

Tips on Teaching the Teachers

by Evelyn Oelen
 Director of Public Relations
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I was very interested in George D. Griffin's article, "How to get the best out of Student Scripters," in the December AUDIO RECORD, and I was glad to see his viewpoint in print. Teaching radio writing and directing in a teachers college from a commercial standard, I too have used the limited outlook as an incentive to better student production.

Our college was asked to use NO sound effects when we first requested commercial station time to air our own scripts. That meant the station wouldn't operate any for us, not even recorded ones or music, because of their own personnel limitations. It was easy to make well-written transitions the price of going on the air. Later, when

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ABOVE — John Yaeger, student engineer assigned to the script writing class for the term, takes up a sound cue in the script with Mrs. Oelen, who seems to be on the writer's side. The college makes standard broadcast transcriptions of voice and music programs with the equipment shown.



AT RIGHT — Charles Fronzuto is double-chalked to keep him from booming on mike by Instructor Oelen as she sets up a test cut for scripter Eleanor Baker, waiting to interpret one of her own characters.

HOW RECORDINGS HELP THE HARD OF HEARING

by Anna May Lange
 Hearing Room
 Franklin School
 Elgin, Illinois

"Hor-ree'-bul, perfectly hor-ree' bul." Mary was working on the speech for a play we had written. We stopped and tried to correct her pronunciation of 'horrible.' Mary is hard-of-hearing. Her hearing loss is so severe that even with her hearing aid, she cannot hear speech as one with normal hearing does. She reproduces the sounds she hears. Unfortunately she does not hear the same sounds in the same way that we who hear do. One of the greatest problems for those working with the deaf and hard-of-hearing is to get normal speech from the auricularly-handicapped persons. The disc recorder is a great help. By recording Mary's voice on an Audiodisc and then letting her hear the recording amplified we began correcting her "hor-ree'-bul." Recognition of the problem was the first step. The second step was recognition of the cor-

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Three students at the Franklin School, and Miss Anna May Lange, hearing instructor, listened to a recording made by Mary Anne Begalka, left. The greatest problem the hard-of-hearing must solve is speech deficiency. Elgin schools are helping their students overcome this difficulty with the aid of modern sound recording and reproducing equipment.

audio record

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Teaching the Teachers

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we had proved ourselves, the station suggested we might like some of the effects in their library. But we never had to unlearn the art of writing footsteps!

Actual broadcasting also clarified another limitation — that is, to represent our institution in somewhat the manner the public would expect. Griffin's point about "demented souls" and the imitation of the local movie screen by new script writers gave me a satisfied laugh because students don't like to emphasize demented souls about the campus, so they write about useful, earnest, believable humans whom they know. Two and a half years ago when I first offered script writing here, our first commercial show was based on the visit of a *New York Herald Tribune* reporter to the campus to investigate our building needs. The next term we broadcast "A Campus United" dealing with good inter-group unity at Montclair. For this we got fanmail lauding us, as a state institution, for giving attention to this subject. At present we are waiting a 19 station schedule on this term's first show, written and produced in the class. It tells about the making of **RESOURCES LIMITED** at the College, a 16 mm. state conservation movie with the same title. Along with second year college and extension students in the class we used ninth grade demonstration high school students, who had helped make the movie, as actors. This is not only good radio experience for the teacher-in-training but good educational experience as well.

In my classes I am not training professional radio workers. I am trying to develop the teacher-to-be in sensitivity to material at hand — principally the school environment — and in understanding how far average individuals can go in dramatizing situations which can be worked over into good scripts. In radio writing the student handles no equipment; student engineers are assigned to each class period and work with me. In radio directing students handle microphones, sound effects and tape recorders but not the cutting equipment.

We use recording constantly after the first few meetings in script writing to begin to work out central scenes from script ideas which have been brought in by individuals.

As soon as we feel one or two of these are going to be good college broadcast material, the individual completes his writing and we commit ourselves to an actual station broadcast time. Usually the show goes on with little rehearsal, for we have built it together, and we understand thoroughly what we are trying to say to our audience. The best measure of our success is that we receive many invitations to be on the air, and that the college has provided us with more and more equipment until from one microphone in the faculty lunchroom for a studio, we now own half a dozen good ones, a Fairchild cutting head and table, AM-FM tuner, amplification units, and two Soundmirrors. A large classroom with director's booth and a smaller anteroom is now our exclusive studio space.

Occasionally we cut our own transcriptions for broadcast, although I prefer that the group works in various commercial stations where they learn a lot more as participants than they would if I just took them on observation trips. I buy 16-inch audiodiscs for all my work so that even in the early stages of working out scenes, different voice teams are on one record or different methods for solving scene problems are recorded close together for study. The large discs take our full fifteen minute shows when we are ready to produce a completed script. Each student is helped, as he feels he needs it, by voicing and discussion in class; he does his own casting and direction on interpretation for these trial records. He also does all his own writing.

