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ABSTRACT

A project in Washington, D.C., used classroom radio as a language arts tool to solve some of the classroom problems (i.e., lack of materials dealing with ghetto children, classroom discipline problems, and the inability of those unable to speak standard English to learn to read and write) which prevent disadvantaged, dialect-speaking children from overcoming their language difficulties. Four types of radio problems (i.e., information, identification, topic, and imagination programs) were selected to attain several performance objectives. As teacher involvement in the planning and production of broadcasts was essential, such training as in-service workshops was implemented and steps were taken to bring both teachers and students into the program. Steps were also taken to assure the dissemination of tapes and teacher materials to schools not involved in the project. (Appended materials include a report on a survey of American radio stations providing instructional programs, a list of schools participating in the project, a sample teacher guide for a program for students in grades 10-12, an evaluation of a classroom radio project, a summary report of a workshop on the use of radio, and a sample schedule of broadcasts.) [Not available in hard copy due to marginal legibility of original document.] (DD)

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ENRICHMENT THROUGH RADIO: A
PROPOSAL TO USE RADIO AS A TOOL OF
INSTRUCTION FROM PRE-KINDERGARTEN THROUGH GRADE 12

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Radio Project 390
March 19, 1968

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BACKGROUND

The Passow report released last year on the District School system is responsible for a vast reorganization program.

However, there was one program being tried on a pilot basis last year that may be the very cure for some of the ails discovered by Passow. This pilot program is "Enrichment Through Radio", an experiment in classroom radio as a language arts tool. The project has been tested for more than a year under Title III in partnership with American University. Radios have been in 164 classrooms with approximately 50,000 children participating. The project included in-service training for teachers, research and development of a number of curricula ideas which show promise of being an effective language arts program. This promise is contingent, of course, on the continuation and gradual expansion of the use of radio.

When looked at on paper, "Enrichment Through Radio" seems modest because of the low costs and small staff required to operate it. However, as Jerrold Sandler, Director of National Educational Broadcasters, pointed out in a workshop for participating teachers, "The experimental project you're operating in the District of Columbia is demonstrating that creative use of classroom radio could have national impact in meeting urban educational problems."

The phrase "classroom radio" suggests many possibilities, most of them being "good morning children" entertainment and saccharine moral lessons. When people think of new ideas in broadcasting they think of television. But, as Mr. Sandler pointed out, this country is years behind England, Canada and Australia in making the most of radio. Many people in the field have pinpointed the radio project in the D.C. Schools as one of the few attempts to do something creative and innovative in radio.

"Enrichment Through Radio" has been concentrating on the language difficulties of children who enter the public classroom from ghetto areas where their families speak a dialect. The project was conceived as compensatory education for students not performing up to the level of their presumed abilities as a result of language deficiencies. Programs developed in the pilot stage were designed to motivate them to participate in the classroom rather than withdraw. Teachers were provided with guidelines and suggestions of how to broaden this participation into a constructive learning process. The programs that were broadcast were true to the experiences of ghetto children. Students and teachers were used in the broadcasts and it is hoped that future broadcasts will involve their parents as well.

CLASSROOM PROBLEMS IN URBAN AREAS THAT NECESSITATED THE "ENRICHMENT THROUGH RADIO" PILOT PROJECT

Teachers in the District of Columbia face three major problems:

1. The ineffectiveness of teaching reading and writing to children who are unable to express themselves in complete standard English sentences.
2. The lack of classroom materials that deal realistically with the problems and needs of ghetto children.
3. The classroom discipline problem that may have its roots in the failure to deal successfully with the preceding problems.

These problem areas were cited in detail in the Passow report, but of course, educators in the District have long been aware of their existence and have been experimenting with projects such as this to determine how these problems might best be solved.

The staff working on the project, the classroom teachers who participated, the research personnel who did the testing, and the educational and professional specialists who were consulted are overwhelmingly convinced of the project's success and its need to be continued. In the following statements of this report, we hope to demonstrate how radio has proved to be an effective language arts tool. But first, a closer look at the problems themselves.

NEGRO CHILDREN FROM GHETTO AREAS SPEAK A DIALECT: A LANGUAGE JUST AS COMPLEX IN ITS GRAMMAR AS STANDARD ENGLISH AND ONE THAT MANAGES TO SURVIVE IN SPITE OF THE PUBLIC SCHOOL SYSTEMS. AT LEAST A THIRD, POSSIBLY MORE, OF THE CHILDREN IN DISTRICT PUBLIC SCHOOLS HAVE THIS LANGUAGE PROBLEM.

These are the facts. Linguists across the country are beginning to analyze Negro speech patterns and are asserting that far from being corruptions or sloppy English they are elements of a separate and legitimate language.

This approving nod from academicians is welcome in that it is helping to reshape the thinking of classroom teachers as they correct their students, but it doesn't alter the cruel facts of life for dialect-speaking children. The public speaking children. The public school system (as well as our economic and social institutions) is historically an institution of white culture and speech. School programs in all cities are geared to the assumption that everyone speaks or should speak standard English. In the District of Columbia, some compensatory projects are being tested, but none are in operation on a citywide basis.

The language difficulties that dialect-speaking children experience from the first day they enter school are a big factor in underachievement. It's not uncommon to hear people say of Negro children, "I can't understand a word they're saying." Well, reverse that. What of children who can't understand a word their teachers are saying and must try to read in a language that is foreign to them. There is also the emotional problem they face when teachers try to get them to reject the language that is used in their homes. Unless handled skillfully the teaching of standard English can cause children to reject themselves.

But, something must be done to teach children standard English. Not only do language differences account for many problems in the classroom, but also for social problems outside the classroom. And, as teachers know only too well, how can young Negroes expect to get good jobs if they cannot speak in the accepted way. Langston Hughes, the Negro poet, summed it up in this way: "I'm dug because I dig all jives."

If Negro children fail to become bilingual, then many opportunities are permanently closed to them. Some urban public school systems are beginning to recognize and accept their responsibility to help students become bilingual without teaching them to hate themselves or their own language.

Aside from, or perhaps adjacent to, the language problem in the classroom, is the lack of interest that students show in regular classroom work. The teaching materials spring from a white culture that is foreign to them and which is "cool" to reject. In elementary school, there is frustration and unruliness. In the secondary grades, this develops into serious discipline problems. Schools are trying to reorganize their curricula to meet the special needs of the children described here. But there are not enough materials to go around or enough teachers especially trained to deal with the problems.

The District of Columbia has been operating a language arts program in the elementary schools on a limited basis with teachers who spend their entire day teaching language arts skills. Ideally there should be such a teacher for every school and every child should have exposure to this special training every year they are in school. The simple fact is that there are not enough such teachers.

The Passow report paid particular compliments to the Language Arts Program and to its recognition of the fact that children cannot be taught to read before they are taught to speak the language they are reading. In teaching foreign languages such as French and Spanish, this has long been accepted. Children must understand the meaning of words and be able to put their own thoughts into words before they can have any concept of phonetics and grammar and begin to read and write.

Since there was no assurance that the Language Arts Program would be expanded to include all schools which seem to need its services, the idea of producing radio broadcasts that embodied the techniques of the Program's special teachers was conceived. These Programs were to be broadcast with teacher guides so that every teacher using them would become, in a sense, a language arts teacher.

WHY RADIO?

When analyzed methodically, radio is probably the most appropriate tool for teaching language arts. The fact that it costs so little is bonus.

1. A RADIO IS A FAMILIAR AND SIMPLE PIECE OF EQUIPMENT TO PURCHASE AND OPERATE. All a teacher has to do is take the radio from its storage cabinet and turn it on. If a radio isn't available in her school, either she or her students can easily bring one from home on the day of the broadcast. (Few people who live in cities are unaware of the teenagers who walk up and down the streets with their transistors blaring. For many, it is their escape from their environment of closed boundaries.) Once the radio is turned on for the classroom broadcast, the teacher is free to direct her class into participation with the help of detailed teacher guides prepared by people who know both broadcasting and the classroom.

2. AT THE SAME TIME RADIO IS FAMILIAR IT IS STILL A MEDIUM OF THE OUTSIDE, ADULT WORLD AND HAS THE AURORA OF EXCITEMENT FOR STUDENTS WHEN THEY KNOW BROADCASTS ARE BEING MADE JUST FOR THEM. When they hear their classmates and teachers and even their parents on a city-wide broadcast, youngsters have the opportunity to feel that they really are a part of the world. With the teacher's help, incentive and motivation to try harder can replace despair.

3. RADIO IS SOUND ALONE AND THE STUDENT MUST USE HIS IMAGINATION TO SUPPLY MISSING DETAIL. Children learn by imitation, but they can fail to learn to think by themselves if imitation never gives way to creation. Programs thus far have been designed to compel students to look deeply into themselves and to what they really are. Teachers participating in the project have been trained to reject right or wrong answers and to allow students to express their own thoughts. This, rather than imitate what he sees or say what he believes people want him to say and has been made to feel is appropriate to the classroom. The programs have been designed to remove the unrealistic walls and blackboards from the classroom and let students see that what happens on the outside can be dealt with in school. With sound and not pictures, students have only the pictures in their own mind and relate.

what they are hearing to their own experiences. They learn to accept themselves rather than reject what they feel the world has already rejected for them.

These statements about radio are not automatic with the mechanical instrument itself. Their truth depends on the skill of the broadcasting and educational staff. But the testing results, as well as comments written by participating teachers have demonstrated that radio as used in this project has lived up to these projections.

A SUMMARY OF THE PLANNING STAGES OF "ENRICHMENT THROUGH RADIO"

The following five objectives were to be achieved by the planning grant:

1. Determine the curriculum needs of the District of Columbia School System which may be served through the use of radio.

During the planning grant, many classrooms were personally visited by the staff and many teachers interviewed. All teachers participating in the project (elementary teachers and secondary English and speech teachers) were invited to an all-day workshop where their classroom needs and program ideas were solicited and written down. These remarks and teacher evaluations are in the appendix.

Department heads of secondary areas outside the English and speech departments were interviewed as to how radio might serve their curriculum needs. Their comments are in the appendix of this report.

2. Determine how radio might be used to supplement the inservice education of classroom teachers relative to language arts and listening skills.

In addition to evaluating the comments of teachers themselves, interviewing a number of educational and broadcasting professionals outside the D.C. Public School System, and soliciting advice and help from D.C. Teacher's College, a number of inservice ideas emerged within the radio staff as a result of watching the project at work. The combined suggestions and ideas are contained in a separate section of this report titled THE FUTURE: TEACHER PARTICIPATION AND IN-SERVICE TRAINING.

3. Write, produce and test several kinds of programs (at different levels) which will meet the curriculum needs determined in two above.

A total of 14 programs designed for the different age groups involved were produced and tested. A schedule of broadcasting listing these programs is included in the appendix. Each program was in the appendix. The programs were evaluated by the teachers themselves as well as a team of researchers from Catholic University.

4. Evaluate the effectiveness in the classroom of the programs which have been constructed.

The evaluation done by Catholic University is in the appendix as well as a report of teacher evaluations that were compiled at the

recent in-service workshop.

5. Choose among the program types tested and develop a coordinated series of aural materials for use in the language arts and other curricula in the District of Columbia Public Schools.

In another section of this report titled THE FUTURE: WHAT KINDS OF PROGRAMS? there is a compilation of program ideas for the different classroom levels. Some of these program ideas would be done on a single-shot basis and others would be developed as a continuing series.

THE FUTURE: WHAT KINDS OF PROGRAMS?

The premise of this entire report is that classroom radio can help children overcome language difficulties and can help reinforce other curriculum areas.

However, there's an important fact to be noted: you can't force children to learn standard English or to learn anything for that matter if they don't want to learn. Motivation and incentive must be built into every program that goes on the air. Children will learn only if they want to and making them want to should be as important as the perfecting of any academic exercise.

The experience in our broadcasting has been that children at the elementary level are naturally curious and respond easily to things that are imaginative, different and fun. Students at the secondary level were found to have a built-in rejection system against things that come from school. What they want to know is "how to be popular" and "how to be rich." Developing material that is intellectually honest and yet able to appeal at this level is the problem at hand.

Visits to the classroom and interviews with teachers in the city revealed that students at the secondary level are sophisticated in an earthy, worldly way and are hardened against middle class cliques that have no relevance for them. Student reaction to the demonstration broadcasts reinforced the thinking of our staff that these students can't be "conned" or coerced into learning.

If secondary students participate and involve themselves in the classroom, it's probably for competitive, personal or pragmatic reasons. Someone has convinced them that by knowing more about themselves and the world they live in will help them have a bigger share of that world.

And, it was found, that when a student lets down his defense mechanisms to a point of genuine response in the classroom, it will have to be because he has some hope of success. Programs for broadcast into the classroom must be prepared with success and hope available to the student who tries.

The above statements pertain primarily to the secondary grades though they are often applicable in the older elementary groups.

The experience in testing programs in the elementary grades seems to point to a continuation and expansion of the kinds of programs tried. These were raw sounds, narrated stories, poetry, language games, quizzes and social situations. These programs would be put together in such a way as to achieve the language arts objectives that are stated in the following section titled THE FUTURE: PROGRAMMING OBJECTIVES.

However, the programs tested at the secondary level indicated that all material should be gutsy and hard-hitting if students are to be interested and involved. And every program must dig deep to make students feel their relationship to the material being broadcast. In other words, concrete and person-oriented, rather than abstract. Programs, even those dealing with facts and figures, must be directly tied to the student's own world and experience.

Broadcasts at the secondary level must bring the ghetto student's world into the classroom, but even more important is relating that world to the bigger world of ideas, geography and technology.

How can broadcasts be these things and also relate to the everyday work that goes on in the classroom?

To begin with, teachers using radio, or at least key teachers in every building, must be intimately involved in the entire planning of materials and skilled in the handling of follow-up activities. The section of this report titled THE FUTURE: TEACHER PARTICIPATION AND IN-SERVICE TRAINING outlines teacher involvement and building of skills.

The following categories of programs have been arbitrarily developed as a result of experiences in the "Enrichment Through Radio" project. These categories would be useful in the math and science room and history room as well as in the English room. The program ideas under these categories are primarily designed as language arts programs, but in examining the list it will be easy to see extensions into the different curriculum areas.

1. INFORMATION programs reaching beyond the child's environment, but in a provocative way that makes new learning experiences seem possible:

- a. dramatization of news events with sounds
- b. factual programs to supplement class texts
- c. programs using sounds from literature being studied in the classroom for identification by students
- d. programs describing culture and language of different countries
- e. cultural programs with built-in student involvement
- f. job information and employment procedures
- g. consumer, health, and safety information
- h. dramatizations of novels, poetry and plays

2. IDENTIFY programs that let students feel a part of the big world outside including programs that emphasize positive values of Negro culture and history and allow students to feel the legitimacy of their own world by bringing it into the classroom.

