one concept. A good example is presented in the Script "Teaching the Small 'a'" by Dianna Shallenburger. (Page 7 of this monograph).

**Gathering Information About the Concepts**

Since some of the tapes you make will be for enrichment, more information than that contained in textbooks will be included. After researching the topic, put the information into two categories.

1. What the student needs to know about the concept.
2. What is beneficial for the student to know about the concept.
The general information available is increasing so rapidly it is impossible to know all, therefore, it is important for the teacher to be aware of these two categories. As the children become experienced, they will be able to select the basic from the enrichment information.

Tapes may be made to fulfill the needs of different abilities by designing an interlude of music or telling a joke to break the different levels of learning. Do not label or inform the students that Group A should listen to only the first 3 minutes of the tape because they are not ready for the information which follows. If students are left alone, they will seek their own saturation level and stop listening after the initial concept is taught or continue for more advanced information.

**Writing the Script**

Even though most teachers are quite verbal and feel it is unnecessary to write the script before taping, educators have learned it is time well spent. The concept to be learned is stated first, then a list of the materials to be used with the tape is given. Follow this with the body of the lesson.

**Directions Should State What Is To Be Learned**

At the beginning the teacher should state what the student will learn. This is especially necessary for the primary grades, as the students are geared for instant action and instant learning. They cannot wait 5 minutes to discover "air has pressure," they want to know now.

Encourage the students to listen to the complete instructions before beginning their activity. On the first tapes it might be necessary to check to ensure students understand the directions. Restating them in a different way and using a different vocabulary makes this easy. Often when pupils don't understand the directions, it may be a comprehension problem instead of a listening problem. Indicate at the beginning of the tape whether the activity is an individual, small group, or a large group activity.

It will be necessary for the students to return all materials to their proper place. Some teachers list the materials on the box containing the tape so the students may check the contents before they start and again when the task is finished.
Proofing the Script

To save hours of taping an unsatisfactory script, it is wise to have a friend or colleague read the script. If no adult is conveniently present, have several students read and react to it—or work through the activity.

Recording the Script

The recording should be done in a quiet area and provision made for two 20-minute practice sessions before recording. Most teachers are never satisfied with the finished product, but improvement is made through practicing. Allow for two 30-minute recording sessions. To do the best recording:

- Place the mike in a stationary position
- Speak slowly and clearly,
- Lower your voice for a better quality
- Stay at least 6-10 inches away from the mike.
- Avoid turning the pages of the script by placing the pages consecutively in front of you.
- Don’t let the background music overpower your speaking voice
- Keep the volume on the recorder at midpoint setting. This permits more volume when playing the tape.
- Let the tape run for 10 seconds before recording—this will supply ample lead.
- Try a section and see if the tape is of good quality.

Keep a Copy of the Script

After the script is completed and recorded, keep a copy of the script in a catalogued system. This is valuable if the tape is erased or fails to function mechanically.
Pitfalls in Tape Construction

Several factors can contribute to the lack of effectiveness of a tape. If you find the students fail to master the concept after you have written the script and made the tape, it might be because:

- There might not be proper introductory information on the use of tapes.
- There are too many concepts.
- There are not enough activities for the students or not enough interaction with 1 or 2 other students.
- The directions are not clearly stated or are too long and too involved.
- The tape has a slow beginning. Teachers have found the first minute is the most important part of the tape. Some teachers have found an introduction of contemporary music will set the stage for learning and catch the student's interest.
- The labels on the tapes are not easily identified by students. They should be labeled so they can be returned to the proper place if misplaced.

Tapes Are Not Ideal for All Students

Educators spend much time trying to find the way to teach children as though there is only one way. Tapes are not suitable for all youngsters. For some students, who read extremely fast, the tape is frustrating because it does not move fast enough. For some children, who cannot concentrate for any length of time, it is difficult to settle long enough to get value from the tape.

