of this series, Drake has made special arrangements with the Des Moines public schools for the organization of regular school listening groups.

So Drake with the assistance of six Iowa stations goes on the air with the belief that "radio has become a powerful force in the social, educational, economic, and recreational life of our people."

THE SCRIPT EXCHANGE IDEA

Questionnaires now being returned to the Script Exchange from radio stations indicating schools, colleges, and universities which have been on the air during the last 6 months, show that hundreds of programs are being produced by educational groups every week in cooperation with commercial broadcasters. Such cooperation is to be expected under the American system of broadcasting which now reaches 82 percent of the homes of the nation. It is apparent from the reports received at the Script Exchange that most broadcasters are eager to release educational programs if they are of real public interest and are at least reasonably well produced.

About two years ago the University of Kentucky prepared and presented a successful series of broadcasts on important discoveries. The scripts were sent to the Script Exchange, rechecked for authenticity and prepared in sufficient quantity for general distribution. The programs have been rebroadcast by schools and colleges in 23 cities with local adaptations. Here is a concrete example of how a good program idea paid greater dividends by being made available through a central clearing house.

During the last two years the Script Exchange has shown that a script may be rebroadcast many times before it outlasts its usefulness. Scripts originally presented on the American School of the Air over the Columbia Broadcasting System and made available by the Script Exchange are being reproduced to good advantage in many local communities throughout the country. Six scripts in a series entitled "Interviews with the Past" written for the Script Exchange have been broadcast over more than 115 radio stations.

The Script Exchange is now well organized and on a relatively small budget can facilitate a free exchange of hundreds of program ideas. Through such an organization good scripts will not be lost after their initial presentation but will be harnessed to the task of raising the quality of local educational broadcasting throughout the country. If you have a good educational script send it to the exchange. If you are looking for good educational scripts write for the *3rd edition Script Catalog* now available free of charge which lists 181 radio scripts and several supplementary aids to production. Address your requests to United States Department of the Interior, Office of Education, Educational Radio Script Exchange, Washington, D. C.

And now back to the question, Is radio broadcasting by school students worth while? Perhaps this article will help you to draw some conclusions of your own.

School Life

PROCEDURES FOR THE INTEGRATION OF PUPIL-EXPERIENCES

IT seems that certain procedures are essential for the teachers who are responsible for the direction of pupil-experience learning. Among them the outstanding ones seem to be teacher training, teacher planning, setting the stage, directing pupil activities, and preparing the stage for the unifying and evaluating of pupil experiences around a large concept of the group culture. At this time, therefore, we shall consider each of these procedures in regular order.

This paper was presented at the meeting of the National Council of Social Studies in Pittsburgh, Pa., on November 25, 1938.

Teacher Training: It seems that pupils will do better work if one teacher is responsible for their guidance in three core fields, Social Science, Language Arts, and Natural Science. If she has had a major in the Social Sciences and a minor in Natural Science and in Language Arts, she should be familiar with the content in the three fields. If the departmental plan is used in the school to which she goes, she will be in a favorable position for co-operation with the teachers in the other fields because she will be able to see the relationships between her work and that of the teachers in the other two fields. If there has been a breakdown in departmentalization in the school to which she goes, she will be in a position to direct a group of pupils in the three fields and guide them for three periods each day. By following such a plan she will be more familiar with her pupils and will be a better guide because she will have more time with which to consider their needs and evaluate changes in their behavior. Then, too, her background in the three fields will enable her to give more time to pupil guidance and spend less time on the study of the materials which may be used in connection with the work.

Teacher Planning: Before the school year begins the teachers should meet and consider various problems, some of which may not be used during the school year. Such events as the recent tension in Europe may be interesting to pupils and may be considered as a possible starting point for the work to be done. If the departmental plan is used, the teachers who are responsible for the different groups or classes of pupils should consider the individuals of each class, their interests, environments, mental abilities, and other individual differences. The members of the faculty who are to teach the pupils ought to discuss the most logical methods of approach. With courses of study as guides, they can determine to some extent just how they may direct pupils to work on certain problems which appear significant in our society. Possible activities related to the problems, together with content material, may be listed. Conversely, if one teacher is responsible for the work of a class in the core-fields, she can learn much from the teachers who have taught these pupils, thereby considering their interests and possibilities for work. And she can list activities drawing from the content of the three fields whenever she thinks such content will contribute to the development of the children whom she is going to direct. In cooperation with the principal and other teachers field trips, shows, lectures and other devices for creating pupil interests may be planned. Preliminary objectives may change, however, as need arises in the development of the work.