- a. taped interviews in the community using in-group language
- b. Negro literature and history programs
- c. American folk and jazz music
- d. programs on stereotyping beginning with example of small children's ideas of what an Indian is like and ending with full scale examination of stereotyping
- e. tapes of students and parents discussing their own opinions and attitudes and role-playing "who am I?"
- f. program of Negro humor and examination of what makes people laugh

3. TOPIC programs that lead to discussion of personal experiences and thoughts and identification beyond the Negro community. These programs should begin and end with the question "why?" and may overlap with some of the program ideas listed above.

- a. program on dropping out of school (not a moral lesson) and what happens to you; the outline for such a program using students from Spingarn has been developed
- b. dramatizations of open-ended social situations that force students to examine their own motives and emotions
- c. taped interviews with "establishment" and "hero" figures where students ask their own question
- d. programs on propaganda and how it works

4. IMAGINATION programs including sound games and programs that involve students by getting them to pretend and role-play and create their own poems, stories and pictures.

These are the suggested categories for evaluating the potential of a program idea. At the teacher workshop held January 6, 1968, participating teachers took these categories and developed detailed suggestions for broadcasting. Those ideas are in the appendix of this report.

In determining which program ideas to develop and produce first and which ones lend themselves to a continuing series, it will have to first be determined what the District of Columbia Public Schools is willing to do. National Educational Radio has shown a great deal of interest in "Enrichment Through Radio" and has suggested the possibility of picking up several series for cross-country broadcast. Other cities have directly expressed their interest in obtaining tapes that are produced here.

THE FUTURE: PROGRAMMING OBJECTIVES

The program identified in the preceding section had implied objectives. These objectives would be served depending on the quality of the broadcast and skill of the teacher in planning and executing follow-up activities.

The teacher has been identified as the single most important person in a program of classroom radio. Various teachers have contributed to the planning of follow-up activities that have been used to date and every broadcast is written with the foremost thought of how the teacher can use it in the classroom. Each broadcast is supplemented with a complete teacher's guide outlining the main ideas of the program, how long it runs, its purpose and suggested follow-up for use in the classroom.

Teachers themselves have contributed to the development of the theory that there are no "right" or "wrong" answers. Students are all too willing to shirk initiative by figuring out what the teacher expects, memorizing somebody else's ideas and letting it go at that. These programs, however, are to provoke original thinking and oral expression of those thoughts. With the beginning of oral competence, the teacher can then logically begin to teach reading and writing. Experience has shown that she will have a more responsive class.

In the elementary grades K-3, program objectives will involve the following performance from children:

1. listen actively and attentively
2. talk spontaneously
3. express themselves in complete sentences where appropriate
4. learn that words have precise meanings and use words correctly
5. expand vocabulary through introduction to new words and repeated use of them in follow-up activities
6. develop confidence in talking to a group
7. develop self-esteem and identity
8. learn to deal with their negative feelings
9. develop critical awareness of their environment
10. develop awareness of standard English
11. learn to pronounce words correctly and enunciate clearly
12. experience a comprehension of language leading to improved reading and writing

In the upper grades and secondary schools, broadcasts will have as their main objective, providing the stimulus to students for greater participation in the classroom and eliminating the "tuning-out" of students who feel alienated and uninspired. The unscientific aim of giving hope to students who feel hopeless and helping them come to a better understanding of themselves and a better self-image is part of this project.

It is hoped that the statements thus far have illustrated the connection between frustration and language difficulties. Eliminating this frustration is the first objective. If that is achieved, then it is reasonable to return to the performance objectives outlined for elementary children. The same would apply and the following should be added:

- 1) gaining of new information
- 2) learning to identify main ideas from irrelevant materials
- 3) development of critical thinking
- 4) creating original materials
- 5) demonstrating an understanding of learning as separate from memorization and repetition

TEACHER PARTICIPATION AND IN-SERVICE TRAINING

Experiences in the pilot testing of classroom radio demonstrated the necessity of involving the teacher as much as possible in the planning and production of broadcasts. Aside from this, there is need for exchange of ideas between teachers and production staff and between teachers themselves. In-service training is also necessary if teachers are to become skillful at integrating a mechanical tool into the live classroom. The following ideas have been developed in the pilot stage for continuation into the permanent program:

- 1) The use of radio as an in-service training media for teachers is being considered in cooperation with the D.C. Teacher's College. Oral demonstration of successful and unsuccessful teaching methods would be dramatized.
- 2) Teachers and students should be used in broadcasts whenever possible.
- 3) Teachers and students should be paid a small sum for usable program ideas and suggestions. This incentive method has a precedent in U. S. Government offices and has proved successful.
- 4) Teachers should receive their program guides and broadcasting schedules at least two weeks before the actual broadcasts and they should be sent an advance notice summarizing briefly what broadcasts they might expect at the beginning of each 9-week period.
- 5) Teachers should be used in preparing teacher guides and programs should be tested in one or more classrooms before they go on the air so that a more accurate guide might be written based on pupil response.
- 6) A monthly newsletter should be sent to teachers outlining the developing dimensions of classroom radio and reporting on the successes and weaknesses of activities that are being used as broadcast follow-ups.
- 7) At least one and hopefully two workshops should be held each year; at the beginning of the fall term and beginning of the second term. These workshops would follow the precedent established by the one held January 6, 1968, with teacher participation and in-service training as the objectives. Released time would be needed, although the Saturday workshop with pay seems the most feasible idea with substitutes being so rare.

DISSEMINATION TO NON-PARTICIPATING STAFF AND INVOLVEENT OF COUNTY SCHOOLS

How can teachers who are not directly involved in the project be informed and allowed to participate if they so desire? Eventually, all teachers should be part of classroom broadcasting and regular receivers of teacher materials. At this point, key teachers would be designated to participate in workshop sessions although every teacher could participate in the radio in-service training broadcasts, in which radios would be used as the training device.

Meanwhile, all teachers in the city who have not been directly supplied with radios should receive a full report on the project and a form to return to the program director if they desire more information and wish to participate on a voluntary basis.

Regular progress reports should be sent to school administrators, the Board of Education, Department heads and principals.

County schools sent representatives to the recent workshop and are already interested in participating in the broadcasts. They should be supplied with regular information and broadcasting schedules.

A library of tapes should be maintained so that they may be borrowed by teachers who missed a broadcast, were unable to obtain radio, who want to repeat it for any reason, and also for teachers outside the system who are interested in the radio project. Tapes used most frequently should be made available through the Learning Resource Centers in every building.

COORDINATION COUNCILS: 1) WITH TOP LEVEL PERSONNEL IN EDUCATION AND BROADCASTING; 2) WITH APPROPRIATE CIVIC ORGANIZATIONS; 3) WITH PARENTS AND COMMUNITY REPRESENTATIVES LEADING TO POSSIBLE PROGRAMMING FOR THE PARENTS OF GHETTO CHILDREN

It has been demonstrated during the pilot stages of this project that coordinated efforts are necessary for the dissemination of information to the various agencies and professional personnel and citizens who are involved in the process of education.

WHERE DO WE GO FROM HERE?

We've reported the results of the pilot stages of "Enrichment Through Radio". Supporting material is in the appendix, and some broad suggestions and guidelines for the use of radio have been outlined. That leaves one thing left to do: the decision of where we go from here.

In making that decision the following things are involved:

1. How quickly do we want to move forward in making radio available across the city to classroom teachers and students?

A broadcast requires the same amount of staff and facilities whether it is heard by one person or by millions. Involved in deciding

how many and what teachers should be given the chance to use radio, it should be remembered how easily they can get a radio into their classroom if they are just aware that a broadcast is available to them. In other words, getting broadcasts schedules and teacher guides to as many teachers as is clerically possible is one approach. This would be an inexpensive operation and with several in-service broadcasts for teachers using radio to introduce radio to teachers, it could work reasonably smoothly. Key teachers from each school would need to be designated for participation in workshops and further skill-building.

2. What kinds of broadcasts and how often?

The pilot project has produced enough evidence and expertise to move ahead with a full-scale language arts broadcasting schedule. Material is available for program development; the key needs in both elementary schools and secondary English and speech classrooms have noted and incorporated into the thinking of the Project; and, the success of these broadcasts in helping teachers eliminate language difficulties has been demonstrated. It would seem that the development of several continuing series at each of the different grade levels with occasional broadcasts on a single-shot basis would be the next step in the graduation to a full-scale language arts program.

Department heads in other curriculum areas have expressed their interest in radio and made suggestions as to how it can help their own teachers. It would seem logical to broadcast on a pilot basis to teachers in other areas.

How often broadcasts are made will of course depend on the facilities and staff available for future broadcasting. Effectiveness in the classroom seems dependent on regular usage with at least one broadcast a week per grade level. This comment is supported by the teacher evaluations compiled at the recent workshop. Perhaps each series would run one-month so as to coordinate with the unit work done by teachers. Of course, although there may be only one or two broadcasts at each grade level, during the course of the week those broadcasts must be repeated several times to give every teacher the chance to work them into her schedule.

In-service broadcasts for teachers and instructional and informational broadcasts for parents are two other areas that should be considered. Radio could effectively and efficiently serve as the link which connects the central administration to the professional and non-professional school personnel and to the community at large.

Budget
Annual Cost for Expanded Service
July 1, 1968-June 30, 1969

The total request is in the amount of \$211,290.50 and is to be distributed as follows:

I. Public Schools of the District of Columbia

A. Staff

Director, In-School Broadcasting: 1 position Class 6	\$15,455.00
Writer-Producers: 3 positions, Class 13 (\$8,600)	25,800.00
Technicians (Remote and Recording): 2 Class 15 (\$7,890)	15,780.00
Secretary: 1 position, GS-6 (Step 4, \$6,137)	6,137.00
Clerk typist: 2 positions, GS-4 (\$4,995)	9,990.00
Lesson Guide and Tape Librarian: 1 position, Class 15, (\$7,550)	7,550.00
Field Coordinator: 1 position Class 9 (11,015)	11,015.00
Part-Time Staff (Talent, Consultant, Technical)	5,000.00

Total, Salaries and Wages Exclusive of benefits
\$96,727.00

B. Travel

1. Staff

a. Staff travel including per diem and allowances for participation at conferences, institutes, seminars, etc.	\$ 1,500.00
b. Mileage allowance (estimated at \$100 per month)	1,200.00

2. Pupils

Two 2 hour trips per month at \$23.00 each for 10 months	460.00
Total Travel	<u>\$3,160.00</u>

C. Membership Fees

NAEB - NER - 1st year (Cost for subsequent years- \$870.50)	427.50
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\$427.50

D. Supplies

1. Tapes, magnetic, recording (2,600 tapes @ \$1.50, 5 in. 600 ft.)	\$ 3,900.00
2. Office supplies	1,000.00
3. Printing, communications, lesson guides	5,000.00
4. Editing supplies	200.00
5. Postage	1,000.00
6. Program purchases	3,000.00
7. Recording and cataloguing supplies	<u>3,000.00</u>

Total Supplies \$17,100.00

E. Equipment

1. Radio receivers, 500 @ \$30.00	\$15,000.00
2. Furniture, office	2,476.00
3. Telephone (estimate based on 2 lines 6 phones)	200.00
4. Studio	12,000.00
5. Dubber	5,000.00
6. Field recorders, 2 @ \$1,200	2,400.00
7. Remote Studio	3,000.00
8. Replacement parts	1,500.00
9. Typewriters and mimeographing equipment	<u>1,510.00</u>

Total, Equipment \$43,086.00

F. In-Service Education

One day per teacher for three hundred teachers @ \$25.00 per person	<u>7,500.00</u>
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Total \$ 7,500.00

Total estimated budget for the first
year, D. C. Public Schools \$168,000.50

The American University Budget for D. C. Schools
Radio Project \$ 43,190.00

Grand Total \$211,190.50

A P P E N D I X

A-B

Report on a
Survey of Educational
Radio Stations Using Instructional
Radio Programs

Dr. Roger Penn
Associate Professor
Department of Communication
The American University
Washington, D. C.

February, 1968

As part of the project "Enrichment Through Radio" WAMU-FM undertook to survey persons involved in some aspects of in-school radio instructions for public education.

questionnaires¹ were sent to 142 persons representing instructional stations of the National Educational Radio Network, language programs for the disadvantaged, and state supervisors for the teaching of English. Approximately one-third of the questionnaires were returned, making a total of fifty responses upon which the following tables are based.

Table I

Sources of Returned Questionnaires	
NER instructional stations	11
Representatives of language programs for the disadvantaged	17
State Supervisors for the teaching of English	17
Unidentified or unusable	<u>5</u>
*Total questionnaires returned	50

*Return rate 34.5%

The responses to the questionnaires yielded information on the range and type of instructional radio programming being broadcast in the United States during 1967. A list of these programs, comprising twenty-seven different subjects and 90 courses is shown in Table II.

¹
See questionnaire appended

Table II

*Number and type of In-School subjects being broadcast by Radio Stations in the United States during 1967.

<u>Subjects</u>	<u>Number of courses</u>	<u>Subjects</u>	<u>Number of courses</u>
Art	2	Music	9
Civics	1	Mythology	1
Drama	2	News	3
Economics	1	Personship	1
English	6	Poetry	2
Geography	3	Reading	1
Guidance	1	Science	10
History	7	Social Studies	7
Health & Safety	3	Social Science	1
Language Arts	3	Speech	3
Languages	3	Teacher In Service	
Listening	4	Training	1
Literature	9	Writing	2
Math	2	Vocabulary Building	2
Total number of subjects offered by radio		27	
Total number of courses offered by radio		90	

*It is important to note that this list is based on questionnaire results only. Additional courses and subjects are certainly offered by stations and institutions not responding or not contacted.

The following specific stations have been identified as broadcasting educational materials for in-school or informal instructional purposes. The list has been compiled from questionnaire results plus data gathered from the² 1967 study of educational radio made by National Educational Radio.

Call letters	Location
WIAN	Indianapolis, Indiana
KBPS	Portland, Oregon
WBAA	Lafayette, Indiana
KSLH	St. Louis, Missouri
WETL	South Bend, Indiana
WKTL	Struthers, Ohio
WGVE	Gary, Indiana
WCBE	Columbus, Ohio
KICO	Calexico, California
KRLC	Lewiston, Idaho
KOZE	Lewiston, Idaho
WNAS	New Albany, Indiana
WEPS	Elgin, Illinois
KTIS	Minneapolis, Minnesota
KUOM	Minneapolis, Minnesota
WLOL	Minneapolis, Minnesota
KLON	Long Beach, California
WFIN	Findlay, Ohio
WFIL	Philadelphia, Pennsylvania
WNYE	New York, New York
WDTR	Detroit, Michigan
WFFK	Louisville, Kentucky
WPLN	Nashville, Tennessee
KRVT	Eugene, Oregon
WBCO	Newark, New Jersey
KANJ	Albuquerque, New Mexico
WFBE	Flint, Michigan
W HI	Muncie, Indiana
WHA	Madison, Wisconsin
WVCR	Londonville, New York
KVOF	El Paso, Texas
KDPS	Des Moines, Iowa
WBGD	Indianapolis, Indiana
WOAK	Royal Oak, Michigan
WPSR	Evansville, Indiana
KLHS	Lewiston, Idaho
WBOE	Cleveland, Ohio
WMTH	Park Ridge, Illinois

² The Hidden Medium: A Status Report on Educational Radio, A report prepared by Herman Land Associates, Inc. (Washington: National Educational Radio, 1967)

Among the stations identified as broadcasting instructional programs were the following which bear further specific mention.