Radio directing is taught alternate terms with script writing from the same point of view: that the teacher needs professional know-how to get and keep time for his students on the air. Auditioning, timing, cutting script, microphone perspective and sound effects, including music, are taught within the range of our equipment. Here recording is essential. I am surprised at the skill with which these student "directors" handle shows. They bring in their own effects, increasing our studio resources, and their own casts from outside the class,

if they wish, and even from off-campus. In the near future I hope to offer local outlets not only student-written and student-acted shows, but also transcriptions that are student-directed. The student is asked to solve his own problems after the script choice has been passed on. He uses the studio extensively out of class time to prepare his dry run and cutting session which must be presented to the class as his course requirement.

It would be unfair to leave the impression that the radio classes, which are relatively small, are the cause of all the expansion in equipment which Montclair State Teachers College has had during my two and a half years teaching radio. The speech department uses 8-inch audiodiscs for beginning and end of term analysis for each student in foundations of speech, tape recording for reading for oral interpretation and in clinical work.

Mr. Howard Fox, drama instructor, heads the staff of student engineers who operate the studio. This group records many shows off the air and recently taped an hour mock trial at a teaching aids conference at the college. This is now being sold on audiodiscs. Mr. Fox and myself cooperated in transcribing four fifteen minute shows with commentary using our orchestra, trio, band and a cappella choir. We did this work over several hundred feet of wire with no amplifying unit, monitored over a field telephone connecting the library (used as studio) with the recording equipment in the basement. A major local station played these transcriptions last summer as a series and we are now offering them to smaller stations throughout the State. Thanks to making a public spectacle of ourselves on this job more people here understand the complexities of working with sounds. During the summer our music department moved from the main building to a temporary building about one-tenth mile from the recording studio. We are now tape testing the large bandroom in the new building and looking into wire prices to solve a new problem.

AER AND SCHOLASTIC MAGAZINES NATIONAL SCRIPT-WRITING CONTESTS CLOSE

It's all over now but the judging! The two nation-wide radio script contests, both sponsored by Audio Devices, have now passed their official closing dates, and the fate of the winners is in the capable hands of the contest judges.

The Scholastic Magazines' 1949 Radio Script Writing Competition, for high school students, closed on March 4th, and the Association for Education by Radio's National Script Contest, for college students, closed on March 31st.

Mr. William D. Boutwell of Scholastic Magazines, and Dr. Sherman P. Lawton,

AER Contest Chairman, both report that the number of entries received has been most gratifying—that scripts from all parts of the United States continued to pour into their offices right up to the deadline. This tremendous response is indicative of the rapid growth of school radio workshops, and reflects the increasing student interest in the script-writing phase of radio work.

It is planned to announce the winners of both contests at the Institute for Education by Radio meeting which will be held in Columbus, Ohio, on May 5th, 6th and 7th.



by C. J. LeBel, Vice President,
Audio Devices, Inc.

RECORDING TAPE TO DISC

A new field for the recordist has broadened astonishingly in the last year. This is the practice of making recordings in the field on tape, then re-recording the material onto discs in the studio.

Using the light weight and improved quality of

the latest tape recorders, and the erasable feature of tape, a considerable number of studios have made a very successful career out of recording professional and amateur orchestras, church choirs, and the like. Generally, a single recording will lead to the sale of twenty-five or fifty discs.

The erasable feature of tape is particularly helpful with groups which are not used to recording procedure. Errors can be edited out with a pair of scissors, or the tape simply re-recorded.

Fidelity Requirements

In re-recording the high frequency attention and distortion effects are additive, so that both tape and disc recorders must be better in quality than if either were used alone.

Home type machines appear very attractive for this work due to their light weight, but caution should be exercised. The older machines had excessive distortion and limited range. Some of the newer machines have excellent distortion characteristics, but the frequency response is uniform only to 5,000 cycles. Rebuilding such a machine, modifying the equalization to extend the frequency range, would appear attractive. Extending the frequency range probably will call for raising the bias frequency. This should be done carefully, to maintain the same bias current as nearly as possible.

System Adjustment

If the tape recorder is fitted with tone controls, these should be adjusted for the most uniform overall response. In most cases this means turning the high frequency control up all the way. The disc system should then be adjusted for most uniform response, plus preemphasis if used.

It occasionally may be desirable to vary

the overall response, but this should be done with great caution. It is better to do such modification in recording, rather than in the original tape. A serious mistake, then, cannot ruin the original recording. Modification of response characteristics should be done very rarely, only if absolutely necessary.

Tape Recorder Improvements

While we believe it desirable to spend at least \$400 for the tape recorder, there are many studios with limited budgets which will want to buy a lower priced machine and rebuild it themselves.

