



A

## Radio Workshop Project

By Jessie M. Troupe

HAGGERSTOWN HIGH SCHOOL  
Haggerstown, Maryland

Because children begin to listen to radio before they are able to read and continue to listen through their high school careers, the schools must assume the same responsibility for building radio taste as they have for the development of better appreciation for motion pictures and reading. Radio workshops for training students in studio and radio techniques can be set up in any school — from the largest urban senior high school with expensive equipment to the one-room rural "studio" using a tin can as a microphone.

An alert Workshop has just completed its second year in the Haggerstown High School, Haggerstown, Maryland, under the capable direction of Mrs. Marjorie Hoachlauder. Haggerstown High School has a student body of approximately 1200 members. The town, with a population of 40,000 boasts two radio stations: WJEJ affiliated with Mutual, and WARK with ABC.

In 1945 when this Workshop was organized, the enrollment was limited to 25 students because the work was to be only experimental in nature. Each prospective member was asked to fill in a card giving not only vital statistics of age, grade, etc., but also preference in radio activity: acting, announcing, script writing, production, recording operator, etc. No one with a grade below C on any major subject was selected from entrees who filled cards. Auditions were held before the public address system, the instructor noting on the back of the card such traits as good speech, speech defects, lack of self confidence, etc. These cards were used as basis for selection of the 25 students who would be admitted to the class. All the cards were filed for future reference.

After the first meeting the class was divided into divisions, each student being placed according to his interest and ability. A chief for each division was elected by the members. Girls from the commercial department were responsible for typing and mimeographing scripts.

Several meetings were given over to reading scripts to familiarize members with format and techniques of radio script writing. One meeting was spent in discussing signs, language, sounds and engineering. Thus the ground work was laid.

(Continued on Page 4)



Pictured above Allen Funt (seated), "the man with the hidden mike," and his staff of "Candid Microphone" assistants. Left to right: Nina Heberer, Phil Pollard, Sonny Fox, Herb Exner, and Al Slep. Inset: Left — Funt conducts another "CM" interview (note mike on shirt front). Right — Funt baits a microphone trap for his next victim.

## "Candid Microphone" ABC's New Tape Recorded Show Radio's Most Novel and Amusing Program

The trademark of radio—the microphone—is conspicuously absent when producer Allen Funt gathers material for the newest and most novel experiment in radio, "Candid Microphone," the

Thursday evening ABC network feature which presents real life conversations of persons unaware that their words are destined for broadcast.

Seeking to capture the spontaneous reactions of persons in all walks of life to situations both common and uncommon, Funt brought a new twist to the interview type of radio program early this Summer by working with "mikes" concealed in dozens of different ways, depending upon the situations with which he dealt. The program, airing about six recorded vignettes each week, brings ABC listeners the frank, unrehearsed conversations of Funt's subjects in a manner that affords amusement as well as an insight into human nature.

With his portable recording equipment close at hand but hidden from view, Funt approaches his carefully conceived "human

(Continued on Page 2)

### A Word to the \_\_\_\_\_ Was Sufficient

Ron Cochran, acting program manager of WCOP-Boston, couldn't get to sleep a few nights ago because his next door neighbors were having a party and had his station's midnight disc show blaring in all directions. Thoughtfully, Cochran called Bob Brenner, the program's M. C. and asked him to suggest that folks listening remember that some of their neighbors might be sleeping and tune their radios accordingly. Sure enough, the Brenner fans next door took the suggestion to heart, turned down the volume, and let the weary Cochran have his shut-eye.

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## ABC's "Candid Microphone" Most Novel-Amusing Program in Radio

(Continued from Page 1)

interest" situations with a tiny microphone hidden under his scarf or coat lapel, in an arm sling, or as a hearing aid. In an office, store or home, it might be concealed in a flower vase, under a book or in a cigarette box.

### All Victims Aren't Amused

Once, when Funt collusively posed as a barber and frightened the light of day out of an unsuspecting customer by bragging, in a trembling voice which betrayed nervousness, that "this is the first time I've shaved anybody" — and adding "do you bleed much" — the microphone was concealed in a sun lamp near the chair in the barber shop where the connivance occurred.

The under-the-lapel technique was used when Funt visited a bewildered garment maker on another occasion to negotiate a tailor-made zoot suit for a boxing kangaroo. A vase was used when the whimsy-loving producer and the banquet manager of a swank New York hotel arranged an eight-course dinner, with caterers, for six cats who, Funt, with tongue in cheek, told the maitre de hotel, had "won blue ribbons in a feline beauty contest."

Not all of Funt's ventures are primarily comical, however. Human interest vies with laughs in some situations, and in others, serious thoughts are provoked as the "Candid Microphone" makes its rounds.