Tips on Making Better Use of Tapes

For small children record the same script on both sides of the tape. This will be less of a mechanical problem for them. For older children put one script for one subject on one side and another script for another subject on the other side. Perhaps a different unit of work may be recorded on the other side. This saves tapes. It is wise to make only a few tapes at first and use them in the classroom to get feedback information. If the teacher creates the proper room environment students will be honest in their evaluations.
You have been presented the techniques of writing an educational script and recording it. However, many teachers find it helpful to study some of the prepared scripts that have been successfully used in the classroom. The following examples have been time and student tested by former members of Individualized Instruction Classes.
Teaching the Letter “a”

Diana Shallenburger, a teacher at the University Laboratory School, has found some students need additional help in learning to make the small “a”. In a regular classroom the teacher has willing hands—but not enough, so uses the personalized tape and an activity package to lend the personalized touch.

Objectives—
1. The child will be able to put a circle around the small “a” when it is found in a group of five letters.
2. The child will be able to write the small “a” in the correct manner.

Hello—Today we are going to meet the little “a.” “A” is the first letter of the alphabet? There is a big “A” and a little “a.”

To find out all about the little “a” you will need the package with the red letter on front of it. Turn off the recorder while you find the package. Turn it back on when you have it in front of you. Turn me off now.

Do you have the right package? Does it have a red letter on front? This is the little “a”.

Here is a rhyme about the little “a”.
(1) Snipple, snapple
    Round as an apple
(2) Pich, tich
    Make a stich

This rhyme is telling you how the “a” is made. First you make a circle that is round as an apple, then you make a line straight as a stich. Can you see the circle and the stich when you look at the red “a”?

Now open the package and put everything out in front of you. Turn off the recorder while you are doing this. When you are finished turn it back on again. Now turn me off.

Put the two little cards with the red circles on the corner in front of you. Put everything else over to one side. Do this now. (Pause).

On both of these cards you will see the little “a.” Look first at the letter made with yarn. There is a black dot at the top of the “a.” Put your finger on the “a” by the black dot. Remember the rhyme—
(1) Snipple, snapple
    Round as an apple

Now move your finger in the same way the arrow is going and make a circle. (Pause).

When you have finished, pick up your finger. Now we will make the straight line. Remember the end of the rhyme
(2) Pich, tich
    Make a stich
Put your finger at the top of the line. Move your finger down. See the way the arrow is going. (Pause).

Now make the "a" again. First the circle and then the line. (Pause). Did you go the same way the arrows go? Good.

Now touch the letter made of sand. Move your finger over the circle first, (Pause) and then go over the line (Pause). Make the "a" again. (Pause). Did you remember to watch the arrows? That is very good!

Now put these cards to the side and find the long card that has a red star in the corner. Also find the red crayon. (Pause)

Do you have the right card? Does it have a red star on it? That's right!
There is a little "a" on the card. Take the crayon and write over the "a" on the card. Remember, the circle first and then the line. (Pause).

Now make the "a" all by yourself. Make your "a" on the line beside the "a" (Pause). Have you made your letter? Does your letter look like the first letter? Very good!

Now make two more "a"'s on the line. When you are finished, show your letters to the teacher. After she has seen your letters, wipe your letters off the card and put everything back in the package.

Please rewind. Now you may turn me off. Good-bye.
This Little Pig

The following tape was written and used by Jolene Schulz, Missouri Title III State Facilitator, with her kindergarten classes. The purpose was to get the students to put pictures in sequence. She started the activities with sequencing two pictures and built it up to 22 pictures. I have chosen "This Little Pig" which sequences five pictures for you.

After the completion of this packet, the child should be able to:
1. Listen to the rhyme.
2. Point to the pictures while the rhyme is being said.
3. Say the rhyme with the tape.
4. Sequence five pictures on the numbered cardboard.
5. Draw a picture of the rhyme.
6. Tell the story on the tape.
7. Play the tape back and listen to the rhyme.

Five Little Pigs

Hello Boys and Girls. . . . It's time for Mother Goose again, and I've got a nursery rhyme about the 5 little pigs. I bet you know all about the 5 little pigs.

Well, let's take everything out of the folder and put it on the table in front of us and just see what these little pigs are going to do . . . (pause)

Have you got everything out? Look again just to make sure . . . (pause) . . . Good!

I want you to get the green cardboard that has the pictures of the 5 pigs pasted on it and put it in front of you . . . (pause) . . .