First, a 500 ohm output impedance is highly desirable. A simple change in output transformer will take care of this.

Secondly, fit a volume indicator motor if the recorder is normally supplied only with a neon lamp for level indication. In this connection, remember that VU meters are available in small size on special order, and that they are much better than the old style general-purpose volume indicator which is more readily available in the smaller case.

Next; reduce the amplifier distortion by change of tubes or addition of negative feedback if necessary. Certain older home recorders need such improvement if they are to be used at all.

Finally, be sure to use a microphone of professional quality. The microphone generally supplied with a home recorder has limited frequency range and a strong peak. This change may require the addition of a pre-amplifier stage if the professional

microphone has as low sensitivity as many do.

Tape Recording Level

Commercial tape recorders do not have as great signal to noise ratio as their laboratory prototypes, and lower cost home machines are, of course, poorer than professional units. Some home machines can be improved by rewiring, proper shielding, and correct position of ground connections, and time so spent is well invested.

Nevertheless, there is a great tendency to record at too high a level for the sake of achieving as high signal to noise as possible. The cure is worse than the disease. Tape recorded at excessive level seems to have a veil over the higher frequencies, and the effect is most objectionable. A home type tape recorder will have a usable-signal to noise ratio of the order of 35 db, and a professional machine but little over 50 db if at all. Use the range available and be content. Do not try to stretch it at the expense of poor sound. The fault is no more excusable because it is so common. Pay no attention to the siren call of advertising literature with its ever louder claim of lower and lower noise levels. We have heard demonstrations in which the tape level was so high that heavy volume compression was taking place. Nothing will so quickly destroy the character of a recording as to have 10 db of the peaks removed by the compression action of overloaded tape. Summarizing, set your recording level by ear and meter tests, and not by catalog claims.



C. J. LeBel



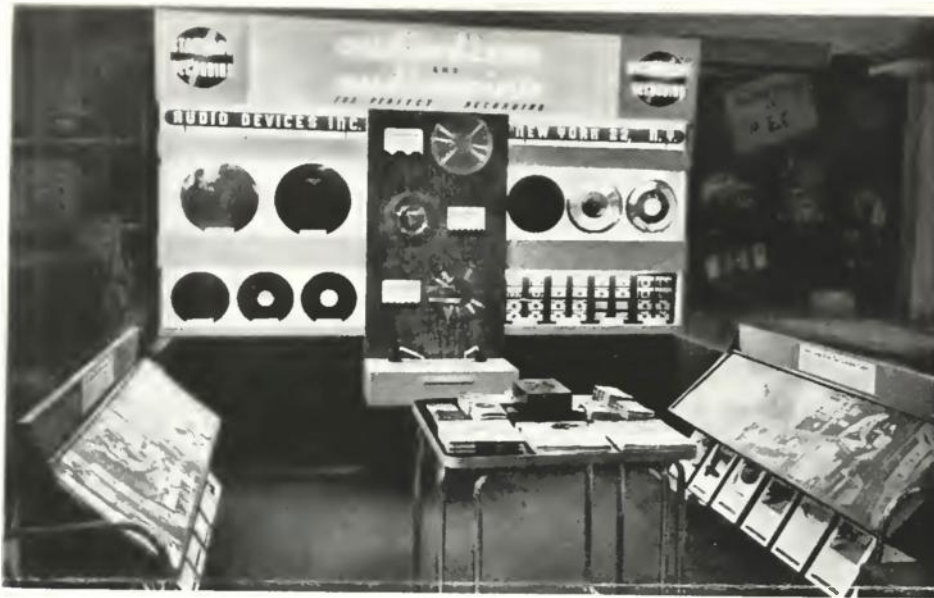
Photo, courtesy of Broadcasting Magazine

THE WINNERS:

Shown here, with President Truman at the White House, are the four talented winners of the "Voice of Democracy" contest. These winning student contestants, whose spoken essays were chosen from a total of approximately 250,000 high school entries, are, left to right—George Morgan, Jr., Hutchinson, Kansas; Kerron Johnson, St. Paul, Minn.; Charles Kuralt, Charlotte, N. C.; and Richard Caves, Everett, Ohio. During a memorable week in historic Washington, these four boys each received a \$500 scholarship and certificate, presented by Attorney General Tom C. Clark.

The job of picking the winners was not an easy one—for voice and oral delivery were important factors in the selection. Preliminary eliminations in individual schools were started last November—after which came the community competitions. Later, the State winners were selected on the basis of transcriptions made by local broadcast stations. The final winners were selected from the winners of the State contests.

The "Voice of Democracy" contest was sponsored by NAB, RMA, and U. S. Junior Chamber of Commerce, with the support and cooperation of the U. S. Office of Education.