### Discs Used, Too

Since a tape recorder is used, extensive editing is possible to avoid repetitious dialogue, before the show goes on the air. In order to obtain an entertaining sequence, often as many as 100 splices are made on a single program. Finally, the entire program is re-recorded on discs for the actual broadcast.

"Candid Microphone" goes on the air with the only audible censor in radio. Instead of a blue pencil assault on a prepared script, the audible censor blots out words unusable on the air when an inter-



Don Wike, announcer; Don Keith, producer; and Byron Towery, engineer, record another KUJ tabloid sportscast of local high school football game.

## KUJ's Capsule Coverage Of Local Football Games Proven To Be A Success

### Tabloid Sportscast Tape Recorded

Network commitments make it impossible for Radio Station KUJ-Walla Walla, Washington to air play-by-play broadcasts of the local high school's football games, but thanks to Don Keith, public relations man, and tape recording, the station has found a solution to the problem. Here's how.

### Every Play Recorded on Tape

On the day of the games, KUJ assigns its regular sportscasting crew, along with a recording engineer and a tape recorder, to cover the contest. Every play of the game, as in a conventional broadcast, is described by the announcer and recorded on tape for presentation at a later time. However, when the game is finally aired, usually the following evening, only the big thrills or scoring plays are heard. But, in addition to the game's action, members of the two competing teams are interviewed and their interesting remarks are made a part of the transcription.

Thus, KUJ is able to present not only the game's highlights, but also the story behind each important play. And, according to KUJ staff members, the quarter-hour recorded tabloid sportscast packs much of the same wallop as the full-game broadcast.

viewee occasionally bristles at Funt's always deliberate affrontery.

Naturally, nothing objectionable to the parties concerned is aired, and no names are used. After a sequence is recorded, Funt's subject — or sometimes, victim — is told that their conversation was recorded and his or her permission is obtained to use it on the air, with anonymity assured. And Funt seldom encounters a refusal.



By C. J. LeBel, Vice President  
AUDIO DEVICES, Inc.

## NEEDS OF THE EDUCATIONAL RECORDIST

Now is an especially fitting time to discuss the subject, for this article is being written just as the 1947 Conference of the Association for Education by Radio comes to a close. Many broadcast and recording

organizations have been called on to advise their local educational institutions on recording problems and facilities, — as our correspondence shows. Hence the discussion is addressed to both commercial broadcaster and educational recordist.



C. J. LeBel

### Historical

It has been interesting to watch the growth of American educational recording. Attention to educational applications began shortly after Edison's original invention, but for many years the complexities of wax recording restricted its use to commercial recording companies, and to production of regular catalog items. In the early thirties the process of embossing grooves in aluminum was perfected. Its quality being too poor for general professional use, some attempt was made to sell it to the educators. This was not very successful. Shortly thereafter recording on lacquer (coated on aluminum) was developed and came into limited professional use. Being a cut groove, the sound quality was definitely better, and some educational applications were found. The same factors that hindered professional use were objectionable to the educator, viz., the blank discs hardened rapidly, the cut disc developed high distortion and noise in a short time on the shelf, the record could only be played a few times before being completely worn out, and the thread was explosively inflammable. Lacquer thickness was often uneven.

These defects were due to use of incorrect plasticizers in the coating, in insufficient amount, and poorly developed coating methods. The introduction of the first Audiodiscs changed this: the plasticizer formula was much more complex, the plasticizer was utilized in much higher proportion, and machine application of lacquer



Funt, with scissors in hand, edits his next broadcast.



was used. The correct plasticizers gave the lacquer high stability, changes with time were no longer a problem, and thread inflammability was reduced to a reasonable value. Machine application gave complete uniformity of thickness.

### Lacquer Makes Educational Recording A Success

These improvements made recording on lacquer a professional success, but they also made educational recording universally available, and fostered its rapid growth. While some attempt was made to sell low cost home recorders and home recording discs for educational use, it was soon found that professional standards of clarity and durability were necessary.

While the first educational applications were for speech correction work, broader vistas soon opened. Educational broadcasting was growing. Whereas a single microphone and recording machine were ample for speech correction, broadcasting posed new problems. The student was accustomed to professional broadcast standards, and to hold his interest production methods and mechanics had to be equally well handled. It was found that better sound quality was essential, for fifteen to thirty minutes of listening to unclear sound was very fatiguing. The student became restless, his attention wandered, and without formalizing the matter, it became generally recognized that sound quality would have to conform to professional standards. The "fatigue factors" in sound reproduction would have to be kept at an absolute minimum. If we may presume to coin a new phrase, the following psycho-acoustic equation was developed:

Sustained Student Interest = Interesting Subject Matter + Aural Presentation in a Non-Fatiguing Manner.