WBAA is the radio station licensed to Purdue University. It is known for its "School of the Air" project which is heard in 279 schools with 4,775 classrooms. An estimated 1,117,602 students participate in WBAA broadcasts. The Educational Supervisor of WBAA feels that one of the most difficult problems faced by instructional radio is feedback from the classroom to production personnel. WBAA has used teacher evaluation forms, placed in the back of each program manual, but the results have not been very successful due to a low rate of return. Some other stations have their evaluation sheets distributed by school principals who expect them to be turned in at the end of a broadcast or series. Such distribution appears to improve the return rate considerably.

WBAA personnel report that the use of a central sound system is not successful for radio because it is associated with administrative school functions and is not under the control of the teacher. Receivers placed in each classroom are more flexible in use and are more acceptable to the classroom teacher.

Drama is used in some BA. programs with college students performing on a volunteer basis. College professors are often invited to plan or provide a series of broadcasts.

A noteworthy series of broadcasts originated by BAA is entitled "Creative Thinking". This series deserves special attention because it documents the teaching of creativity by radio. Other series which are felt to be particularly successful by WBAA personnel are "Words to Use," "Economics for Elementary School Children", and "News in Focus," a current events broadcast.

KSLH is the station of the Board of Education of St. Louis, Missouri. One of the significant findings about KSLH is the frequent "on the air" use of school children in their broadcasts.

A program which has received enthusiastic listener response from students and teachers alike, is a morning broadcast of news for the upper grades. Regular news stories are covered with an emphasis on vocabulary building, spelling, and geographical facts in the news. The broadcasts are often carried over central sound systems in the schools. The programs are scheduled just prior to the beginning of classes in the morning, a time which may lend itself to the successful use of a public address system.

A significant attempt at in-service teacher education has been achieved by the distribution of a booklet, "How to Use Radio in the Classroom," to all teachers in the listening area.

KBPS, the radio station of the Portland, Oregon, Public Schools reaches an estimated 179 schools and over 4,000 classrooms. KBPS

activities include experimentation with programming for disadvantaged youth under a Title I grant. The station has also experimented with a telephone call-in series of broadcasts for 7th and 8th grade students. Students provide scripts for some of the broadcasts.

KBPS has had extensive experience with teacher education by radio. After school discussion series, dramatic programs, and other activities for teachers have been presented.

WBCO is the station of the Board of Education of the city of Newark, New Jersey. Over seventy-five percent of the school students in the area are Negro. The station has participated in "Headstart" programs and has developed special programs for Negro classroom audiences. Most notable among the special programs is "Glory Road", a series on Negro history.

WNAS is the radio station of New Albany, Indiana, licensed to the Floyd County Consolidated School Corporation.

Perhaps the most surprising aspect of WNAS is that it is entirely student operated. WNAS personnel estimate that their programs are used by ninety-five percent of the 140 elementary school classrooms in Floyd County. Almost all of the programming is locally produced including language instruction, spelling, "global concepts", and listening skills for grades one through three.

WANN is the radio station of the Board of Education of the city of Albuquerque, New Mexico. It is in an area of Spanish-American and Negro minorities. One of the most useful procedural devices which they have developed is a five minute musical interval between programs allowing radio receivers to be moved from classroom to classroom. Another sensible innovation is a teacher manual with looseleaf pages so that new material can be inserted and old material changed without major printing costs during the school year.

KLON is the educational station of the Long Beach Unified School District, Long Beach, California. The programming is received by seventy-seven schools and nearly 100,000 students.

One of the significant techniques used by KLON is the broadcasting of programs to teachers on a preview basis. Teachers are asked to evaluate these programs before actual use in the classroom. The evaluations assist station personnel and school officials in revising the materials in an effective manner. Perhaps more important, the classroom teacher is given a chance to influence the programs during production.

WFBE is the educational station of the Board of Education of the city of Flint, Michigan. Broadcasts are made to nineteen schools with 473 classes. It is significant to note that the station provides materials for the students as well as the teachers. These materials include poems, stories, and illustrations which have relevance to the broadcasts.

The data gathered by this survey show the great variety of subject matter being transmitted to public school classrooms by radio. It is clear that radio is being used at all levels of public education. The survey results do not indicate the relative or general effectiveness of radio in a rigorous manner. Such results were not intended.

The data do reveal that radio is a consistent element in the educational experience of students in a limited number of school systems in various parts of the United States. Radio appears to have the capability of meeting a wide variety of educational needs including teacher in-service education, presentation of current events, specialized skills training, enrichment, and complete courses of instruction.

B

HOW CAN RADIOS SERVE THE TOTAL CURRICULUM OF DISTRICT SCHOOLS?

During the pilot stage of "Enrichment Through Radio" each director of a curriculum area was interviewed regarding his interest in being consulted and included in plans for broadcasting materials into the classroom.

It should be understood that the following excerpts are not direct quotations, but a summary of the preliminary interviews. Follow-up conferences and recording sessions should be arranged if we continue exploring the use of radio in other areas outside language arts.

MRS. JULIA FICKLING, Guidance and Placement Supervising Director: Radio can be most helpful in stimulating discussions of how to go about getting a job. Where do you go? What do you take? How do you dress? How should you answer questions? What information do you take with you? Occupational information could be given too, such as, how do you get along with your employer or your co-workers. We would be glad to help with the formulation of ideas for these broadcasts or in any way.

MRS. BERNICE W. WADE, Health, Physical Education, Athletics and Safety Supervising Director: I would like radio broadcasts to stimulate educational discussion in the classroom on "forbidden" subjects. When we're having illegitimate babies in elementary school it's time to face the problem of promiscuity and venereal disease. I would also like programs on physical fitness, smoking, and drugs.

MRS. LUCILLE N. POLK, Business and Distributive Education Supervising Director: I would like to see discussions of vocational opportunities and preparation for these. How to take a civil service exam would be a good program. Did you know that many students go right into a GS 3 position while they're working at a part-time job and finishing high school? Most students don't even know such an opportunity exists to go to school in the morning and work from 1-5 with the promise of full-time employment on graduation. Radio would be a fine way to reach students who would qualify for these opportunities, but don't know about them.

MRS. MARIAN B. CONWAY, Home Economics Supervising Director: Programs dealing with realistic family situations, pointing up family problems so that children may listen to them and discuss them would be extremely worthwhile.

DR. JUDITH B. LEBOVIT, Foreign Languages Supervising Director: I will wait until I hear one broadcast to see how, if at all, radio can fit our needs. (Interviewer's note: Radio is a natural medium for teaching foreign language, even if all that happens is that students hear a native speaker whom they really don't understand. They can certainly benefit from the flow of the language, the accent,

comments cont'd

the inflection, just as when one listens to a tune and picks up the melody more easily than if only a printed page were available. There are infinite possibilities here for cooperative planning between the foreign language teacher and the radio producer.)

MRS. EMMETT L. LIND, Supervising Director of Mathematics: I'll talk to my staff of elementary teachers at our next meeting. My immediate impression is no, we cannot utilize radio. But maybe they'll have some other ideas. Of course, even if actual concepts have no place in such broadcasts, motivation could be helped. For example, you might do number stories and the history of mathematics. (Interviewer's note: Programs on why one learns to tell time or why one learns to do simple arithmetic and how you can be cheated if you don't learn. Also, programs on bowling and playing pool would be a way introducing concepts in higher mathematics since these games are based on mathematics.)

MR. SOL M. SILVERMAN, Supervising Director, Industrial Arts: I've discussed this with my staff and we are very much interested in the possibilities radio offers us. We suggest panels or discussion groups of children on vocational guidance, consumer knowledge, home maintenance (the value of knowing how to fix and do small repairs around the apartment or house). Consumer knowledge means showing children what to look for in buying goods. For example, in selecting furniture, is it constructed properly of good materials, drawers well-made, finish solid or veneer? These are things that the industrial arts program works on with students.

MISS. FRANCES NOLL, Supervising Director of Curriculum: Safety is a very weak part of a child's education and I would like to see programs on pedestrian safety, highway safety, domestic safety. Another subject for discussion on radio could be personal and family living. When certain problems face us, what do we do? The children could tell us what these problems are. They might dramatize these so that other children could consider them.

MRS. MARIE ILLIUS, Assistant to the Supervising Director of Art: Radio can be most helpful in studying and discussing the creative process and how it relates to learning. How do children create? How can we accept the child's idea of his world without using adult standards as our yardstick? We have various segments of our society. Some carry one interest, some carry others. How does a child react to his world? How much of his reaction is based on his own background, his own "segment of society?" We speak of disadvantaged children, and of middle class children. But you might have middle class ideas in the ghettos and ghetto points of view among middle class children. It all comes out in the art they do. We find that children paint alike all over the world... especially very young children. It's very difficult to tell in the early years whether a child comes from the

west of Rock Creek Park.

MRS. JUANITA FLETCHER, D.C. Teachers College: It would be very important to dramatize real classroom situations for students studying to teach in classrooms.

Dramatize playground situations too, as well as conferences with parents. What's the proper way to conduct these?

Broadcast real contacts between teachers and pupils to aid the development of deeper insight.

Use salesmanship in teaching. Compare the technique of salesmen and of teachers. After all, the aim of both is to influence the public. Personal decorum is important, as well as techniques of organizing your presentation so that the product becomes interesting to a potential buyer.

Unfortunately in teacher training classes, too often, a course in methods is a course in subject matter and not methods of teaching at all.

How about showing two teachers presenting the same subject matter, using varying (and natural) degrees of vitality, interest, and enthusiasm.

Certainly students in classes at the college would enjoy and would benefit from working on the scripts or helping to perform in the broadcasts. Try giving them an idea, and letting them work it out creatively.

Lackadaisical teaching is harmful.

The motivations of ghetto children would be helpful subject matter too. Children who come from the ghetto are "upward mobile." They "pull" themselves up by their bootstraps. Then they don't want to be identified with the ghetto. It's a self hatred. Get him to understand himself." We need teachers who will go back and teach those children.

Incidentally, we are doing productions of two classic tales: The Ugly Duckling and Carna Gordon's Needle. These would be suitable for broadcast and we would be interested in working with you on these. (Interviewer's note: These kinds of program could serve as refresher training for teachers already working in District schools.)

C

An Interim Report on an Experimental Study
of the Use of Radio in the Classroom
in the District of Columbia

Presented at the
1967
National Convention of
The National Association of Educational Broadcasters
Denver, Colorado
November, 1967

by

Dr. Roger Penn
Associate Professor
Department of Communication
The American University
Washington, D. C.

On March 1, 1967, WAIU-FM began a unique project in the Washington, D. C. area. We began to develop entirely new radio material for use in D. C. School system classrooms. The experiment, titled "Enrichment Through Radio: An Experimental Project to Alleviate a Language Barrier," was funded through the Board of Education of the District of Columbia under Title III of the Elementary and Secondary Education Act of 1965.

The project was unique for three reasons: (1) the D. C. Schools had not employed radio or television for instructional purposes for a number of years; (2) it was proposed to attempt unusual ways of using the radio as an aid to classroom instruction, not as substitute for it; (3) it was fully cooperative project between a University and the D. C. School system.

Over a period of months, 140 public school classrooms were equipped with transistor radios. While this was in progress, the instructional radio staff, consisting of a producer, Victor Sussman, and a team of writers, began to experiment with program formats. There were extensive discussions with teachers and observations in many classes. The production team learned what was needed by studying what was happening in the classroom.

The initial programs utilized sounds without words. Some sounds were derived from standard sound effects records, others were recorded by the staff "live" from various parts of the city. The production team attempted to discover and use sounds to facilitate self expression among the students. We often spoke of listening skills development, but, in addition, we were trying to provide material from the student's environment which would cause him to "open up" in new ways within the classroom situation. All programs were planned in detail and approved by representatives of the D. C. School system under the guidance of Mr. Louis Kornhauser, Director of the Language Arts program and the Radio Project Director for the Board of Education.

The first broadcasts were transmitted to the schools on a scheduled basis just three months after the project began. They ran for the week of May 29, 1967. These programs included simple sounds, sound sequences, occupational sounds, complex sounds, and "Music Everywhere." The last program was made to show how music can be found in the sound of a tin can being kicked down the street, or in the sound of a basketball game, or in shooting dice. It was an object lesson in definition.

We made no attempt to do more than obtain feedback from the teachers after our first broadcasts. This information was obtained by means of a free-response questionnaire, sent to teachers by means of free-response questionnaire, sent to teachers by the D. C. School system. The Catholic University of America has been engaged in a more sophisticated study but the data are not yet available since the project is still in progress at this writing. Of the fifty teachers who

voluntarily responded to the questionnaire, forty-seven of them stated that they found the broadcasts to be useful and wished the project to be continued.

This fall we have decided to broadcast in two intervals. The first of these has just been finished, the second will begin in December. The interval just completed used simple and complex sounds discussed earlier, the second will use completely new forms, including drama, readings, attempts to stimulate the imagination, a rebus game, and a short play--all original radio material designed especially for the D. C. Schools.

We all know that radio is cheaper and equally effective in handling much educational material as compared with many other media. A survey of radio stations and school systems revealed that at least twenty-seven different subjects are being taught by radio in the U. S. alone at the present time. These subjects include literature, music, social studies, English, speech, science, penmanship, history, listening, foreign languages, math, geography, health and safety, guidance, civics, drama, writing, economics, vocabulary building, mythology, poetry, social sciences, reading, and teacher in-service instruction. We were astonished to learn of the variety and complexity of the educational materials being offered by radio. These data were gathered through a survey of stations and educational systems which was undertaken as part of the project.

I should like to encourage you to make contact with the schools, try to determine ways in which radio might serve the needs of public education in your coverage area.

Four steps are in order:

1. Realize that radio has a place in the classroom.
2. Examine the needs of local education.
3. Offer your expertise in radio to meet those needs.
4. Work with the schools to implement a program.

If you attempt to do these things, I believe that a variety of valuable projects will come to your attention, some of which none of us now dream about. We must become aware that the information capacity of a single F. station has hardly been tapped-- we must prepare ourselves to use that capacity. It will permit instructional programming to be carried without disturbing your regular programs at all.

There are a number of federal and state agencies which finance programs in which radio might be used. These agencies are not interested in radio as such; they are interested in achieving specific goals. Radio is often a means which should be used in achieving educational goals, but there is nothing magical about radio, television, or any other medium; there is no substitute for careful planning and demonstrated learning. Radio coupled with sound programming and good production works.

It may never have occurred to some of us that we, as educational radio stations, are not directly eligible for most funding programs; other agencies are—and they may be interested in radio. Just because a funding program does not say RADIO across the top, try not to ignore it—think about how radio can serve the program being funded and then approach the appropriate institution—board of health, school system, junior college, police training officer, county agent, forest service, representative, etc. Attempt to find out whether radio can be conceived as an integral part of a program to serve the needs which these organizations attempt to meet.