'49 SHOW TOPS 'EM ALL!

The 1949 National Convention and Show of the Institute of Radio Engineers, held March 7-10 in New York's Grand Central Palace and Hotel Commodore, chalked up a record-breaking attendance of over 16,000 persons. Prominent among the show's 225 exhibits, was The Audio Devices booth, shown above. Featured in the center panel are three gold-sputtered Master Audiodescs of recordings made at 78 rpm (96 grooves per inch), 45 rpm (264 grooves per inch) and 33-1/3 rpm (224

grooves per inch), each accompanied by an actual shadowgraph magnifying a section of the recorded surface 250 times. Also displayed were the various steps in the manufacture of Audiodescs — and the complete line of Audiopoints. At this booth, more than 2500 copies of Audio Records were distributed, and approximately 800 new "subscribers" were signed up.

(This Audio Devices exhibit will also be on display at The Radio Parts Show in Chicago, May 17-20, in Booth No. 24.)

Something New Under the Sun . . . and Stars!

The uses of Audiodescs are manifold and multiform — some of them undreamt of in our philosophy. Here, for example is a most unusual application — quoted from a letter written to our editor by Philip W. Rhys, of Rhys & Walsh, Astrological Recordings, 330 East 32nd St., Brooklyn, N. Y.

"For the first time, Astrology has been combined with recordings. To some this may strike an odd tone. The general opinion of Astrology, born out of distorted knowledge (or none at all) of its principles, is that it is a sort of fortune-telling or witchery, about which everything is sort of vague.

When I was twelve years of age, I began my studies in Astrology. "Does one have to study it?" you may ask. Yes, indeed, for many years. Although this was an unusual age to begin, I advanced rapidly. I became more and more aware, through the years, that there was a higher type of Astrology, which is called Astrosophy. As I became convinced, as a matter of experience, observation and study, that Astrosophy was an art of a very high moral and educational nature, I also became awakened to the nec-

essity of letting others know that Astrosophy existed. And surely there are few who know.

I had to find some way of impressing people with the difference between the rubbish handed out under the title Astrology, and the true material. I had to find a way of impressing upon people a respect for the true type of Astrology—Astrosophy.

I thought of the idea of making the character analyses and forecasts that the public was accustomed to, but a higher type of reading that is not charlatanism or fortune-telling. These I have made on recordings because the recording is able to do one thing that a book or picture cannot — it can carry the human voice with all its expressions and meanings to the ears of the listener. My partner and I started out with next to no knowledge about recording and have been continually delighted with the clarity and noiselessness of Audiodescs. And so it is that recordings — Audiodescs — have entered the century-long conflict of Astrosophy with its worst enemies — charlatans, and those who condemn without knowledge of what they condemn."

Hearing Helps (Cont'd from Page 1)

rect sound. From then on the work was merely routine drill.

"I sopped at the sore." Jim was alibiing for being late. Unbeknown to him, the Recordio was turned on, as it often is to catch natural speech of the youngsters. On being reminded that there was a 't' in both 'stopped' and 'store,' Jim insisted he had put the sound in these words. This was just another one of the many cases in which our problem is to show the student where his mistakes are. Once he recognizes his difficulties and is anxious to correct his faults, half the battle is over.

"Do you think I'll ever be able to talk right?" It's one of those gloomy days when one feels as though he has done nothing. Peggy is worried about her speech. We get out old recordings. We listen to recordings of her voice made last fall. She recognizes faults she has since cleared up. We play parts of recordings she has made throughout the year. "It doesn't seem possible I talked like that!" Peggy exclaims. If there were no recordings to prove it, Peggy would not realize she has made progress and that she can expect to continue to improve her speech.

Mary, Peggy and Jim are among the deaf and hard-of-hearing children who attend the public schools of Elgin, Illinois. In the old days, they would have been put in special classes. Now the handicapped attend school with their out-of-school friends. They are equipped with hearing aids and are in classes with teachers who understand their problems and work hard to help in their adjustments. They go to the Hearing Room once a day for individual assistance. Here they receive help in Speech and Speech Reading and are given Auricular Training and remedial help in any subject matter which is bothering them in their classrooms.

The Hearing Room is sound-proofed and very well equipped. Recording with Audiodescs is frequent, as can be noted by the percentage of the time the sign *Recording* hangs from the door. The children like to record and we feel the benefit resulting is well worth the small cost. At Hallow'en the older children made a clever radio skit that we recorded and then played for the classes in which they were. At Christmas time each child made a record for his parents. Many parents told us that the recordings were the nicest gifts they received. The children had practiced to have perfect speech and the records showed the parents what we can expect of their children.

It's been a long time since education for the deaf in the United States was begun. It's been 135 years. Tremendous progress has been made during these years. Amplification of sound and recording of voice have played a great part in this progress.