

# THE TAPE RECORDER

Revised Edition

Bridges for Ideas



A SERIES OF HANDBOOKS FOR  
DESIGNING, CREATING AND USING  
RESOURCES FOR TEACHING AND  
LEARNING.

# THE TAPE RECORDER

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## PREFACE

This handbook, in the BRIDGES FOR IDEAS series, was designed to help the classroom teacher use the tape recorder as a basic tool for teaching. It incorporates information about the basic components of recording equipment and accessories and describes successful recording techniques.

Appreciation is expressed to Roy Frye, Margaret Eldridge and the other members of the Visual Instruction Bureau staff for their efforts in assisting in the production of this publication.

# TABLE OF CONTENTS

## PART I ITS APPLICATIONS AND USES

Introduction . . . . .	3
Speech Therapy . . . . .	4
Student Reports . . . . .	5
Dramatics . . . . .	6
Recorded Sound Effects . . . . .	7
Resource People . . . . .	9
Social Studies . . . . .	10
On Field Trips . . . . .	11
The Taped Lectures . . . . .	12
For Elementary Classroom Singing . . . . .	13
For Historical Events . . . . .	14
For Stenographic Classes . . . . .	15
Typing in Rhythm . . . . .	16
Slide Commentary in Senior Biology . . . . .	17
Split a Class with Quarter-Track . . . . .	18
Voicespondence . . . . .	20
Learning by Rote . . . . .	21
Home Economics Applies Tape in Food Lab . . . . .	22
Taped Lectures for Shut-In Students . . . . .	23
Tape Review Libraries . . . . .	24
Music . . . . .	25
Rhythm and Dancing . . . . .	26
Story Hour--Primary Grades . . . . .	28
High School and College Extended Class Study . . . . .	29
Natural Sounds of Nature for Classroom Study . . . . .	30
Individual Instruction Through Mechanical Means . . . . .	31

## PART II FEATURES AND TECHNIQUES

Introduction . . . . .	35
Reel to Reel Recorders . . . . .	35
Cassette Recorders . . . . .	40
Microphones and Recording Techniques . . . . .	43
Erasing or Cleaning Tape . . . . .	49
Splicing . . . . .	51
Duplication . . . . .	52
Labeling and Storing . . . . .	52
Maintenance . . . . .	52

ITS APPLICATIONS AND USES



PART I



## INTRODUCTION

The proper use of instructional media is one of the major challenges of education today. The rapidly emerging changes in school curriculum and the new important role of individualization is causing concern among administrators and teachers as they must employ new strategies in teaching.

Of all instructional media, the audio tape recorder is probably the most rapidly-growing. It is playing an increasingly important role in training programs in education and industry. Its potential is being exploited by many learning systems because of its versatility and its acceptance by the public. Its potential seems to be limited only by the user's imagination and initiative. The portability of the new light-weight transistorized equipment has added a uniqueness to the tape recorder and its uses.

Individualized instruction, which is allowing students to study and learn at their own pace is making extensive use of tapes in conjunction with other media. The advent of stereo and multi-track tape is also making further contribution to the use of recorded sound in teaching.