All of this experience has had considerable effect on the educational recordist's requirements in the way of facilities. The dramatic recording facilities suggested may appear over-elaborate to some, but this is incorrect. While work can be done with less complete equipment, it will be smaller in scope, or poorer in production quality, or will be produced at an excessive cost in time and material (due to need for test cuts or retakes). A glance at current educational practice indicates that these facilities are gradually becoming the standard for a complete educational recording setup.

### Facilities

The facilities required will vary with the work to be done, of course, but some form of each of the following must be provided:

- A. Studio
- B. Speech input system — input controls, amplifiers
- C. Recording machine
- D. Recording raw material
- E. Reproducing facilities

### Speech Correction

Speech correction recording has generally been done right in the classroom, and with one student performing at a time. Since acoustical conditions are seldom good, this indicates that the single microphone used should be of a directional form. The recording machine is generally of simple form, often a single-speed type cutting only up to 12" diameter. While inside-to-out recording is more convenient, it has been found preferable to use outside-to-in cut for records so made can be played on the home phonograph, which the student usually wishes to do. Cut in the reverse direction, they cannot be played on a turntable fitted with the usual automatic stop or changer.

Since faithful reproduction, "presence", is highly desirable, it becomes necessary to use a professional cutting stylus — stellite has been preferred because of greater ruggedness — and a professional quality disc. As before and after comparisons are desirable, it is necessary to use a disc with unquestioned permanence — one which will be as quiet and undistorted a year after as on the day of recording.

For making a quick survey of a class at the beginning of a term, it has been found very economical to cut a 16" disc at 33½ rpm. It is possible to place fifteen to twenty voices on each side of the disc, separated one from the other by short spirals.

### Radio Dramatics and Broadcast Transcription

Whether played over the school public address system or over an educational broadcast station, the dramatic recording must stand comparison with professional broadcasting, to which the student daily listens. The mechanics of the production must be well executed, the sound quality good. This imposes definite equipment requirements.

The studio must be adequate in sound isolation, reverberation characteristics, and size. Inadequate isolation means that many records will be spoiled by extraneous sounds, and inadequate acoustical treatment implies serious problems in setting up to record. It is apt to mean a "tricky" studio, full of bad spots, and most difficult to use. In practice this is apt to make recording quality rather uneven, for available time is limited, and likely to be used in rehearsing the cast, rather than in rehearsal for sound. The studio should be large enough to accommodate the largest group. There is nothing so futile as trying to put a school orchestra of fifty in a small speech studio. Fortunately, the trend in school design shows a growing appreciation of the fact that broadcast dramatics has become as important as stage dramatics, and a studio is often provided for use with the public address system. Recording from the same studio is easily accomplished.

The speech input system must provide adequate flexibility. Facilities for simul-

taneous use of three microphones are the minimum necessary, and four mixer positions are more convenient. Two turntables for music are also necessary. Means of inserting a sound effects filter to control at least one microphone circuit are highly desirable. It goes without saying that the amplifiers must have both good performance and reliability. Unlike a broadcast station, most schools have no maintenance man, and an amplifier breakdown is a serious matter.

The recording machine should be complete in its facilities. Both speeds should be available, and provision should be made for change of pitch. A spiralling device should be provided. Outside-to-in cutting should be used, and this will make a suction device for removing the thread highly desirable.

The recording disc must provide professional recording quality, of course, but more is required. Complete uniformity is necessary and long life. Educational discs form part of a library, which must be reproduced next year, the year after, and the year after that. They must be durable, as regards repeated playing, but lack of deterioration with time is equally essential. Chemicals used in the formulation must be time tested for proven permanence. A disc which becomes noisy or distorted in two or three years is not satisfactory.

### Reproducing Equipment

Playback machines of professional quality are available for use in playing an educational transcription to a class. If any criticism may be made of them, it is that the portable loudspeakers are generally too small and too inadequately baffled for satisfactory reproduction of anything but speech.

The educational broadcaster needs especially a definite setup for re-recording. One concomitant of the production of successful program series is the process of exchanging copies with other groups. Very seldom do the quantities warrant processing, so the amount of re-recording to be done is very considerable—a serious burden unless a regular setup is made for that purpose.

### Conclusion

It has been very interesting to watch the development of educational recording from an idea to a rapidly growing movement of well documented value. We salute those who have made recording an essential part of the modern educational process.

### ATTENTION

The Editors of Audio Record welcome contributions from its readers. Any news concerning your recorded programs or other recording activities, that you believe will be read with interest by recordists, can be used. Photographs, drawings, or graphs needed to illustrate your material will be appreciated also. Address all contributions to:—The Editor, Audio Record, 444 Madison Ave., New York 22, N. Y.