Setting the Stages: Careful consideration should be given to the way a problem is introduced in the classroom because a good beginning will mean a great deal to the success of the work to be done. Some of the ways by which a problem may be introduced in the classroom are as follows:

Interest may be stimulated through the use of pictures, books, maps and other materials which are related to the problem which teachers feel that the pupils would like to work on at a given time and which appear significant in our society.

The teacher may talk on some phase, character, or movement related to the problem around which she wishes the work to center, and then encourage the pupils to talk in an informal way concerning the work.

The teacher may encourage an open forum discussion concerning a radio program related to the problem under consideration. From the discussion pupils may be able to formulate a problem and a purpose for the work which is to be done.

Under the direction of the teacher the pupils may consider a lead from another unit which has been studied. Their interest in some particular phase of a former problem may lead to a discussion of another problem which is related to the one with which the pupils were previously concerned.

Events and conditions in the community may lead to a study of a problem because pupils are naturally interested in the things which directly affect them.

The teachers and pupils may go on a field trip

and observe conditions concerning certain problems.

A picture show may be provided for the class as a means of stimulating the interests of the children.

After the interest of the pupil has been aroused they should select the element in their environment which is of most interest to them and related to the large problem, such as "Home and Family Relationships." The different elements should be written upon the blackboard so that each pupil will see all of them and have some idea of their relation to the problem. Groups should then be formed on the basis of a common element or elements which are closely related.

Directing the Work: Under the guidance of the teachers, pupils may examine the available materials at hand and select activities and content related to both the individual child's interest and the larger problem around which the entire class will center its attention. Usually pupils who are superior mentally will be able to make their own selection with little assistance from the teachers. In some instances, however, she should offer suggestions and if necessary point out desirable activities. Often when pupils have had little experience with this method of procedure, prepared activities are essential because some pupils are not self-dependent. Practice, however, has demonstrated that after such a method has been used for some time the pupils grow in independence until they can select for themselves. All activities should be related to the general problem and pertinent to the objectives which the teacher selects from time to time. In order to provide for individual differences sub-groups may be formed and pupils may work upon problems which they can solve, rather than try to work on activities which are beyond their mental capacities. If such a method is used, each child will have an opportunity to do the work which he is capable of doing while no one will find the work too easy or too difficult.

Each child should be so directed that he will have his own purpose for the work which he is to do, but the experience gained in his activity ought to be related to the undertaking of the class. Having decided upon activities, the pupils should begin work at once. If the subject-matter analysis of library materials is arranged on the basis of child interest, much time and effort for both teachers and pupils will be saved.

If the departmental plan is used in the school, the teacher in each subject matter field may guide the child as he selects activities related to the general problem and to his interest. To be more explicit, if the large problem is "Home and Family Relationships" and a group of pupils are interested in advertising, the teacher of Language Arts could direct this group to select an activity such as the following:

Writing a news article for the school paper showing the influence of advertising on the home.

Under the Social Studies teacher the pupils could select such an activity as the following:

Reading to determine how the government may protect the home by enacting laws to prevent corporations from taking undue advantage of home owners through false advertising.

Such books as *Skin Deep* and *One Hundred Million Guinea Pigs* could form the basis of activities.

In Natural Science the pupils could experiment with certain articles like tooth paste and mercurochrome to determine their value to the home.

A group interested in health could select such activities as the following:

Reading to find out how famous people have worked under difficulties in home on account of their poor health, e. g., Milton, Wilson, Helen Keller.

Reading, consulting, and interviewing to find out the part which germs play in health.

Investigating the contributions which the government makes to the protection of the home and family (Pure Food Laws, Child Labor, etc.).

Evaluating the contributions which outstanding leaders in the field of medicine have made in the protection of the home.

A group interested in crime could select such activities as the following:

Investigating the treatment of debtors and petty offenders, 1700-1835, to show how treatment of them has changed and to show how the home can help to prevent crime by providing the proper environment for the children.

Drawing a chart showing the increase in crime since 1900 in this and in other countries to determine how changes in the home have had a tendency to increase crime.

Investigating to find out how heredity and environment have affected crime in our country.

Writing a news article entitled "Crime Does Not Pay" to learn how to write correctly and to form the proper attitude toward crime.

In addition to the activities which the pupils develop in their classrooms, the various clubs in the school could be used as outlets for the refining and reconstruction of activities developed by the pupils. For instance, if the children in a group were interested in crime they could have a trial in the debators' club. Should another group be interested in food, they could serve lunch to the class.