I recommend to us all that we immediately begin to learn as much as possible about the needs of the schools in our listening areas. We should make it a point to attempt to explore with teachers and administrators ways in which radio may be of value in public education.

The evidence is coming in now. Radio has a broad base of acceptance among teachers and students. It may be used for a very wide range of instructional material. It is cheaper and more flexible than most other media. It brings the "live" quality of involvement into the classroom and in the process requires that students use their imaginations. Let us no longer waste this precious educational resource—radio.

D

National Education Association

DIVISION OF EDUCATIONAL TECHNOLOGY

January 30, 1968



1201 SIXTEENTH STREET, N.
WASHINGTON, D. C., 20036
(202) 223-8400

Dr. Louis Kornhauser, Director
Language Arts Program, Great Cities Project
Public Schools, District of Columbia
Twining Administration Annex No. 8
Third Street between N and O, N.W.
Washington, D. C. 20001

Dear Dr. Kornhauser:

Thank you so very much for the opportunity to visit your teachers' in-service institute on radio held at American University on Saturday, January 6. I have intended to write you before now but time has not permitted.

I was enormously impressed with the enthusiasm which I found evident at the institute. It was good to see that radio was being rediscovered because I personally feel it has great potentialities, especially for use in inner-city type schools. I have long felt that radio has no equal when it comes to the development of imagery and imagination in children. It affords additional benefits in the fact that it gives children much-needed practice in following directions and in increasing their facility with the skills of oral communications. As all of us know, skill in listening must be acquired and is just as important as skill in reading or in oral expression.

I am seeing--as I visit schools throughout the nation--an increase in the attention which educators are giving to this important tool, and I am glad to see the District of Columbia taking the leadership role in this area.

Again, my warm thanks for the invitation to visit the workshop. Please keep me informed of your activities so that I might call them to the attention of other school districts around the nation.

Sincerely yours,

Harold E. Wigren

Harold E. Wigren
Educational Television Consultant, NEA
HEW:ekb

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

January 30, 1968

ADDRESS ALL COMMUNICATIONS
TO THE SECRETARY

IN REPLY REFER TO:

8900

Mr. Louis Kornhauser, Director
Language Arts Project
Twining Building, Room 5
3rd & N Sts., N. W.
Washington, D. C. 20001

Dear Lou:

I am pleased, in response to your telephone request of January 29, 1968, to comment on the D. C. School Radio Workshop you invited me to - and in which I was pleased to participate - on January 6.

The enthusiasm and dedication of the many teachers who attended the workshop attested once more to the remarkable contributions that the mass media, including radio, have been making to education all over our country.

I could tell and feel from the statements and actions of the teachers how valuable it was for them and, most importantly, for their students to be able to use radio to bring into the classroom and into the learning experiences those materials and resources that otherwise would not have been available.

On a personal note, I think you already know my satisfaction in seeing the Washington, D. C. schools beginning to use radio and, hopefully soon, television. With one child in the second grade and another soon to enter the D. C. schools, I am concerned that my children should receive the higher quality education necessary for them in today's world, and that, like so many millions of other children throughout this country and the rest of the world, they could receive through the effective use of radio and television.

Sincerely,



Robert L. Hilliard
Chief, Educational
Broadcasting Branch



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
WASHINGTON, D.C. 20201

OFFICE OF THE SECRETARY

February 1, 1968

Dear Dr. Kornhauser:

The reason I asked Dr. Penn if I might attend your radio workshop at American University was because Project 390 was of a type which I have felt should be more widely undertaken. I have watched a project in Las Cruces, New Mexico, where radio has been used successfully as a prime tool in efforts to teach English as a second language to Indian and Mexican-American populations. There are others I know, but not many. When I learned of your effort I wanted to learn more about it.

I was enormously impressed. To me you have achieved something with a great potential. The materials to which I listened were, I felt, genuinely creative. The teachers I talked with and observed were able, intelligent, and sharply focused on their job. As a citizen of the District I was genuinely pleased. I hope you will expand this project next year and attempt to focus national attention on it. You have something which is pretty nearly unique.

May I retain your Preliminary draft of the Proposal on the Use of Radio as a Tool of Instruction? It is excellent. I hope we can get together and discuss some further possibilities which are another year down the road.

May I take this opportunity to make a suggestion and a proposal as forcefully as I can. It is particularly timely in light of the bright decision and I think could appropriately be included in the Board's presentation to the court. As you are aware, the special school television service authorized by the Federal Communications Commission in the 2500 megahertz range makes it possible for school districts to interconnect their buildings at modest cost for communication by means of television. Such capacity can also be leased from the telephone company.

Television interconnection permits sharing of resources, inter-institutional dialogue between students, teachers and administrators... A discussion, for example, between two social science classes, one at Roosevelt the other at Western. Given some of the funding difficulties faced by the District in exchange through busing, why not have the more economical, less time consuming, more dramatic (for students at least) exchange by television as a supplement. This system would not be open to public viewing and initially the "programs" would be very informal. Essentially the system would be logistical capacity to distribute what is already going in one location to many locations.

There are, of course, a wide range of prepared curriculum materials available from the two major tape libraries and from other school systems. It opens the way for greater diversity of opportunity.

This system, as you know, is being instituted in all parts of the United States. The principal arguments for it in contrast to the broadcast television station such as Channel 26 are these: more than one channel (some systems have 6 or 8 channels), a private institutional system not available to the public, and low cost.

I suggest that preliminary operation and technical plans could be drawn up using the contributed time of experts here in the district. The major figures in telecommunication planning are here and, I suspect, available if properly approached.

Once the system was in operation it seems quite possible that exchanges via communication satellite could be arranged on a contributed time basis with schools in foreign countries. The District Schools as they increase in effectiveness would be in a position to demonstrate the fact to world populations. Some exchanges have taken place, between school children in Wisconsin and those in France for example, but the interconnection of the schools in the Nation's capital with those in the capitals of the world is something special.

As a citizen I would be pleased to assist in a very solid way personally, if this suggestion appears to have any merit. I should tell you that in the past the attitude of the District Administration toward such systems has been such as to make any planning effort seem wasteful. It would not be fair to call on the valuable talent which is available for planning without assurance that it will have meaning. In light of the Wright decision, a new administrative posture, and the importance which has been attached to equality of school services, now might be the time to initiate the benefits of this new technology which has a decade or more of experience behind it.

I would like to get together soon with you, if in your opinion anything worthwhile can be accomplished.

You have a good project, one of national significance if allowed to live and expand as it proves itself.

Cordially,



John W. Bystrom
Assistant to the Assistant Secretary
for Education

Dr. Louis H. Kornhauser
10501 Pinedale Drive
Silver Spring, Maryland 20901

Listing of Schools in the
Radio Project

Senior High Schools

Cardozo
Dunbar
Eastern

Vocational High Schools

Bell
Phelps
M. M. Washington

Junior High Schools

Backus
Banneker
Douglass
Eliot

Evans
Carnett-Patterson
Hine
Kelly-Miller

Langley
Randall
Roper
Shaw

Stuart
Terrell

Elementary Schools

Blair
Brent
Congress Heights
Crummell
Davis
Draper
Drew
Hayes

Houston
Kotcham
Ludlow
Madison
Maury
Meyer
Moten
Mott

Nicholas
Avenue
Payne
Randolph
Stanton
Takoma
Tavler
Thomas
Turner

Tyler
Van Ness
Whittier

THE AMERICAN UNIVERSITY
WASHINGTON, D. C. 20016

WAMU-FM 88.5
NON-COMMERCIAL RADIO
(202) 966-6506

AFFILIATIONS

NATIONAL EDUCATIONAL RADIO (NER)
EASTERN EDUCATIONAL RADIO (EERN)

February 29, 1968

Mr. Louis H. Kornhauser
Director, Language Arts
District of Columbia School System
Twining Annex #8
Third and N Streets, N. W.
Washington, D. C. 20001

Dear Mr. Kornhauser:

We are happy to respond favorably to the suggestion that there be a continuation of the relationship between WAMU-FM and the D. C. Public Schools for the purpose of providing in-school radio programs for the District of Columbia. Evidence gained during the past year indicates the important role that radio can play in the classroom and we should like to cooperate in the following manner.

It is proposed that WAMU-FM make studios and transmission facilities available, on a scheduled basis, for the production and transmission of programs to the schools. Transmission would be possible during the morning hours of the regular school week. It is our understanding that the bulk of the writing and non-studio production work would be undertaken by school system personnel, and that WAMU-FM would furnish technical support and facilities including the actual broadcast of the programs.

The attached budget will permit WAMU-FM to participate in the proposed project at a professional level during the

-2-

period June 1, 1968 through May 31, 1969. Please do not hesitate to contact us if further information is required.

Sincerely yours,



Dr. Roger Penn
General Manager, WAMU-FM



Mr. Merrill A. Ewing
Assistant Treasurer
and Controller

RP:DNB
ENC

TEACHER GUIDELINE
FOR THE BROADCAST

A DRAMATIZATION FROM "INVISIBLE MAN"

Background Information

In 1965, BOOK WEEK polled 200 prominent authors, critics and editors to see if there was any agreement about the quality of American fiction from 1945-65.

The concensus was that "Invisible Man" by Ralph Ellison describing a young Negro's search for a real identity and human function is the best fiction of the postwar years.

The section of the book chosen for broadcasting describes the young man's first job. He had been attending a Negro college in the South but had been turned out by the school because of an incident involving a white trustee. He had been sent to New York by the president of the college with seven letters to prominent people which the young man thought were job recommendations. They turned out to be requests that the people simply ignore him. That's when he was forced to find a job on his own. As the program begins he is in his first day on the job.

We're fortunate to have professional actors from Arena Stage in this dramatized dialogue between the young man and an old man who has been working in the basement of the paint factory since its beginning. The basic conflict of the dialogue comes from the different values that the two men have and their different concepts of their identities in this world. The young man is still young enough to visualize himself as part of the big world and is trying to discover for himself the dimensions of that world. The old man's world is the paint factory and as far as he is concerned the factory is his and couldn't operate three minutes without him. He would do anything necessary to protect his relationship to the factory and he does not like outsiders and foreign ideas in his basement. The two men take good looks at one another and without examining their own prejudices and attitudes they see all that they hate and fear. The result is violence.

The following is an excerpt from the review of "Invisible Man" that appeared in "BOOK WEEK":

"...On what does the book's peculiar fame depend? For one thing there is the astonishing scope and defiant audacity of the story. What makes INVISIBLE MAN supremely memorable, however, is the appalling

vividness or touching truthfulness of many of its individual episodes rather than any consistency of language or tone or characterization... The racial turmoil as we know it now was then only a distant thunder, not necessarily promising rain. In that state of nervous calm, Ellison could produce a novel which, regarding the character and fate of American Negroes --indeed the character and fate of our whole multi-racial society--was both a summation and a prophecy. Into the incidents, characters, settings, moods of the book, Ellison poured his knowledge of the past sufferings as well as the future expectation of his race, of the entire society. He could thus transcend the limitations of mere doctrine and documentation as no writer could probably do so effectively at present, with the actualities of the struggle in our ears and before our eyes every minute."

Preparation for Listening

1. Question students about their familiarity with the story.
2. Share the background information which is presented in this guideline.
3. Alert students to listen for key words or expressions which seem to be particularly inflammatory in the dialogue between the two characters.

After the Broadcast

A. Discussion:

1. Why do the two men hate one another?
2. Is the animosity between the two characters real or is there a more fundamental reason for it which goes much deeper than the overt behavior which they demonstrate and the heated words which they exchange?
3. Why does the old man fear the union?
4. Why does the young man resort to slavery insults toward the old man?
5. What analogies can you make to similar events which have taken place within your experience?
6. Compare the situation presented in the dramatization with events which are taking place in contemporary society--in the District of Columbia and in most large urban centers in America.

B. Reading and Writing:

1. Encourage students to write short original plays or scripts which can be used for future broadcasts?

2. Motivate students to do extensive reading in order to identify segments of other books for dramatizations and role-playing in the classroom and for future broadcasts. In each case, there should be specific reasons given for the selections suggested.
3. Have student list key words or phrases which describe the characters in the broadcast or the conditions or situation in which the action takes place.

Copies of the book, "Invisible Man," in paperback or hardcover, should be available in the classroom for those students who are motivated to read the story in its entirety. You may want to read other portions of the book out loud. The questions raised in "Invisible Man" are worthy of a full unit of work.

The language of the book is native to the two characters and the radio staff felt it would be inappropriate to tamper with what has been written. Violent expressions arise from the action and do not stand out from the flow of the dialogue. The professional acting of the men from Arena Stage is responsible for the adult handling of the situation. You will want to judge for yourself if your class is mature enough for this literature. The importance of the questions raised in "Invisible Man" should be considered in your judgement.

NOTE: The variety of activities suggested under "After the Broadcast," are not meant to be covered in one day. Rather, they should be viewed as extensions of the broadcast which may be carried on during several days or even a full week.

December 21, 1967

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PROJECT 390 - ENRICHMENT THROUGH RADIO

..AT 11 P.M.