Move the other things away from you . . . (pause) . . .

Can you listen and point to each picture while I say the rhyme for you?

Here we go . . .

This little pig went to market .
This little pig stayed home .
This little pig had roast beef .
This little pig had none . .
This little pig said (whee whee) all the way home .

Now can you say the nursery rhyme with me and point to the pictures while we say it together?

Get ready . . . Here we go . . .
This little pig went to market .
This little pig stayed home....
This little pig had roast beef....
This little pig had none......
This little pig said (whee whee) all the way home.... Oh, you did such a nice job...
Now can you move this piece of green cardboard over to the side and can you get the green cardboard that has the numbers on it? (pause)...
There should be numbers 1, 2, 3, 4, and 5 on it.... Put the piece of green cardboard in front of you.... (pause)....
Then look for 5 small green squares that have pictures of pigs on them.... when you find them, take them and put them in front of you also.... (pause).... Are you ready?
As I say the nursery rhyme you decide which picture comes first and put it on the square that's marked number 1.... Then decide which comes next and put it on the square marked number 2.... Decide which one comes third and put it on the square marked number 3.... Decide which one comes fourth, put it on the square marked number 4.... and decide which one comes fifth and put it on the square marked number 5.... Are you ready?
Here we go....
This little pig went to market.... Can you find the picture of the pig going to market? (pause).... Put it on the square marked number one.... Good....
This little pig stayed home....
This little pig had roast beef....
This little pig had none....
This little pig said (whee whee) all the way home....
Did you get all your pictures on the squares? Good...
Now, to see if you did it right, get the cardboard that has the pictures of the pigs pasted on it.... (pause)....
See if your cardboard looks the same way.... (pause).... does it look alright to you? You might like to call your teacher over to look at it....
Turn me off while you do this, then turn me back on again....
Why don't you take a piece of white paper out of the folder and draw a picture of one of the little pigs....
You might like to give it to your teacher or you might like to take it home to your mother....
Turn me off while you do this, then turn me on again....
The last activity you might like to do is to take the other cassette out of the folder and put it on the recorder. Then you might like to say the nursery rhyme into the tape....
Ask your teacher to help you....
Don't forget to turn me off and put everything back in my folder...
See you later boys and girls....
Have fun.
Reba Mayhew, a kindergarten teacher in Columbia, has designed tapes for the five senses and has put each into a learning package. These have been used extensively in her kindergarten classes and science teachers in the elementary school have captured her ideas and implemented her creative methods. I have chosen two of the five for you. They are "Ears to Hear" and "Tongue to Taste."

Materials Needed
Tape recorder
Taped cassette
Green box containing: 1 jar water
1 box sand
1 box with a marble

Behavioral Objectives
By listening to the taped directions and clues, and listening to the sounds made by shaking the contents in their containers, the child should be able to:
1. Recognize and identify their contents
2. Check his hearing answer by using his sense of sight or touch
3. Replace contents in box in chronological and left-to-right order
4. Turn off the recorder and rewind the tape.

Well, I certainly hope you have brought your good listening ears with you today for that is the next one of your five scientific tools you are going to experiment with. You have made discoveries using your sense of sight, your sense of touch, and now you will listen carefully with your ears and make discoveries with your sense of hearing. We hear sounds all around us. We hear and find out. There are loud sounds, (alarm bell) like the alarm bell to awaken you in the morning. There are soft sounds, (clock ticking) like the clock ticking. There are high sounds (high c) and low sounds (low c) too. High. Low. Loud. Soft.

Now that your sense of hearing is working so well, open the green box in front of you and take out the jar with the lid on top. Hold it close to your ear and shake it. Do you recognize that sound? That splashing sound? (Pause). What do your ears tell you it is? "Water", you say. Check yourself, now, by using your sense of sight. Hold the jar up and look through the bottom at what is inside. Were your ears right? You see water inside the jar. One sense can help another. Your eyes checked what your ears discovered. Put the jar of water on the table in front of you. Reach back into the big green box and take out experiment box number 2.
it close to your ear and shake it. Listen carefully. Do you hear one sound or many sounds? While you are making these sounds and listening, think back to the sight experiments in the blue box and the touch experiments in the yellow box. What did you see in the blue box and feel in the yellow box that might make the sounds that you are hearing now? You think it sounds like sand? Do you want to check it out with your eyes to be sure? You may. Lift the lid carefully and look inside. (Pause). Were you right? Want to touch it now? Go ahead but don't spill it. (Pause). Close it up now and set it on the table. Reach back into the big green box and take out experiment number 3. Shake it and listen to the sound it makes. You feel it too, you say? Fine! You have two senses working for you and finding clues today. Can you guess what is in the box? Have you heard that sound before? In the mystery box on the science table. It's a marble", you say. Lift the lid and check it yourself. Are you right? Fine.