The time devoted to the large problem should depend upon the results which are obtained from day to day. Should the teachers recognize the fact that the interests of the children are slowing down and should they see that the pupils have developed a reasonable number of activities, they should make provisions for the unifying of the different activities around the larger problem. A class program may then be arranged with all of the teachers directing different phases of the program while the pupils center their new activities which are related to former experiences around the large concept of the group culture which has been under consideration. Since the same pupils are working on their problems from three different points of view—Language Arts, Social Science, and Natural Science—their experiences gained in previous situations may be unified around some central activity for the whole group. After this program has been rendered, the pupils may select additional problems in the form of a review and clear up any conceptions which do not appear clear to them.

Evaluation: Through evaluation the teachers should determine when the objectives have been met. Tests should be constructed in such a way as to bring out the changes which have taken place in the behavior of the children. Also they should bring about an analysis of the work which a child has done in accord with his own ability to do the work rather than in terms of what the group does. For instance, if the child is of superior ability he should be expected to do a great deal more work than one of low mentality. Moreover, both teacher and pupil should participate in evaluation activities whenever it is practicable. Through scoring papers and passing opinions on them pupils will take their work more seriously and recognize their weaknesses sooner. The teacher should evaluate the work further by observing the changes which have come in the interests, habits, and attitudes of the pupils. Furthermore, evaluation should be a continuous process from day to day rather than a single examination of facts at the end of a certain number of activities. Pupils' work in extra-curricular activities should also be evaluated. For example, if a study of democracy should lead children to organize self-government in the high school and such an interest grew out of their work in the classroom, they should receive credit for the work they have done in reconstructing former experiences and actually applying some of them to problems vital to their lives. How well they develop and use such activities should be evaluated as well as the actual work which has been done in the classroom. If pupils develop their abilities to talk before a group as a consequence of the work which they do in solving a problem in the classroom and if they are willing to talk on some important problem in the assembly program, their growth ought to be recognized, for they have demonstrated that they can transfer their training from one situation to another.

Caswell and Campbell, in *Curriculum Development,* point out many ways by which teachers may observe attitudes and fixed associations. Such suggestions have been most valuable to the writer in his evaluation of pupil-experiences in the high school.

Observational tests are much more important than teachers usually realize. More can be told about the complete development of a child by observing him from day to day than in any other way. Important attitudes, appreciations, and methods of work may be tested by securing from observation of a pupil answers to such questions as the following:

1. Does he work well with a group?
2. Does he get along with other children?
3. Is he on time?
4. Is he pleasant and cheerful?
5. Does he read good books during leisure time?
6. Does he raise interesting and stimulating questions?
7. Is he increasingly effective in his use of references?
8. Does he stick to a task until it is finished?
9. Does he give undivided attention to the task at hand?
10. Does he listen courteously to others?
11. Is he thoughtful of smaller children?
12. Does he enjoy hearing good music?[1]

Such suggestions as these are very useful, because the teacher may use them in checking the growth of pupils and in determining whether or not he is directing them in such a way as to have them realize such objections.

Summary and Conclusions: When such procedures as we have outlined in this paper are used in connection with pupil-experience learning, certain factors seem to require careful thought on the part of teachers. First, they should plan the work so that the pupils will group their individual experiences around the same large problem in all of the core fields at the same time. Second, all teachers should be familiar with the characteristics and interests of their pupils, and with the materials which are available. Moreover, they should be aware of the many problems which are significant to American society in the world in which they live. Third, no teacher should do for the child what he can do for himself. Fourth, from small interests pupils should center their experiences around a problem which is of vital significance in the world in which they live. Provisions should be made for the development of literature and the sciences in the past along with the contemporary happenings in the various fields. Fifth, in the selection of the activities provision should be made for the individual differences in the environments and abilities of children. In evaluating the work which the children do the teacher must observe growth in the habits, attitudes, and interests of the pupils not only in the classroom, but also on the school campus and in the community. While subject matter tests may be essential at various times, pupils ought to be judged on the basis of other criteria. Furthermore, pupils should be directed to reconstruct their school-experiences in new situations whenever occasion presents itself.

GEORGE B. WYNNE

[1]Caswell and Campbell—*Curriculum Development.* American Book Company. New York. 1935.

NEW FEATURE IN AMERICAN SCHOOL OF THE AIR

"Lives Between the Lines," a literature feature presented in collaboration with the National Council of Teachers of English and the American Library Association, is being offered each Wednesday between 2:30 and 3:00 o'clock over the nationwide WABC—Columbia net work. It includes dramatizations of American literature and a series of guest speakers invited from the ranks of outstanding writers of this country. The program will point out how literature can be used to increase understanding of other human beings, an essential to a successful democracy. It is a division of the "American School of the Air."

No man nor any body of men is good enough or wise enough to dispense with the tonic of criticism.—*Huxley.*