New Programs as of BROADCAST SCHEDULE FOR WEEK OF JANUARY 8-12, 1968 88.5
 September, 1967

TIME	MONDAY 8th	TUESDAY 9th	WEDNESDAY 10th	THURSDAY 11th	FRIDAY 12th
9:30 A.M.	*REBUS GAME Kgn-3	"HUCK FINN" Drama Gr. 5-9	SOUND SEQUENCE Gr. 4-12	SINGLE SOUNDS, COMPLEX Kgn-3	NEGRO POETRY Gr. 5-12
10:00 A.M.	*WHAT WOULD YOU DO? NO. 1 Gr. 3-6	REBUS GAME Kgn-3	"HUCK FINN" Drama Gr. 5-9	OCCUPATIONAL SOUNDS NO. 2 Kgn-9	SINGLE SOUNDS, SIMPLE Kgn. 3
10:30 A.M.	*NEGRO POETRY Gr. 5-12	WHAT WOULD YOU DO? NO. 1 Gr. 3-6	REBUS GAME Kgn-3	"HUCK FINN" Drama Gr. 5-9	MUSIC EVERYWHERE Gr. 7-12
11:00 A.M.	SOUND SEQUENCE Gr. 4-12	NEGRO POETRY Gr. 5-12	WHAT WOULD YOU DO? NO. 1 Gr. 3-6	REBUS GAME Kgn. -3	"HUCK FINN" Gr. 5-9
11:30 A.M.	OCCUPATIONAL SOUNDS NO.2 Kgn-9	SINGLE SOUNDS (Simple) Kgn-3	NEGRO POETRY Gr. 5-12	WHAT WOULD YOU DO? NO.1 Gr. 3-6	REBUS GAME Kgn-3
1:15 P.M.	* "HUCK FINN" Drama Gr. 5-9	MUSIC EVERYWHERE Gr. 7-12	OCCUPATIONAL SOUNDS NO. 1 Kgn-9	NEGRO POETRY Gr. 5-12	WHAT WOULD YOU DO? NO. 1 Gr. 3-6



PROJECT 390 ENRICHMENT THROUGH RADIO

WAFB-TV

*New Programs as of September 1967 BROADCAST SCHEDULE FOR WEEK OF JANUARY 15-19, 1968 88.5

TIME	MONDAY 15th	TUESDAY 16th	WEDNESDAY 17th	THURSDAY 18th	FRIDAY 19th
9:30 A.M.	*Drama "INVISIBLE MAN" Gr. 10-12	REBUS GAME Kgn - 3	Drama - "HUCK FINN" Gr. 5-9	"WHAT WOULD YOU DO? NO. 1" Gr. 3-6	NEGRO POETRY Gr. 5-12
10:00 A.M.	*I HEARD IT WITH MY OWN TWO EARS Kgn - 3	Drama - "INVISIBLE MAN" Gr. 10 - 12	REBUS GAME Kgn - 3	Drama - "HUCK FINN" Gr. 5-9	"WHAT WOULD YOU DO? NO. 1" Gr. 3 - 6
10:30 A.M.	NEGRO POETRY Gr. 5 - 12	I HEARD IT WITH MY OWN TWO EARS Kgn - 3	Drama - "INVISIBLE MAN" Gr. 10 - 12	REBUS GAME Kgn - 3	Drama - "HUCK FINN" Gr. 5 - 9
11:00 A.M.	"WHAT WOULD YOU DO? NO. 1" Gr. 3 - 6	NEGRO POETRY Gr. 5 - 12	I HEARD IT WITH MY OWN TWO EARS Kgn - 3	Drama - "INVISIBLE MAN" Gr. 10 - 12	REBUS GAME Kgn - 3
11:30 A.M.	Drama - "HUCK FINN" Gr. 5 - 9	"WHAT WOULD YOU DO? NO. 1" Gr. 3 - 6	NEGRO POETRY Gr. 5 - 12	I HEARD IT WITH MY OWN TWO EARS Kgn - 3	Drama - "INVISIBLE MAN" Gr. 10-12
1:15 P.M.	REBUS GAME Kgn - 3	Drama - "HUCK FINN" Gr. 5 - 9	"WHAT WOULD YOU DO? NO. 1" Gr. 3 - 6	NEGRO POETRY Gr. 5 - 12	I HEARD IT WITH MY OWN TWO EARS Gr. 3 - 6



PROJECT 390 ENRICHMENT THROUGH RADIO

WABU-FM

*New Programs as of
September, 1967
BROADCAST SCHEDULE FOR WEEK OF JANUARY 22-26, 1968

88.5

TIME	MONDAY 22nd	TUESDAY 23rd	WEDNESDAY 24th	THURSDAY 30th	FRIDAY 31
9:30 A.M.	*WHAT WOULD YOU DO? NO. 2 Gr. 7 - 12	"HUCK FINN" Drama Gr. 5 - 9	I HEARD IT WITH MY OWN TWO EARS Kgn - 3	RUBUS GAME Kgn - 3	WHAT WOULD YOU DO? NO. 2 Gr. 7 - 12
10:30 A.M.	*USE YOUR IMAGINATION Gr. 2 - 7	WHAT WOULD YOU DO? NO. 1 Gr. 3 - 6	NEGRO POETRY Gr. 5 - 12	"INVISIBLE MAN" Drama Gr. 10 - 12	USE YOUR IMAGINATION Gr. 2 - 7
11:00 A.M.	"INVISIBLE MAN" Gr. 10 - 12	USE YOUR IMAGINATION Gr. 2 - 7	WHAT WOULD YOU DO? NO. 1 Gr. 3 - 6	NEGRO POETRY Gr. 5 - 12	"INVISIBLE MAN" Drama Gr. 10 - 12
11:30 A.M.	I HEARD IT WITH MY OWN TWO EARS Kgn. - 3	RUBUS GAME Kgn - 3	WHAT WOULD YOU DO? NO. 2 Gr. 7 - 12	"HUCK FINN" Drama Gr. 5 - 9	I HEARD IT WITH MY OWN TWO EARS Kgn.-3
1:15 P.M.	NEGRO POETRY Gr. 5 - 12	"INVISIBLE MAN" Drama Gr. 10 - 12	USE YOUR IMAGINATION Gr. 2 - 7	WHAT WOULD YOU DO? NO. 1 Gr. 3 - 6	NEGRO POETRY Gr. 5 - 12



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Samplers

BROADCAST SCHEDULE OR ENRICHMENT THROUGH RADIO

WEEK OF JANUARY 6, 1969

WAMU-FM 88.5

TIME	TUESDAY, JANUARY 7	WEDNESDAY, JANUARY 8	THURSDAY, JANUARY 9
9:30 A.M.	SPECIAL "NEGRO POETRY" GRADES 4 - 6	CHILDREN'S LITERATURE "THE MAD TEA PARTY" By Lewis Carroll GRADES 1 - 6	READ ALOUD CHILDREN READING ORIGINAL STORIES
10:00 A.M.	LISTENING SKILLS SOUNDS OF CHRISTMAS SHOPPING GRADES K - 4	LISTENING SKILLS SOUNDS OF CHRISTMAS SHOPPING GRADES K - 4	LISTENING SKILLS SOUNDS OF CHRISTMAS SHOPPING GRADES K - 4
10:15 A.M.	SPECIAL A REPEAT OF ABOVE GRADES 4 - 6	READ ALOUD CHILDREN READING ORIGINAL STORIES	CHILDREN'S LITERATURE "THE MAD TEA PARTY" By Lewis Carroll GRADES 1 - 6
11:00 A.M.	CHILDREN'S LITERATURE "THE MAD TEA PARTY" By Lewis Carroll GRADES 1 - 6	SPECIAL "NEGRO POETRY" GRADES 4 - 6	SPECIAL "NEGRO POETRY" GRADES 4 - 6
1:15 P.M.	LISTENING SKILLS A REPEAT OF THE ABOVE	LISTENING SKILLS A REPEAT OF THE ABOVE	LISTENING SKILLS A REPEAT OF THE ABOVE
1:30 P.M.	READ ALOUD CHILDREN READING ORIGINAL STORIES	SPECIAL A REPEAT OF THE ABOVE	SPECIAL A REPEAT OF THE ABOVE

BROADCAST SCHEDULE FOR ENRICHMENT PROGRAMS BY RADIO

February 3, 1969

WAMU-TM 88.1

TIME	TUESDAY, FEBRUARY 4	WEDNESDAY, FEBRUARY 5	THURSDAY, FEBRUARY 6
9:30 A.M.	SPECIAL "ABE LINCOLN IN SONG AND STORY" Part I Grades 2-6	CHILDREN'S LITERATURE "UNCLE BOUCUI TALES" Grades 3-6	LET'S TELL A STORY WHITTIER SCHOOL Grades 1 - 6
10:00 A.M.	LISTENING SKILLS "A VISIT TO THE FLOOR OF THE OCEAN" Grades 2 - 6	LISTENING SKILLS "A VISIT TO THE FLOOR OF THE OCEAN" Grades 2 - 6	LISTENING SKILLS "A VISIT TO THE FLOOR OF THE OCEAN" Grades 2 - 6
10:15 A.M.	SPECIAL A REPEAT OF THE ABOVE	LET'S TELL A STORY WHITTIER SCHOOL CHILDREN Grades 1 - 6	CHILDREN'S LITERATURE "UNCLE BOUCUI TALES" Grades. 3 - 6
11:00 A.M.	CHILDREN'S LITERATURE "UNCLE BOUCUI TALES" Grades 2-6	SPECIAL "ABE LINCOLN IN SONG AND STORY" Part I Grades 2-6	SPECIAL "ABE LINCOLN IN SONG AND STORY" Part I Grades 2-6
1:15 P.M.	LISTENING SKILLS "A VISIT TO THE FLOOR OF THE OCEAN" Grades 2-6	LISTENING SKILLS "A VISIT TO THE FLOOR OF THE OCEAN" Grades 2-6	LISTENING SKILLS "A VISIT TO THE FLOOR OF THE OCEAN" Grades 2-6
1:30 P.M.	LET'S TELL A STORY Whittier School	SPECIAL "ABE LINCOLN IN SONG AND STORY" Part I	SPECIAL "ABE LINCOLN IN SONG AND STORY" Part I

WEEK OF FEBRUARY 10

BROADCAST SCHEDULE FOR ENRICHMENT THROUGH RADIO

WAMU-FM 88.5

DATE	TUESDAY, FEBRUARY 11	WEDNESDAY, FEBRUARY 12	THURSDAY, FEBRUARY 13
9:30 A.M.	<p><i>OK</i></p> <p>SPECIAL " ABE LINCOLN IN SONG AND STORY" PART II-Grades 2-6</p>	<p>CHILDREN'S LITERATURE "TILL EULENSPIEGEL" German Folk Tale Grades 2-6</p>	<p>LET'S TELL A STORY NICHOLS AVENUE-PRIMARY Grades 1-6</p>
10:00 A.M.	<p><i>OK</i></p> <p>LISTENING SKILLS * "HOME SOUNDS" K - 3 <i>pl.</i></p>	<p>LISTENING SKILLS * "HOME SOUNDS" K - 3</p>	<p>LISTENING SKILLS * "HOME SOUNDS" K - 3</p>
10:15 A.M.	<p><i>OK</i></p> <p>SPECIAL " ABE LINCOLN IN SONG AND STORY" Part II-Grades 2-6</p>	<p>LET'S TELL A STORY NICHOLS AVENUE-PRIMARY Grades 1-6</p>	<p>CHILDREN'S LITERATURE "TILL EULENSPIEGEL" German Folk Tale Grades 2-6</p>
11:00 A.M.	<p><i>OK</i></p> <p>CHILDREN'S LITERATURE "TILL EULENSPIEGEL" German Folk Tale Grades 2-6</p>	<p>" ABE LINCOLN IN SONG AND STORY" Part II-Grades 2-6</p>	<p>" ABE LINCOLN IN SONG AND STORY" Part II Grades 2-6</p>
1:15 P.M.	<p>LISTENING SKILLS * A REPEAT OF THE ABOVE</p>	<p>LISTENING SKILLS * A REPEAT OF ABOVE</p>	<p>LISTENING SKILLS * REPEAT OF THE ABOVE</p>
1.30 P.M.	<p>LET'S TELL A STORY NICHOLS AVENUE-PRIMARY K-3</p>	<p>SPECIAL " ABE LINCOLN IN SONG AND STORY" Part II - Grades 2-6</p>	<p>SPECIAL " ABE LINCOLN IN SONG AND STORY" Part II - Grades 2-6</p>

* NOTE: PLEASE REFER TO TEACHER'S GUIDE FOR NOVEMBER 4, 1968 HOME SOUNDS



BROADCAST SCHEDULE FOR ENRICHMENT PROGRAM RADIO

WEEK OF FEBRUARY 24, 1969

WAMU-FM 88.5

TIME	TUESDAY, FEBRUARY 25	WEDNESDAY, FEBRUARY 26	THURSDAY, FEBRUARY 27
9:30 A.M.	SPECIAL "HERITAGE EAST AND WEST" Grs. 3-6	CHILDREN'S LITERATURE "TALES OF THE ASHANTI" Grs. 1-6	LET'S TELL A STORY TYLER 6th GRADE STORYTELLERS Grs. 1-6
10:00 A.M.	LISTENING SKILLS SOUNDS OF INDUSTRY Grs. 2-6	LISTENING SKILLS SOUNDS OF INDUSTRY Grs. 2-6	LISTENING SKILLS SOUNDS OF INDUSTRY Grs. 2-6
10:15 A.M.	SPECIAL "HERITAGE EAST AND WEST" Grs. 3-6	LET'S TELL A STORY TYLER 6th GRADE STORYTELLERS Grs. 1-6	CHILDREN'S LITERATURE "TALES OF THE ASHANTI" Grs. 1-6
11:00 A.M.	CHILDREN'S LITERATURE "TALES OF THE ASHANTI" Grs. 1-6	SPECIAL "HERITAGE EAST AND WEST" Grs. 3-6	SPECIAL "HERITAGE EAST AND WEST" Grs. 3-6
1:15 P.M.	LISTENING SKILLS SOUNDS OF INDUSTRY Grs. 2-6	LISTENING SKILLS SOUNDS OF INDUSTRY Grs. 2-6	LISTENING SKILLS SOUNDS OF INDUSTRY Grs. 2-6
1:30 P.M.	LET'S TELL A STORY TYLER 6th GRADE STORYTELLERS Grs. 1-6	SPECIAL "HERITAGE EAST AND WEST" Grs. 3-6	SPECIAL "HERITAGE EAST AND WEST" Grs. 3-6

NOTE:

- There will be no new teacher guide for those programs or read original stories. Please refer to previous guides for suggested preparation and follow-up.
- The Special, "HERITAGE EAST AND WEST" is a repeat. You received the teacher

BROADCAST SCHEDULE FOR SWITCHBOARD THROUGH RADIO

WEEK OF MARCH 3, 1969

82.5 WAKU-PM

TIME	TUESDAY MARCH 4	WEDNESDAY MARCH 5	THURSDAY MARCH 6
9:00 p.m.	SPECIAL "WHAT MAKES YOU LAUGH" Grades 2-6	CHILDREN'S LITERATURE HEROES AND HEROINES "FREDERICK DOUGLASS" Grades 4 - 5	LET'S TELL A STORY MADISON SCHOOL CHILD Grades 1-5
10:00 a.m.	LISTENING SKILLS SOUNDS OF EMOTIONS Grades 3 - 6	LISTENING SKILLS SOUNDS OF EMOTIONS Grades 3 - 6	LISTENING SKILLS SOUNDS OF EMOTIONS Grades 3-6
10:15 a.m.	SPECIAL A RECAP OF THE ABOVE	LET'S TELL A STORY MADISON SCHOOL CHILDREN Grades 1 - 5	CHILDREN'S LITERATURE HEROES AND HEROINES - "FREDERICK DOUGLASS" Grades 4 - 6
11:00 a.m.	CHILDREN'S LITERATURE HEROES AND HEROINES-- "FREDERICK DOUGLASS" Grades 4 - 5	SPECIAL "WHAT MAKES YOU LAUGH?" Grades 2-6	SPECIAL "WHAT MAKES YOU LAUGH" Grades 2 - 6
1:15 p.m.	LISTENING SKILLS SOUNDS OF EMOTIONS Grades 3-6	LISTENING SKILLS SOUNDS OF EMOTIONS Grades 3 - 6	LISTENING SKILLS SOUNDS OF EMOTIONS Grades 3-6
1:30 p.m.	LET'S TELL A STORY MADISON SCHOOL CHILDREN Grades 1 - 5	SPECIAL "WHAT MAKES YOU LAUGH?" Grades 2 - 6	SPECIAL "WHAT MAKES YOU LAUGH" Grades 2 - 6

Note: Use previous guides for children telling or reading original stories.