Your hearing experiments are over unless you would like to listen to each one again. Put everything back in the big green box in the order they were when you took them out. Please turn off the recorder and rewind the tape so that your next scientific friend will have the tape start in the right order. Did you have fun today? I certainly hope so.
Tongue to Taste

Materials Needed
Tape recorder
Taped cassette
White box containing 4 bottles with salt, sugar, tang, and onion powder
4 numbered squares
1 picture card
1 numbered transparency overlay for self-testing

Behavioral Objectives
By listening to the tape, following the directions given, and testing the contents of the four bottles, the child should be able to.
1. Recognize and identify the contents of each bottle.
2. Match and place the numbered squares to the proper food pictures.
3. Check himself with the overlay (self-test).
4. Replace overlay, picture card, squares, and bottles in white box in reverse order.
5. Count, recognize, and match numerals 1-4.
6. Turn off the recorder and rewind the tape.

Hello, here we are again for you to make discoveries with another sensory tool. Your fourth one this time—your sense of taste. Have you thought about how important a tool your tongue and its tasting ability is? Let’s have a tasting game and find out.

But before we start the game, check your hands. “Hands!” you say. Yes, your hands, for you are going to sprinkle a small amount of what is in each of the bottles in the white box on the palm of your hand and then taste it with your tongue. So you see, your hands do need to be clean, don’t they? If they do need washing, please turn off the tape recorder while you do it. —Are both hands clean? Fine, then on with the tasting game.

Take the four numbered bottles from the white box and line them up on the table in any order you like. (Pause). When you have finished lining them up, reach back into the box and bring out the small pink, plastic container you find. (Pause). Lift the lid and shake out the four numbered squares. (Pause). Put each square on the table in front of the bottle with a numeral on its lid. (Pause). When you have finished matching the squares to the bottle lids, reach back into the white box and take out the picture card you see at the back. (Pause). Put it on the table to one side.

Now you are ready to begin the tasting game. Unscrew the lid from one of the bottles—any one will do—and shake a little bit from the bottle, carefully, into your palm. A tiny bit is all you need for a taste. (Pause). Lick it off with your tongue. Can you tell what it is? Does the taste match or
remind you of one of the pictures on the card? It does? Then pick up this
taste's numbered square and put it on the picture it matches. Screw the
lid back on the bottle and try another one. (Pause). Taste it, put its
numbered square on the food picture it matches and replace the lid on
the bottle before starting another taste test. After you have tasted all four
of the tastes and matched the numbered squares to the pictures, you will
be ready for the last part of the game. Turn off the tape recorder while you
are finishing the tasting and placing of the squares. Turn it back on when
you are ready to go on with the game.

Hello, again. Shall we finish the game? O.K. Using just your finger tips,
reach back into the front of the white box and remove the transparent
numbered sheet you find hidden there. (Pause). Did your finger tips find
it? Good. Put it down, carefully, over the picture card with the numbered
squares. Do they match? Good. If they don't match, you get another turn
to taste and recheck yourself. If you do retaste, turn off the tape recorder,
first, then turn it back on when you are through retasting. (Pause). The
game is over when the transparent overlay matches the numbered
squares on the picture card. Put everything back into the white box
starting with the transparent overlay which goes into its front of the box
and the picture card into its special back-of-the-box place. (Pause). Put
all four squares, count them, please—all four squares into their pink
container and into the big box. The four bottles go in last. When the table
is cleared and the white box is full, turn off the tape recorder, please, and
rewind the tape for the next scientist.

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