## SPEECH THERAPY



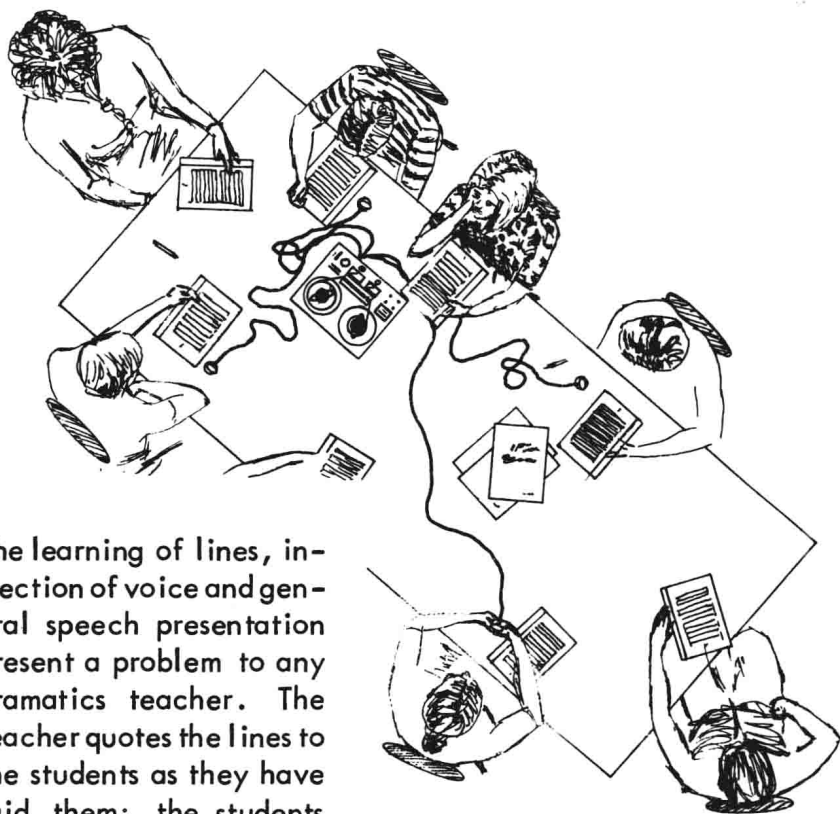
The recorder is used by the speech therapist as a recognized tool to aid in diagnosis and correction as well as in clinical study. The classroom teacher suspecting a child's speech difficulty can obtain a natural recording through everyday classroom discussion. This recording can then accompany the referral as it is processed for the therapist's consideration. In such case, the therapist gets more meaningful recordings and truer reaction if the student in question would record with several other students. This recording session should be a regularly accepted practice from past experiences so a student does not "freeze" for a special referral recording. The students should each be identified by name in a casual manner by the teacher prior to their recording. The portion of the recording to accompany the referral can be "dubbed" on another tape so the only portion of the tape to accompany the report is the portion applicable to the individual involved. Cataloging of the individual student's recording present a chronological "progress report" for future study.

## STUDENT REPORTS



The recorder can be used by students with only the slightest amount of formal training in operation. With this in mind, a classroom teacher faced with the problem of poorly prepared reports and unscheduled humorous events in class found application for the recorder in the field of formal reports. At the time a report was assigned, the students were informed of the fact that they were to record their reports, as an individual or a group, for playback at a scheduled time. By recording their reports, the students were able to devote more time to research. Students preparing the reports could review and re-work areas of the reports wherever necessary, rendering a finished product, which would be received with interest, attentiveness, and enthusiasm. The teacher could replay the tape for the students' review at a later date. The opportunity to preview reports also eased teacher tension with controversial areas and subjects.

## DRAMATICS



The learning of lines, inflection of voice and general speech presentation present a problem to any dramatics teacher. The teacher quotes the lines to the students as they have said them; the students often feel that their errors are being exaggerated and unfairly represented. The teacher in this particular situation asked the students to gather around a large table on which she had a tape recorder and multiple microphones. The students were to read through their lines without actions, after which the recorded lines were played back for appraisal and constructive criticism. Result: a cast that was aware of its mistakes and conscious of the actual results of their lack of serious study. In subsequent rehearsals and plays, the cast itself initiated the request that all rehearsals first be recorded and studied, and then performed "on stage" for actual rehearsal.

Students studying dramatics have been assisted in individual practice with cue lines from a full supporting cast, including sound effects. How is this achieved? By means of quarter-track recording, with the added use of either sound on sound, sound with sound, or add-a-track. With this relatively new innovation in the field of tape recording, a master tape of cue lines can be prepared providing for the student's recording of another track on which the master parts and his own parts will be recorded in natural sequence. Furthermore, the second portion may be erased without damage to the first, or master program.

It may be found advantageous to give a cue on the master followed by the student's expected response using correct timing and voice control, and then repeat the cue line and leave the necessary time lapse for actual response.

Result: A personal rehearsal for each member of the cast with a full supporting cast and accompanying sound effects.