WEEK OF MARCH 31, 1969 broadcast schedule for enrichment through radio

WAMU-FM 88.5

TIME	TUESDAY, APRIL 1	WEDNESDAY APRIL 2	THURSDAY APRIL 3
9:30 a.m.	SPECIAL "DON'T YOU WEEP AFTER ME" TRIBUTE TO DR. MARTIN LUTHER KING ALL GRADES	CHILDREN'S LITERATURE FOLK TALES OF KOREA AND AFRICA Repeat of 12/16/68 Grades 4-6	LET'S TELL A STORY CLEVELAND ELEMENTARY 1st Grade Grades 1 - 5
10:00 a.m.	LISTENING SKILLS "A VISIT TO THE OCEAN FLOOR" Repeat of 2/3/69 Grades 3 - 6	LISTENING SKILLS "A VISIT TO THE OCEAN FLOOR" Repeat of 2/3/69 Grades 3 - 6	LISTENING SKILLS "A VISIT TO THE OCEAN FLOOR" Repeat of 2/3/69 Grades 3 - 6
10:15 a.m.	SPECIAL "DON'T YOU WEEP AFTER ME" Repeat of Above	LET'S TELL A STORY CLEVELAND ELEMENTARY 1st Grade Grades 1-5	CHILDREN'S LITERATURE FOLK TALES OF KOREA AND AFRICA Repeat of 12/16/68 Grades 4 - 6
11:00 a.m.	CHILDREN'S LITERATURE FOLK TALES OF KOREA AND AFRICA Repeat of 12/16/68 Grades 4 - 6	SPECIAL "DON'T YOU WEEP AFTER ME" TRIBUTE TO DR. MARTIN LUTHER KING ALL GRADES	SPECIAL "DON'T YOU WEEP AFTER ME" TRIBUTE TO DR. MARTIN LUTHER KING ALL GRADES
1:15 p.m.	LISTENING SKILLS "A VISIT TO THE OCEAN FLOOR" Repeat of 2/3/69 Grades 3 - 6	LISTENING SKILLS "A VISIT TO THE OCEAN FLOOR" Repeat of 2/3/69 Grades 3 - 6	LISTENING SKILLS "A VISIT TO THE OCEAN FLOOR" Repeat of 2/3/69 Grades 3 - 6
1:30 p.m.	LET'S TELL A STORY CLEVELAND ELEMENTARY 1st Grade Grades 1 - 5	SPECIAL "DON'T YOU WEEP AFTER ME" TRIBUTE TO DR. MARTIN LUTHER KING ALL GRADES	SPECIAL "DON'T YOU WEEP AFTER ME" TRIBUTE TO DR. MARTIN LUTHER KING ALL GRADES

NOTE: PLEASE KEEP ALL TEACHER GUIDES FOR FUTURE REPEAT OF PROGRAMS



MY LIFE

My Life---

I want to tell you about my life.

It is like a bowling ball knocking
down pins.

It is like boards torn up.

My life is like a spinning top.

It's like a world going round.

That is my life.

Linda Battle
Grade 5
Taylor
Feb. 1968

LOOK AROUND THE WORLD

Look, Boy, Look out that window.
Can you see that sun so sky high
and the ground so low.
Boy, lets take a ride around the world.
It is a wonderful sight.
Aint that a wonderful color - pink,
brown and green.
Boy this is something for you to learn.
This world is such a sight to see,

Lets go back home.
Watch out!
Live right.
Come on—I got something else to
tell you.
This world is something hou've
got to get used to!
Dead out...Be used to the world
and live right.

Patricia Richards
Taylor Elementary School
5th Grade
Feb. 1968

EVALUATION OF A CLASSROOM RADIO PROJECT

Introduction

This study was an attempt to evaluate the effectiveness of an educational radio training program operated by the District of Columbia Public School System. The program was designed to help a large number of students in the District schools who are handicapped by a language deficiency.

Authorities in the field of education and psychology for a considerable period time have recognized the importance to identify and institute methods, procedures, and equipment which would assist the classroom teacher in reaching students more effectively. General recognition of this need had led to exploration and innovation in program in various areas of education such as curriculum, teacher training, physical arrangements, etc.

In the field of education the traditional approach has been to institute remedial training or teaching programs based upon some promising theoretical framework and thereby proceed without assessing the nature and extent of program productivity. The absence of program evaluations has perhaps deterred progress particularly for children from deprived backgrounds. Effective remedial programs are absolutely essential for these children yet there are very few effective remedial methods identified as compared to the enormous number of innovative programs instituted. This reflects the absence of objective evaluations designed as carefully as possible, rather than the subjective global

types of assessments so often accepted.

One promising aid to the teacher in working with culturally deprived children appears to be the radio. The potentialities of the radio seem to be unquestionable, however, it was felt an objective evaluation of its use for verification is necessary. Such an evaluation would call for a good research design that satisfies the requirements of, at least, a quasi-experimental study.

It has been estimated that approximately 30% of the children entering the schools of the District of Columbia are exposed to a spoken language they find difficult to understand. This figure does not include the percentage of students from K-12, also seriously handicapped. At any rate, in 1963 a grant from the Ford Foundation made possible the implementation of a special language area curriculum. During the three year life of the project a program consisting of special language arts teachers was conducted in fourteen schools. At the end of the granting period the results were so encouraging that the program was continued and expanded by funds appropriated by the school budgets. Intentions are eventually to provide all the elementary schools with a special language arts teacher, however, it was felt some help must be given to regular classroom teachers in the meantime. In search of appropriate methods and techniques to help these teachers deal with the child's problems of comprehension and communication, consideration was given to the utilization of radio facilities. Subsequently, a radio program was devised to assist regular classroom teachers in seventeen elementary schools, and English teachers of twenty

secondary schools. The program did not include special language arts teachers.

Although the evaluation deals solely with certain aspects of the use of a radio in the classroom, it does have theoretical implications for the areas of communication, perception, and learning behavior. Since the major goal of this study is to provide the decision makers with a set of objective data regarding the impact of the radio in the classroom, a discussion of theoretical implications are not included.

The Study Objectives

The program consisted of broadcasting four different sound programs in relation to four grade levels in 37 schools. They were 1) "Single Sound Complex" - primary grade level, 2) "Occupational Sounds #1" - intermediate, 3) "Sound Sequence" - junior high, and 4) "Music Everywhere" - high school grade level. The nature and intention of these broadcasts are outlined in material prepared by the project director. The major aim of this study is to determine the impact of the broadcasts upon the students and faculty in a variety of ways.

Specifically, the major objectives of the study were 1) to determine the motivational capability of the radio when used as a reinforcement stimulus in the classroom and, 2) to determine whether or not the utilization of the radio as an implement in teaching the language arts is effective in reducing language deficiencies. In the process of reaching these objectives related questions were considered, such as, does the radio generate enthusiasm in the classroom? Is

it perceived as having value by the students and teachers? Does it capture and hold the students attention, etc.?

Hypotheses

Several hypotheses were tested in relation to the preceding objectives.

1. The utilization of the radio as an implementation in teaching will have no appreciable impact on teachers and students in the development of interest, attitudes, and values.
2. There will be no significant difference in attitude toward the radio among the students based on grade level.
3. There will be no significant difference between the experimental and control students in attitude toward the radio in a classroom setting.

Research Design

The research included the administration of questionnaires and interviews to an experimental group of 180 students and 10 teachers in 8 classes of 6 schools and a control group of 94 students in 4 classes of 4 schools. Secondly, a classroom observation form was completed by an observer on 7 experimental classes at the six schools. Finally, a sample of teachers were interviewed. The total population from which these samples were drawn consisted of 4,410 students and 147 teachers of 37 schools. Following is a breakdown of the student samples by grade level.

Table 1

Total Sample of Students by Group
and Grade Level

Grade Level	Experimental Group			Control Group		
	No. of Students	No. of Classes	No. of Schools	No. of Students	No. of Classes	No. of Schools
Primary*	15	2	1	8	1	1
Intermediate*	54	2	1	27	1	1
Jr. High**	51	2	2	34	1	1
Senior High**	60	2	2	25	1	1
TOTAL	180	8	6	94	4	4

* Both the experimental and control groups were selected from the same schools.

** The control group and experimental groups were selected from different schools.

The sample of 10 faculty members consisted of 4 teachers from the primary level and 2 from each of the other three levels.

The four research instruments used in this study are appended to this report. The experimental student opinion survey contains a semantic differential and a Likert type scale and ending with three structured and one open ended item. The control group opinion survey is similar to that of the experimental group, varied to the degree that the respondents had not been exposed to the broadcasts. Finally, inspection of items on the classroom behavior inventory and teacher questionnaire implies the type of data used in the analysis.

The method of analysis involved eight measurements.

- 1. Two resulted from an analysis among grade levels within the experimental group of students on variables of attitude toward the overall radio broadcast and judgment of the sounds in the broadcast.**
- 2. Two resulted from comparisons between experimental and control groups on attitude toward using the radio in the classroom and the number of hours a radio is used outside of the classroom.**
- 3. Two resulted from an analysis among grade levels within the experimental group of students which were judgment of a) continued use of radio in the classroom, and b) the radio's helpfulness in course work.**
- 4. One resulted from an analysis of the impact of radio among grade levels within the experimental group as the broadcast proceeded.**
- 5. One was related to the viewpoints of the teachers.**

RESULTS

Students Attitude Toward the Broadcasts

The results of the experimental groups attitude toward the radio program are shown in Table 2.

Table 2

Mean Values of Experimental Group
Attitude Toward the Radio Program Over Four
Grade Levels

<u>Grade Level</u>	<u>Mean</u>
Primary	1.45
Intermediate	1.20
Junior High	1.63
Senior High	1.90

These values are the means of four - seven point semantic differential scales for each grade level. Due to the positioning of the scales the lower the numerical value (mean) the more positive attitude indicated.

Inspection of Table 2 shows that students of all four grade levels expressed a high positive attitude toward the program. All means fall within a 1.00-2.00 range on a seven point scale. Specifically, the program was judged between extremely and moderately good, pleasant, interesting, and valuable. The data, therefore, suggests the students of all grade levels were very satisfied with the broadcast.

Even though a high positive attitude toward the specific radio broadcast were expressed by all of the experimental students, there was some variation among the sub groups. Table 2 shows that there was a range of means between 1.20 and 1.90. In comparison the intermediate group showed the most favorable attitude and the primary group the least.

The median test was used to statistically analyze the data for significant difference among the four grade levels. The results are shown in Table.

Table 3

Median Test Critical Values Between Four Experimental Grade Levels on Attitude Toward the Radio Program

Critical Values

Grade Levels	Primary	Intermediate	Jr. High
Primary			
Intermediate	1.55		
Jr. High	.16	11.35*	
Senior High	4.33**	30.24*	.53

* $p < .01$
** $p < .05$

Table 3 indicates that there was a significant difference between the senior high school and primary group in attitude toward the broadcast. There were also significant differences between the high school and intermediate, and intermediate and junior high. Inspection of Table 2 suggests that the statistical differences contained in Table 3 should be interpreted to mean the primary and intermediate groups generally judged the broadcasts significantly more favorable than the junior high and high school groups.

Overall, the data suggests the broadcasts were very well received by all the groups and overwhelmingly so by the intermediate and primary students.

Six of the semantic differential scales were designed to ascertain the experimental student's judgment of the sounds contained in the broadcast. Table 4 contains the mean values by grade level. The sounds were judged between moderately and slightly smooth, beautiful, sharp, colorful, familiar, and interesting by the primary (2.06) and the junior high (2.43) groups. The intermediate group judged them (sounds) between extremely and moderately smooth, beautiful, interesting as indicated by a mean of 1.76. The mean of 4.01 in Table 4 reveals the high school group judged the sounds neither smooth or rough, beautiful or ugly, colorful or colorless, etc. (See Table 4 on page 10)

Table 4

**Mean Values of Experimental Group
Judgment of Sounds Used in Radio Program**

<u>Grade Level</u>	<u>Mean</u>
Primary	2.06
Intermediate	1.76
Junior High	2.43
Senior High	4.01

The median test revealed the primary and intermediate groups judged the sounds significantly more favorable than the junior high and senior high groups.

Table 5

**Median Test Critical Values Between Four Experimental Grade
Levels on Judgment of Sounds Used in Radio Program**

Critical Values			
Grade Level	Primary	Intermediate	Jr. High
Primary			
Intermediate	1.37		
Junior High	3.60**	13.87*	
Senior High	2.10	10.77*	.67

* $p < 7.01$

** $p < 7.05$

This finding with respect to the sounds is consistent with the groups relative attitude toward the overall broadcast. However, when the adjective scale of interesting - uninteresting was isolated there were no significant differences found among the grade levels. The primary and intermediate groups rated the sounds on the average extremely interesting (3.87) and the junior high and senior high groups rated them moderately interesting (3.01). The single ratings of sound on this scale, interesting, uninteresting is perhaps more indicative of the broadcast sounds stimulating value than any of the other five scales used.

Usefulness of Radio in Classroom as Viewed by Students

The students were asked to judge how useful they thought a radio was in a classroom setting. Comparisons were made within and between the four level of experimental and control groups. Variations in judgment between experimental and control groups reflects differences between students related to exposure and non-exposure to a classroom broadcast.

Table 6 contains the mean values for the judgment of radio usefulness in the classroom by the experimental group of students.
(See Table 6 on page 12)

Table 6

Mean Values of Experimental Groups by Grade Level on Judgment of the Radio's Usefulness in the Classroom

<u>Grade Level</u>	<u>Mean</u>
Primary	1.90
Intermediate	1.61
Junior High	2.00
Senior High	3.47

Table 6 shows the intermediate students rated the radio as most useful, followed by the primary, junior high and senior high. A total of .39 scale units difference between the primary, intermediate, and junior high groups suggest the judgment of usefulness by these three groups were extremely close. The lowest rating among the three was moderately useful, the second highest rating. The high school group judged the radio as slightly useful, 3.40, which is .53 unit away from a neither useful or useless rating. The median test indicated a significant difference existed between the high school and intermediate group .05 level of confidence. This of course would be expected from the distribution of the means in Table 6 even though the median test utilizes medians rather than means in the computations.

Table 7

**Median Test Critical Values Between Experimental Groups
by Grade Level on Judgment of the Radio's Usefulness in the Classroom**

Critical Values			
Grade Level	Primary	Intermediate	Jr. High
Primary			
Intermediate	3.84*		
Junior High	.18	1.35	
Senior High	.06	2.42	.13

* $p < .05$

The control group of subjects also were asked to judge how beneficial they thought the radio would be in the classroom. These students could not use their experience as a basis of judgment since they had not been exposed to the broadcasts. Table 8 indicates, with the exception of the primary group, all groups of students thought the radio would be moderately useful. The mean of 6.85 for the primary group indicates the small children viewed the radio as almost useless in their classroom. There was a significant difference between the primary group and each of the other groups on this variable as shown by Table 9. (See Tables 8 and 9 on page 14)

Table 8

Mean Values of Control Group by Grade Level on Judgment of Radio's Usefulness in the Classroom

<u>Grade Level</u>	<u>Mean</u>
Primary	6.85
Intermediate	1.61
Junior High	2.32
Senior High	2.10

Table 9

Median Test Critical Values Between Experimental Groups by Grade Level on Judgment of the Radio's Usefulness in the Classroom

Critical Values

Grade Level	Primary	Intermediate	Jr. High
Primary			
Intermediate	7.43*		
Junior High	9.39*	2.05	
Senior High	8.66*	1.86	.17

* $p < .01$

Comparison of means of the experimental group and control group shown in Tables 6 and 7, respectively, shows several interesting variations. First, the primary children (control group) which had no experience with the radio in a school had little respect for the potential of such aid. On the other hand the experimental group very favorably suggests that if the radio is used the students' low expectation disappears. Secondly, there was essentially no change in the anticipated and actual value of the radio as viewed by the experimental and control group of intermediate and junior high school students as shown by the results of Tables 6 and 8. Thirdly, the discrepancy between the senior high school students' expectation and actual value of the radio from exposure is opposite of the primary group. The senior high school control group anticipated the value of the radio as moderately good, 2.10 - Table 8, as opposed to the experimental groups rating of slightly good, 3.47 which is a statistical difference at the .05 level of confidence. Also, there is a significant difference between the primary experimental and control groups.