## PLATTERS FOR PULLERS

At the American Dental Association Convention, held a few weeks ago in Boston, Harold I. Primus, Manager of the Diamond Crown Division of Audio Devices, which produces diamond abrasive dental instruments, recorded interviews with visitors to the show on 10" Audiodiscs and gave them the recordings to take home as souvenirs. (Above photo shows Diamond Crown booth with microphone on table in foreground — recording equipment was located in rear of booth). Interviews with many leading foreign dental representatives, speaking in their native tongues, highlighted the recording sessions.

## A Radio Workshop Project

(Continued from Page 1)

At the start the equipment was poor — books, blackboard and an elementary public address set-up composed of a junior velocity microphone and a 15 watt amplifier. New crystal microphones with full length adjustable stands and additional shorter desk stands were purchased. By January of 1946 an adjoining room had been arranged to provide a "studio" creating the broadcasting illusion so necessary to the success of any radio laboratory. To this were added a recording machine and a play-back unit (two speeds, 33 $\frac{1}{3}$  and 78 RPM), the former for recording students' voices, the latter for playing back sound effects during rehearsal.

During the first year sixteen actual broadcasts were made over WJEJ. The initial broadcast during American education week in November emphasized the relation of school, home, and community. At Christmas O'Henry's "Gift of the Magi" and Moore's "A visit from St. Nicholas" were dramatized. Thirteen vocational guidance programs written and produced by the Workshop were presented over a period of thirteen weeks. This "Looking Ahead" series dealt with the problems of school and after-life adjustments. Another step in advancement was chalked up when these broadcasts were listened to in schools all over the country.

In May the class and instructor chartered a bus to New York City for the purpose

of visiting NBC and CBS studios. They enjoyed Nila Mack's "Let's Pretend" in its pre-broadcast rehearsal and the famed Cities Service show, "Highways of Melody".

With the approach of a second year it was possible to organize two sections of 25 students each. Only seniors were eligible because of a limited teaching staff in the English department.

A new location was arranged with a small control room, a rectangular studio and an adjoining classroom of regulation size. A cut-in microphone system was installed to facilitate giving directions during rehearsals, and a simple decibel meter control box was added. Then it was possible to produce scripts which contained sound effects, background music, and special effects. It was also possible for the teacher to work with a cast in the studio while the remainder of the group worked at other



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projects in the class room.

More advanced programs were worked out. Students participated in a Student Forum of the Air broadcasted over WBAL. A panel discussion was presented by four social studies students presenting affirmative and negative arguments in answer to the question: "Is a democratic form of government similar to that in the United States practicable in all other countries of the world?" This was followed by questions from the floor directed to the panel. Audience participation came from the entire student body in applause.

In the spring different groups undertook two six-week series, "Sing and Listen," a music appreciation project, and "130 Story Book Street," a dramatization of fairy tales. This last series was directed toward the elementary school audience.

Again the course was concluded with a New York trip, the students seeing James Melton's "Harvest of Stars," Armstrong's "Theater of the Air," "The Mighty Casey," N. B. C. Symphony and "Let's Pretend."

At the close of the second year the instructor was able to list certain gains made by students in her three sections.

1. Learning to work with groups.
2. Acquiring habits of accuracy and a sense of proper timing.
3. Overcoming self-consciousness.
4. Experience in script writing.
5. Developing good voice and speech habits.
6. Handling sound techniques.
7. Developing hidden talent.
8. Developing the appreciation of the art of radio broadcasting.
9. Awakening a realization of the power of modern radio as a medium of propaganda.
10. Assisting in administration of school program.

The workshop will be expanded in the 1947-1948 school term to include more students interested in radio. The instructor, however, feels that additional changes must be made if the program is to mature.

1. Release of the radio instructor from the responsibility of teaching classes other than radio.
2. Establishment of a central office located conveniently for the coordination of high school, junior high school and elementary programs.
3. Appointment of a Director of Radio Education to plan, supervise, and carry out the radio program activities on a county-wide basis.
4. More contributions and participation from other departments in the school.
5. Installation of machinery for re-broadcasting to meet each class period need.
6. More consciousness on part of public and school officials to the role schools must play in the national radio scene.

Radio workshops are not ends in themselves, but they definitely have their place in the future of the radio as a medium for educational purposes.

## As We Go to Press

Audio Devices, currently co-sponsor of the 1948 Scholastic Writing Awards in the Radio Script Writing Classification, will also co-sponsor the NATIONAL RADIO SCRIPT CONTEST for college students.

Under the auspices of the Association for Education by Radio, the National Radio Script Contest, will offer prizes for best written scripts to students enrolled in recognized colleges and universities in the United States. Complete details along with rules and regulations and list of awards will appear in our December issue.