## RECORDED SOUND EFFECTS

Realistic sounds which can add so much to a dramatics presentation are often hard to come by. When they are on records or obtained by manipulation of instruments, such as a telephone, they are often hard to synchronize with stage action.



The tape recorder can make a great many helpful sounds conveniently available to the sound effects technician. Recorded sounds obtained from field work as well as those that may be contrived artificially in the studio are recorded on tape for use during a presentation as required. The tape recorder has a unique advantage in that timing tape can be dubbed into the master sound tape so the exact sound may be obtained at the exact time it is needed. Footage indicators are useful to a point, but are not accurate enough to be depended on exclusively in this specific application.

## RESOURCE PEOPLE



It is often much more convenient to interview an individual and record his responses than to ask him to come in person to share his experiences with a class of students.

A well-trained student with a tape recorder can arrange an appointment in advance with the resource person to be interviewed. In this way, time is saved and much inconvenience averted.

The student should have a prepared "script" or outline ready for the interview so that he will not need to use notes. The person to be interviewed is informed in advance that a tape recorder is to be used and arrangements are made for replay and approval after the interview. The student interviewer calls and gives the person to be interviewed the "questions" in advance.

After the recorded session, the student studies the recording and prepares maps, drawings, charts, etc., that will make the taped interview more meaningful, realizing that the tape recorder brings back only the sound and not the visuals associated with the interview. With this material prepared, the interview can be screened by the teacher before presentation to the class, thus selecting just the right time in the learning presentation to make proper use of the prepared lesson.

## SOCIAL STUDIES



In social studies, the news of the day as it happens is as important as previously recorded history. Current events have long been used to make the student aware of the happenings of today in the world in which he lives. Much of this history-making news, however, is lost in presentation and lack of continuity.

A case study reveals a teacher who records the news of the day each morning at a selected time from a selected station on the radio or TV. The tape is used as a master for making a second tape for use in the classroom. In this way news events not suited to class presentation can be removed from the commentary with no noticeable interruption in the news presentation. A five-minute newscast was selected because of brevity and this in turn caused the edited recording to present only the news highlights. From these highlights the teacher could take the class into deeper study as she selected and saw fit. The recording from the same voice caused a serial effect in presentation as a newscaster tends to follow stories through to their climax. It is suggested here that TV as well as radio could be used because many TV newscasters use little if any video presentation in current events.

## ON FIELD TRIPS



This application, often found in a biology class, can be made in various fields of study. In this particular field trip, the transistorized tape recorder was carried by the instructor on a field trip studying Gulf Coast wildlife. The recording of the natural sounds of birds was not as clear as might have been desired because of the background noises of rolling surf. Nevertheless, the instructor's questions, student's response, and student's spontaneous questions were of acceptable recording quality. The tape was later used by the instructor (1) to make sure that no pertinent information was overlooked in his presentation, (2) to verify the answers of the class so that no questions were answered incorrectly and accepted without proper consideration, and (3) to ascertain that each student's question had been answered to the student's satisfaction as well as the instructor's.

The taped proceedings found a second use which was not considered at the time of preparation. Absent students listened to the re-run of the field trip as they were shown specimens collected during the trip, and it was found that this recording aided the students in visualizing the experiences they had missed.



## THE TAPED LECTURES



In a course in economics it was found that repetitive absences caused a marked decrease in grade. The students were intelligent enough and worked to the point that study was not the cause of their faltering achievement. The resourceful teacher turned to the tape recorder. A recording was made of all class lectures and discussions. This was not for replay to succeeding classes, but was for use by students absent from class as well as by students needing special help and review. The taped lecture was made during an actual class presentation with the only difference being that the teacher found it necessary to restate student questions before answering them due to technical recording problems. A lavalier microphone gave the teacher freedom of movement and yet gave a proper voice level for constant and true recording. (Cordless microphones are available, though expensive.) It was found that question and answer periods were not of particular benefit, neither were they adapted to recording. It must be kept in mind that in such use, the original use of graphic tools such as maps, projectuals, and charts are not readily accessible for use with the tape when replayed. These visuals may be used with replay of the tape if they are programmed properly in advance. In either case, the review possibilities and the advantages to the student are readily seen.