Helpfulness and Continued Use of Radio as Viewed by Students

The experimental students felt the broadcast provided them with a great degree of assistance in their course work. Table 10 consists of the means of the four grade levels on one Likert-type item.

Table 10

Mean Score from Likert-Type Scale of Students' Judgment of Radio's Helpfulness in Course Work by Grade Level

<u>Grade Level</u>	<u>Mean Score</u>
Primary	1.60
Intermediate	1.37
Junior High	1.64
Senior High	1.85

The means of all grade levels, with the exception of the senior high school group, fall between strongly agree (1.00) and agree (2.00) to the five point statement of "Such broadcasts will be helpful in your course-work for this subject." (The senior high group was 15 units beyond agree). One deficiency of the research design is that it did not explore the specific ways that students thought the broadcast was helpful.

The student's judgment with respect to the continuation of the broadcast are consistent with their opinion of helpfulness in their coursework. Table 11 shows the mean scores for the group received from a five point Likert-type item that stated "You would like to hear other radio programs like this one," strongly agree(1), agree(2), uncertain(3), disagree(4), strongly disagree(5). (See Table 11 on page 17)

Table 11

Mean Scores from Likert-Type Scale of Students' Interest in Continuation of Broadcast

<u>Grade Level</u>	<u>Mean Score</u>
Primary	1.60
Intermediate	1.37
Junior High	1.64
Senior High	1.85

As shown by Table 11 all group means fell between strongly agree and agree, that the broadcasts should continue. This ranged from 1.37 for the intermediate group to 1.85 for the high school group.

The two findings in this section related to the students opinion of the broadcast's usefulness and interest in continuation are evidence that the radio in the classroom setting is very well received by the students.

The classroom broadcast, although an innovative feature, does have a strong base from which to build. One hundred and sixty-eight of 180 or 93% of the students use a radio outside of the classroom from 8.86 hours to 26.10 hours per week. As Table 12 indicates the older the student the more time is spent listening to a radio outside of the classroom. The vast majority of the students listen to popular music judging from the stations they said they listen.

(See Table 12 on page 18)

Table 12

Average Number of Hours Per Week That Experimental Students Listen to Radio Outside of the Classroom

Use of the Radio Outside of Classroom

<u>Grade Level</u>	<u>Total No. of Students</u>	<u>No. that Listen to Radio</u>	<u>Average No. of Hrs. Per Week</u>
Primary	15	12	8.66
Intermediate	54	51	12.16
Jr. High	51	48	18.29
Senior High	60	57	26.10

Viewpoint of Teachers Toward the Classroom Radio

The 10 teachers interviewed rated the specific broadcasts very highly and thought the use of the radio had great potential as a teaching aid.

Seven of the 10 teachers cited the broadcast as giving them a fine opportunity to help the students in enunciation and pronunciation at the height of the students' interest. In the process of the students' identification or discussion of a sound, the teacher was able to correct their word usage and/or sentence structure at a time they (students) considered it least offensive since they were most interested in expressing themselves.

Contrary to the actual attitudinal ratings toward the broadcast among grade levels of the experimental students, the teachers responses indicated

the senior high and junior high students judged the radio broadcast more favorably than the intermediate and primary grade levels. This was characterized by the variation among grade levels in the number of responses, inquiries, debates, comments, etc., reported by the emerging hours following each broadcast. The senior high and junior high teachers reported a significantly larger number of these occurrences than teachers of the other two grade levels.

In addition to viewing the broadcast as a mechanism for assisting the children in language development there were other uses of the broadcast cited by the teachers. Five of 7 teachers said they were able to associate the sounds with the student's actual experience, 4 thought it gave them a chance to help improve oral interpretation, and 4 used it to improve group discussion. Improving oral interpretation and associating sounds to experience was mostly cited by primary and intermediate teachers whereas improving group discussion was identified by junior high and senior high school teachers.

Eight out of 10 teachers were encouraged by the broadcast's capability of stimulating usually silent students to voluntarily participate in the group discussions. Some of the students that are generally apprehensive about verbally expressing themselves apparently became engrossed in the conversation and forgot their fear of speaking out.

All 10 teachers expressed in one manner or another that there was room for improving the broadcasts. Unfortunately, the interview did not

require specific suggestions but general recommendations such as more relevant sounds for a particular grade level, inclusion of more sounds that will force critical thinking on the part of the students, and more material that is associated with the students' experience. There was an effort to carry out a follow-up interview with the teachers for the purpose of getting specific suggestions for improvement of the broadcast, however, due to the pressure of time and several other factors, this was not possible.

Another indication of the teachers' viewpoint of the broadcast is of the number and kinds of questions they asked the students about the broadcast. In excess of 85% of all questions the teachers asked following the broadcast fall into 7 question categories, as shown in Table 13.

Table 13

Distribution of Eighty-Five Percent
of Teachers' Questions Following Broadcast

<u>No. of Times Asked</u>	<u>Question Category</u>
12	Has anyone heard the sound before?
16	What does the sound make you think of?
16	Do you think you can make the sound?
17	How does the sound make you feel?
18	What else could the sound have been?
19	Identify the sounds you heard?
19	What types of occupations might be associated with the sounds?

The nature of these questions supports the teachers' expressed opinion that the broadcasts were most useful in not only generally improving language patterns but also helpful in the related areas of developing oral interpretation, associating sounds to experience, and improving group discussion.

Finally, the observer reported in giving instruction for the broadcast, 1 teacher was excellent, 5 were good and 1 was fair. Five of those 7 teachers gave the instruction enthusiastically, according to the observer, and two gave them in a normal manner. No teacher was identified as giving unclear instructions.

Impact of Radio on Students at Various Intervals of Broadcast

Another source of data was that yielded by the classroom behavior inventory. A research assistant observed the class before, during, and after the broadcasts. The power of the radio program to capture and retain the attention of the students is shown by Table 14.

(See Table 14 on page 22)

Table 14

Student Behavior by Grade Level
During the Broadcast

Grade Level	First 5 minutes of broadcast		Second 5 minutes of broadcast		Third 5 minutes of broadcast		Total No. of Students
	No. of Students Listening	No. of Students Not Listening	No. of Students Listening	No. of Students Not Listening	No. of Students Listening	No. of Students Not Listening	
Primary	27 (55%)	22 (45%)	13 (27%)	36 (73%)	15 (31%)	34 (69%)	49**
Intermediate	23 (43%)	31 (57%)	39 (72%)	15 (28%)	32 (59%)	22 (41%)	54
Junior High	41 (82%)	9 (18%)	42 (84%)	8 (16%)	42 (84%)	8 (16%)	50
Senior High	32 (89%)	4 (11%)	30 (83%)	6 (17%)	30 (83%)	6 (17%)	36
							189

* Number of students that appeared to be preoccupied for the majority of the five minute time period.

** The total number of primary students observed were 49 in two classes, whereas only 15 completed the student opinion inventory because the instrument had to be individually administered to this group.

These tables show that as the broadcast proceeded the attention of the primary students declined. During the first five minutes of the broadcast 27 out of 49 (55%) primary students spent the majority of the time listening to the broadcast whereas this number dropped to 15 (31%) by the end of the program. The observer reported 25 of the children "not listening" during the second and third phases of the broadcast 17 were reading, six were staring out the window, and three were whispering.

During the first five broadcasts only 23 students of 54 intermediate students listened to the broadcast the first five minutes of the radio program. During this time 27 students were reading, one staring into space, and three were whispering. This figure changed to 39 the second five minutes and 32 the final five minutes. In the second 10 minutes, 16 stopped reading and listened. Seven of these 16 returned to reading the last five minutes. Three students continued to whisper throughout the program.

Table 14 reveals that the vast majority of junior high students, an average of 42 out of 50, and senior high students, an average of 30 out of 36, listened to the broadcast throughout. Two of the junior high students and three senior high students consistently whispered whereas the others classified as "not listening" by the observers were reading.

In short, the radio program was generally successful in attracting the attention of the students with the exception of the primary group. Even within this group more children could have been paying attention to the broadcast than recorded since it is possible to read and listen simultaneously.

CONCLUSIONS

Test of hypotheses

All three of the hypotheses underlying this study were rejected according to indications of the data.

Hypotheses 1.

The utilization of the radio as an implementation in teaching will have no appreciable impact on teachers and students in the development of interest, attitudes, and values.

The data suggests that the broadcast generated an enormous amount of interest generated among students and teachers. The teachers were impressed with their opportunity to work with the students on language deficiencies by drawing upon material related to the broadcast. Students were stimulated to voluntarily participate in the discussions which not only enabled the teacher to give them immediate help in self expression but also gave the teacher a chance to ascertain the nature and degree of basic language deficiencies. As for the attitude and values of teachers and students, the anxiousness of both to continue the program and the very positive judgment of usefulness directly imply the radio had a great impact on developing positive attitudes with regard to education and indirectly imply there is some realignment of values as well.

Hypotheses 2.

There will be no significant difference in attitude toward the radio among students based on grade level.

This hypotheses was statistically rejected at the .05 level of confidence. The statistical data suggests the primary and intermediate grade levels had a more positive attitude toward the radio than the junior and senior high grade levels. However, on closer observation as to the follow-up activity based on teacher responses and observer reports, a difference existed between grade levels in the reverse direction. It was found the senior high and junior high students engaged the teacher days after the broadcast. The latter finding is based on a firmer data source than the former.

Hypotheses 3.

There will be no significant difference between the experimental and control groups in attitude toward the radio in the classroom setting.

This null hypotheses was rejected at the .05 level of confidence between the experimental group and control group by grade level. The control group of children in the primary classes did not view the radio as very useful in the classroom as opposed to a very favorable impression by the experimental group. In contradistinction the experimental group of high school students that had been exposed to the broadcasts indicated a less favorable attitude than the control group that were responding to an anticipated value.

Achievement of Study Objectives

Specific objectives of the study were to (1) determine the motivational capability of the radio when used as a reinforcement stimulus in the

classroom and (2) to determine whether or not the utilization of the radio as an implement in teaching language arts is effective in reducing language deficiencies.

The study strongly suggests throughout the entire data analysis that the favorable motivational capability of the radio across the entire spectrum of grades is unquestioned. This data strongly suggests this is true for not only students but the teachers as well. The interaction between highly stimulated teachers and highly stimulated students, although unmeasurable, perhaps accounted for the lively discussions reported by observers.

The study was not able to address itself to the second objective of the study, therefore, it is unknown to what extent, if at all, the radio was helpful in reducing language deficiencies. It is known the teacher was able to work with the students on word usage and sentence structure within a friendly atmosphere because the discussion centered around the broadcast which in turn was of great interest to the student. The radio project had not been conducted for a sufficient period of time to allow reasonable measurement to be taken of the students academic progress because of the broadcast.

In brief, it may be stated that based on this study the classroom radio is definitely capable of motivating students and teachers and its effectiveness in reducing language deficiencies is unknown although there are subjective reasons to believe it may.

Recommendations. Based on the study findings,

1. The radio project should be continued if at all possible. The data strongly suggest benefits to the students are considerable.
2. The project staff should work very closely with the teachers in developing program material to be broadcast.
3. The broadcast time should be shorter for students in the primary grades.
4. The effectiveness of the radio in aiding the classroom teacher in reducing language deficiencies should be carefully studied after one academic year of broadcasting.

J

Student _____

Form IR
Experimental

School _____

Course or Class _____

Teacher _____

Date _____

STUDENT OPINION SURVEY

We are interested in your opinion of the broadcast you have recently heard in this class. Please answer the question below by placing a check in the blanks of your choice. Your answers will not be shown to anyone.

The radio program was:

A. Good _____; _____; _____; _____; _____; _____

Extremely good	Moderately good	Slightly good	Neither good or bad	Slightly bad	Moderately bad
1	2	3	4	5	6

_____; bad

Extremely bad
7

B. Pleasant _____; _____; _____; _____; _____

Extremely Pleasant	Moderately Pleasant	Slightly Pleasant	Neither Pleasant or Unpleasant	Slightly Unpleasant
1	2	3	4	5

_____; _____; unpleasant

Moderately Unpleasant	Extremely Unpleasant
6	7

C. Interesting _____; _____; _____; _____; _____; _____

Extremely	Moderately	Slightly	Neither	Slightly	Moderately
1	2	3	4	5	6

Extremely; boring

7

D. Successful ; ; ; ; ; ; ; ; Unsuccessful
 1 2 3 4 5 6 7

The sounds were:

A. Smooth ; ; ; ; ; ; ; rough
 1 2 3 4 5 6 7

B. Beautiful ; ; ; ; ; ; ; ugly
 1 2 3 4 5 6 7

C. Sharp ; ; ; ; ; ; ; dull
 1 2 3 4 5 6 7

D. Colorful ; ; ; ; ; ; ; colorless
 1 2 3 4 5 6 7

E. Familiar ; ; ; ; ; ; ; unfamiliar
 1 2 3 4 5 6 7

F. Interesting ; ; ; ; ; ; ; uninteresting
 1 2 3 4 5 6 7

Use of the radio in the classroom is:

A. Valuable ; ; ; ; ; ; ; worthless
 1 2 3 4 5 6 7

B. Powerful ; ; ; ; ; ; ; weak
 1 2 3 4 5 6 7

C. Fair ; ; ; ; ; ; ; unfair
 1 2 3 4 5 6 7

D. Important ; ; ; ; ; ; ; unimportant
 1 2 3 4 5 6 7

E. Meaningful ; ; ; ; ; ; ; meaningless
 1 2 3 4 5 6 7

Indicate your agreement or disagreement with the following statements:

Indicate your agreement or disagreement with the following statements:

1. You would like to hear other radio programs like this one:

_____ strongly agree

_____ agree

Indicate your agreement or disagreement with the following statements:

_____ uncertain

_____ disagree

_____ strongly disagree

2. Such broadcasts will be helpful in your coursework for this subject:

_____ strongly agree

_____ agree

Indicate your agreement or disagreement with the following statements:

_____ uncertain

_____ disagree

_____ strongly disagree

3. Do you listen to a radio outside of class?

yes _____; no _____; or disagreement with the following statements:

If yes, about how much time per day? _____

To what programs do you listen? _____

Additional comments on or about broadcast: _____

5

Observer _____

Form III R

School _____

Ob.

