Radio in the Schools

J. J. TIGERT, in *Radio* (American Academy of Political and Social Science, Philadelphia):

Virtually every college which has a broadcasting station considers its expenditure warranted. The budgets range from \$25 to \$12,000 a year. In the former case, however, the money from the college fund is supplemented by Chamber of Commerce donations. Usually the budgets appear pitifully small.

A number of prominent universities and colleges have broadcast their programs over borrowed commercial stations. This, however, has not always proved satisfactory, because the commercial stations themselves are sometimes so limited by the Radio Commission as to find it necessary to discontinue lending time.

One handicap which the educational station must consider, and which does not admit of easy solution, is that of the daylight broadcast. As the result of the study of the programs of twenty-seven leading broadcasting stations of the country Mr. George H. Zehmer, director of extension of the University of Virginia, announced before the last meeting of the National University Extension Association:

"It seems to be pretty generally conceded that the best radio hours for general educational programs are from around seven o'clock to nine or ten o'clock in the evening. A study of the programs submitted indicates that in many instances the value of these hours for purposes of education are largely disregarded in planning programs. The hours assigned advertising generally are the most desirable periods of the radio day. The educational talks which were given in the evenings during the periods indicated were obviously sandwiched in between most of the programs which were devoted to advertising.'

The experiment in radio instruction in the public schools of Oakland, California, yields most interesting and valuable information for the subject in hand.

About ten of the Oakland schools had radio sets installed for the project, two of the schools having a complete system of radio connected with all of the rooms.

The purpose, according to Mr. Virgil E. Dickson, director of the experiment, was

"To see if we could develop actual classroom instruction in which pupils

in widely distributed centers of the city would participate. . . . To develop demonstration lessons for teachers to observe children in directed activities as nearly as possible parallel to regular classroom procedure. We wanted to know if anything approaching a common classroom lesson could be sent over the air to many classes at once."

As early as May, 1924, the committee began planning the work. The subjects selected for the first series of eight demonstration lessons of twenty minutes each were English, counseling of classes going into high school, geography, literature, history, arithmetic, penmanship and physical training.

A member of the committee visited each schoolroom where students were participating in the lesson, to make observations. After each lesson, the committee compared notes and made efforts to improve the next unit of the experiment.

The first trials were considered successful, and the work was continued in the fall, when a series of fifty-six lessons, covering vocational counseling, how to read a book, drawing, penmanship, science, singing, thrift, composition, arithmetic and manual activities were broadcast, and careful tabulation made of results. Each lesson was adapted for a particular grade, ranging from the fifth to the tenth.

It is perfectly possible to get reception so that a class of any reasonable size can hear every word and every direction of the instructor who is broadcasting, Mr. Dickson reports. It is also possible, he says, to plan a lesson that will interest, and keep active, any number of classes that have been properly prepared for its reception. The experiment proved that certain lessons taught before the microphone produce class and individual results that cannot be distinguished from those gained by the same instructor teaching in person before the class.

The replies to a recent questionnaire to educators in large school systems indicate that music appreciation and current events are popularly believed to be about the only subjects which are readily adapted to radio teaching. The Oakland experiment, however, shows, unexpectedly enough, that art and arithmetic are among the subjects which lend themselves most readily

to successful treatment in radio lessons. These facts lead one irresistibly to the conclusions that radio instruction has not even begun to develop, and that subjects will not be restricted to the narrow fields which have generally been considered necessary.

Here, then, is the answer to those who maintain that formal education in the grades cannot be had by radio. Experiments such as the foregoing are bound to be supplemented in other parts of the country. The great difficulty to date has been that no one has given attention, first, to the scientific development of the lessons, and second, to the definite checking of results. It has been practically impossible to say whether formal education could be succeessful by radio, largely because most of the efforts at instruction have been purely informal. There seems to be no reason why radio instruction, too, should not be based on the "self-activity" necessary to the education of youth.

Benton High School at St. Joseph, Missouri, is equipped with apparatus under direct control of the principal. The central set is in the office of the principal, with a fifteen-inch loud speaker connection in each room. A microphone permits him to make announcements, and the teacher can reply by means of the loud speaker, which also acts as a microphone. There is a victrola attachment for playing records, which may be broadcast to any room at will.

The central set is tuned in at the principal's office, and at the proper moment, by the turn of a switch, all rooms are cut in on the program, with perfect reception for small groups, under teacher control, and with no loss of time.

At present, most high schools are not equipped with receiving sets because there is little material being broadcast during school hours which can be used to supplement the regular curriculum. School men state that when the college and university stations supply work of use to them, they will install radio receiving sets. However, until schools install the receiving sets and make it possible, universities and colleges probably cannot afford to put on an elaborate experimental educational program. The public schools and universities must get together on a cooperative plan for satisfactory experimental work.

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