Number of students in class

Course or class _____

Teacher _____

Date _____

CLASSROOM BEHAVIOR INVENTORY

A. Instructions for broadcast by teacher:

1. excellent ___; good ___; fair ___; poor ___; no instructions ___

2. Teacher appears

extremely excited ___; enthusiastic ___; normal ___; dry ___

3. Are the students paying attention to the instructions?

all are ___; the majority are ___; the majority are not ___;

approx. no. of students talking ___;

approx. no. of students reading or writing ___;

approx. no. appearing disinterested ___;

(staring out of window, looking bored, fidgeting, etc.)

4. How many questions were asked? _____

Sample of questions are: _____

Page Two

C. First five minutes of the broadcast.

1. Teacher reaction?

2. Approximate number of students that spent the majority of the time:

Whispering_____

Reading or writing_____

Other (fidgeting, sleeping, etc.)_____

Number of times teacher had to warn different students_____

3. Briefly describe class reaction to broadcast? (Laughter, seriousness, puzzlement, etc.)

4. Were there any unusual incidents that occurred during the time span? If so, briefly describe.

Page Three

D. Second five minutes of broadcast.

1. Approximate number of students that spent the majority of the time:

Whispering _____; No. of different students from previous five minutes _____

Reading or writing _____; No. of different students from previous five minutes _____

Other (fidgeting, sleeping, etc.) _____

2. Briefly describe any change in student reaction from first five minutes.

3. Were there any unusual incidents that occurred during the time span? If so, briefly describe.

Page Four

E. Third five minutes of the broadcast.

1. Approximate number of students that spent the majority of the time:

Whispering _____; No. of different students from previous
five minutes _____

Reading or writing _____; No. of different students from previous
five minutes _____

Other (fidgeting, sleeping, etc.) _____

2. Briefly describe any change in student behavior from the last five
minute period.

3. Were there any unusual incidents that occurred during this time
span? If so, describe?

Page Five

E Discussion

1. Total number of students participated in the discussion voluntarily. _____
2. Total number of different students that participated in the discussion voluntarily. _____
3. Total number of times the teacher called upon a non-volunteer. _____

Briefly describe how these students answered? (Knowledgeably, apathetically, etc.)

4. Briefly describe the general interest the class had in the discussion?

5. Did the teacher act as a stimulator? Briefly describe.

Page Six

6. Briefly record the highlights of the discussion.

G. Observers assessment

Evaluate the effect of this broadcast with this particular class in terms of its success in stimulating the students to learn. In short, do you think the experience was worth the student's time. You may justify your answer with both general and specific impressions.

K

EVALUATION OF WORKSHOP PROGRAM
ENRICHMENT THROUGH RADIO PROJECT
D.C. PUBLIC SCHOOLS

Saturday, January 6, 1968, a workshop was conducted by the D.C. Public Schools' Language Arts Program in connection with a Title III Project entitled Enrichment Through Radio. The workshop involved 90 teachers, which included 79 from D.C. Public Schools, 8 from parochial schools, and 3 from Montgomery County Public Schools in Maryland. Of the 79 teachers from D.C. Public Schools, 35 were elementary teachers, 28 from junior high, and 15 were from senior high.

The workshop was designed to yield useful information for developing and improving the pilot classroom radio broadcasts of which the Enrichment Through Radio Project was related. The workshop was held at American University in order to give the participants an opportunity to view the broadcast facilities. The workshop program, beginning at 9:00 A.M. and ending at 3:30 P.M., consisted of the following components:

1. Orientation

Statement and review of the Enrichment Through Radio project goals.

2. Video tape showing

3. Small group discussion of classroom broadcasts

- a. the role of the teacher
- b. techniques of pupil involvement
- c. physical organization of classes
- d. problems and possible solutions related to the use of radio for instruction.

4. Explanation of A.U.'s broadcasting facilities and how the radio project operates staff-wise.

5. Role playing by participants.

- 6. Group discussions--guideline preparation groups.
Groups of 12 considered the following issues:
 - 1. What are key words and/or phrases for encouraging pupil responses to questions and involvement in free discussion?
 - 2. What are specific activities that could be used as broadcast follow-ups?
 - 3. What are specific ways in which radio can be used to reinforce all curricular areas?
 - 4. What are some script ideas for future planning?
- 8. Listening to excerpts of coming broadcasts and offering suggestions for their use.

The following evaluation of the workshop was based on a three-page questionnaire attached to this report.

Success of the Workshop

All 90 (100%) of the participants rated the overall success of the workshop as either extremely or moderately successful. Only one participant out of the 90 said he would not participate in such a workshop again.

The majority of the teachers, as shown by Table 1, felt the program should have been held during the regular school day and release time given.

TABLE 1

Response of Ninety Teachers to "Should the Workshop have been held during regular school hours with release time?"

GRADE LEVEL	Response			TOTAL
	YES	NO	NO RESPONSE	
Elementary	23 (68)**	11 (32)	1	35
Junior High	22 (79)	6 (21)	0	28
Senior High	7 (54)	6 (46)	2	15
*Others	7 (79)	3 (30)	2	12
	59 (69)	26 ()	5	90

*non D.C. Public School Teachers
 ** () = percent

Specifically Table 1 shows that only 67% of the teachers would have preferred the workshops to be held during the regular school hours, however, 77 or 92% said they would have participated had it been held under these conditions.

Structure and Organization of Workshops

Ninety-two percent of the teachers felt that the structure and organization of the workshops that primarily centered around participant involvement was the best approach to use as indicated by Table 2.

Table 2

Teacher Agreement by Grade Level With Workshop Centered Around Participant Involvement

Grade Level	Response		
	Yes	No	Total
Elementary	32 (91)**	3 (9)	35
Junior High	26 (93)	2 (7)	28
Senior High	15 (100)	0	15
Others*	10 (83)	2 (17)	12
TOTAL	83 (92)	7 (8)	90

* Non Public School Teachers

** () = percent

In relation to the total organization 93% of the teachers found the program satisfactory which varied slightly by grade level from their opinions of the specific participant involvement as a focal point. Table 3 contains their assessment of the overall structure and organization of the project.

Table 3
Teacher Agreement by Grade Level With The Overall Structure and Function of the Workshop

Response

Grade Level	Yes	No	Total
Elementary	31 (89)	4 (11)	35
Junior High	28 (100)	0	28
Senior High	14 (93)	1 (7%)	15
Teachers**	11 (92)	1	12
TOTAL	84 (93)	7 (8)	90

Although there was a great deal of satisfaction with the workshops, as organized, there were suggestions for improving future ones. These suggestions for improvement are categorized into three areas for clarity purposes.

1. Organization of the workshops
 - a. Use children for demonstrations
 - b. Have a longer workshop

- c. Have available different material for different grade levels
- d. Include many subject areas
- e. Divide participants into smaller groups
- f. Give professional credit for participation
- g. Schedule different groups to visit the control room
- h. Divide the teachers on a grade level basis
- i. Provide for more teacher involvement

2. Interpretation

- a. Allow more time for discussion of guidelines and tapes.
- b. Provide explanation by experts on available research.
- c. Distribute prior information on the workshops.
- d. Emphasize the objectives of the workshops.
- e. Make use of more concrete materials.
- f. More time for discussion of tapes.

3. Follow-up

- a. Hold such workshops more frequently.
- b. Make group findings available to all.

The above are the most frequent suggestions offered by the 90 participants. Table 4 contains these suggestions by area and grade level.

Table 4

-6-

Suggestions for Improving Workshops by Grade Level and Area

Grade Level

Areas	Elementary	Junior: High	Senior High	Others	Total
Organization	<p>Shorter coffee breaks</p> <p>Pre-assigned chairman</p> <p>Emphasizing objectives</p> <p>Use children</p> <p>Include more classes</p> <p>Programs on grade level</p> <p>Include many subject areas</p> <p>Smaller groups</p> <p>Smaller group participation</p> <p>State the purpose of the radio clearly</p>	<p>Program was well organized</p> <p>Shorter coffee breaks</p> <p>Make group finding available to all</p> <p>Improved schedule for grade levels</p> <p>More time for programs & tape</p> <p>More group discussions</p> <p>Role playing should be planned so as to eliminate embarrassment</p>	<p>Longer workshops</p> <p>Materials on grade level</p> <p>More time for program</p> <p>Group levels together for role playing</p> <p>Various groups should have been scheduled to visit the control room</p> <p>Division of teachers on grade levels</p>	<p>Prior inter-shops on work</p> <p>Professional credit</p> <p>Closer cooperation between public and parochial schools</p> <p>Parochial schools should be told the why's of the program</p> <p>Workshop on grade level</p>	

Table 4 (continued)

Grade Level

Areas	Elementary	Junior High	Senior High	Others	Total
Interpretation of Media	More time for discussing guidelines and tapes	Use tape recorder in group discussion Play tapes earlier in workshop More time for analyzing the video tapes	Have excerpts early in the morning	Concrete materials to work with More demonstrations needed Explanations by experts of available research	10
Follow-up Activities	More group discussions Follow-up activities	Hold programs more frequently Follow-up of today's meeting	Teachers should participate in writing the program	Demonstrations of follow-up activities	5

Teacher Evaluation of Workshop Components

The 90 participants were asked to evaluate the four basic workshop components which were 1) role playing, 2) discussion of video tape, 3) listening to excerpts, 4) and writing guidelines. The coffee break was included as one of the components to inject a bit of humor, however, judging from the responses the participants took the investigator seriously.

The teachers were asked to judge the usefulness of each of the basic components as shown in Table 5.

Table 5

Overall Teacher Rating of Usefulness of Workshop Program Components N = 90

Components	Usefulness	
	Useful	Uncertain or Not Useful
Role Playing	65 (72)*	25 (28)
Discussion of Video Tapes	89 (99)	1 (1)
Listening to Excerpts	79 (91)	8 (9)
Writing Guidelines	76 (86)	12 (4)
Coffee Break	79 (9)	8 (9)

* () = percent

Inspection of Table 5 shows all the components were judged useful, however, 25, or 28% of the teachers did not think so with respect to role playing. Tables 6, 7, 8, and 9 shows the variation among the teachers based on grade level in their opinion of the usefulness of each component.

Table 6

Teacher Rating of Usefulness of Role Playing
by Grade Level

Grade Level	Usefulness		Total
	Useful	Uncertain or Not Useful	
Elementary	28 (80)*	7 (20)	35
Junior High	17 (61)	11 (39)	28
Senior High	12 (80)	3 (20)	15
Others*	8 (67)	4 (33)	12
TOTAL	65 (72)	25 (28)	90

* Non D. C. Public School Teachers

Table 7

Teacher Ratings on Usefulness of Discussion of Video
Tapes by Grade Level

Grade Level	Usefulness		Total
	Useful	Uncertain or Not Useful	
Elementary	34 (97)	1	35
Junior High	28 (100)	0	28
Senior High	15 (100)	0	15
Others	12 (100)	0	12
TOTAL	89	1	90

Table 8

Teacher Rating of Usefulness of Listening to Excerpts
by Grade Level

Usefulness			
Grade Level	Useful	Not Useful	Total
Elementary	29 (85)	6 (15)	35
Junior High	24 (91)	4 (9)	28
Senior High	15 (100)	0	15
Others	11 (92)	1 (8)	12
TOTAL	79	11	90

Table 9

Teacher Rating of Usefulness of Writing Guidelines by Grade Level

Usefulness			
	Useful	Uncertain or not useful	Total
Elementary	32 (91)	3 (9)	35
Junior High	23 (88)	5 (12)	28
Senior High	11 (73)	4 (27)	15
Others	10 (83)	2 (17)	12
TOTAL	76	14	90

These tables indicate that the participants thought the discussion of video tapes were the most useful followed by listening to excerpts, writing guidelines and role playing. In relation to grade level the senior high teachers appeared to be the most satisfied with the total group of components followed by the junior high group.

The teachers were also asked whether more time should have been given to each of the components, as shown by Table 10.

Table 10

Teacher Opinion as to Additional Time
Needed by Component

Response

Component	Yes	No	Total
Role Playing	32 (38)	53 (62)	85
Discussion of Video Tape	51 (57)	38 (43)	89
Writing Guidelines	66 (73)	24 (27)	90

The majority of participants felt that more time should have been given to the discussion of the video tapes and listening to the excerpts, whereas, no additional time should have been given to the writing of guidelines and role playing.

Examination of Table 11 reveals that non-public schools were the leaders among those that thought more time should have been devoted to the discussion of the video tapes. Listening to excerpts drew the highest percentage of teachers in all four groups that more time should have been allowed

whereas the low percentage of yes responses to "additional time needed", on the whole, was given to role playing. Finally, writing guidelines drew a minority of yes responses from the elementary (35%) and junior high groups (42%) and the majority of the senior high (53%) and non public school teachers (51%).

Conclusions and Summary.

The workshop was viewed very effective by the D. C. Public School teachers of all grade levels as well as by the non public school. These participants felt such workshops should be given during regular school hours with release time for teachers to attend. There should be more of such workshops in the opinion of the participants and they should be longer.

The teachers were happy with the overall structure and organization of the workshops and thought the idea of centering it around teacher participation was a good one. In fact, a number thought the teacher involvement should have been increased. Although the total group was satisfied with the overall program they did offer suggestions for improvement. Among the most important suggestions were, 1) to use children in the demonstrations, 2) divide participants into small groups and in accordance with grade level interest, 3) distribute prior information on the workshops, and 4) make the findings of the small groups to all.

With regards to the components or divisions of the workshops the excerpts presented for future broadcast was by far the most useful and stimulating. In fact the participants thought more time should have been

Table 11

Teacher Opinion as to Additional Time Needed by Grade Level and Component

Component	Grade Level										
	Elementary		Junior High		Senior High		Total		Others*		Total
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Role Playing	13 (37)	22 (63)	12 (48)	13 (52)	25	4 (29)	10 (71)	14	3 (27)	8 (73)	11
Discussion of Video Tape	9 (56)	15 (44)	34	15 (54)	28	8 (53)	7 (47)	15	9 (75)	5 (25)	12
Listening to Excerpts	25 (71)	10 (29)	35	20 (71)	28	10 (67)	5 (33)	15	11 (92)	1	12 (8)
Wearing Goggles	12 (35)	22 (65)	34	11 (42)	26	8 (53)	7 (47)	15	8 (53)	7 (47)	15
TOTALS	69 (50)	69 (50)	138	58 (54)	107	30 (51)	29 (49)	59	31 (62)	19 (38)	50

* Non D. C. Public School Teachers

() = percent

devoted to this. On the other end of the continuum they did not think that role playing was as useful as the other three activities. This cannot be interpreted that role playing should not be included in future workshops because the questionnaire did not contain an item asking specifically whether or not such a component should be involved.

In short the formulation and execution of the workshops were certainly in the right direction. Future workshops should operate from the same foundations but incorporate into their designs some of the more pertinent recommendations advanced by participants of the Enrichment through Radio Program.