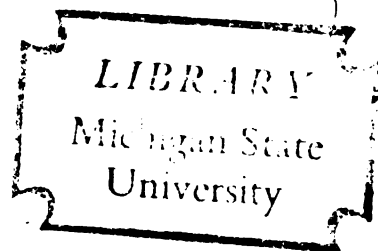


**SUPPLEMENTARY
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5-122

**A HIGH SCHOOL COURSE IN BROADCASTING: ITS
EVOLUTION, CONTENT, AND STRUCTURE**

By

Juanita Jane Rucker

A THESIS

**Submitted to the College of Communication Arts of
Michigan State University of Agriculture and
Applied Science in partial fulfillment of
the requirements for the degree of**

MASTER OF ARTS

Department of Television, Radio and Film

1959

PREFACE

To those principals and superintendents for inspiration and administrative guidance, which provided opportunity to gain the necessary experience through the years to give this project any worth-while quality it may have, the writer wishes to express her appreciation.

To her parents and friends who have given the quiet encouragement necessary to complete this project, she expresses a very deep gratitude.

To the present professors who have guided this project to its completion, she extends sincere thanks for their patience and wisdom in shaping it to its present form. She hopes that the materials contained herein may be of value to any reader seeking help in preparing a course of study in broadcasting for a high school class.

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Approved

Gordon L. Gray

ABSTRACT

The purpose of this study is to provide a description of a course in broadcasting offered to the upper levels of the secondary school and to present an evaluation of the course in terms of established patterns drawn from the histories of previous courses in broadcasting.

The study is divided into four divisions. The first two trace the development of broadcasting interests and activities at the collegiate level and then in the secondary level of education. It was found that, at both levels, a curricular interest and eventual development of a curriculum followed the broadcasting activity in which educational institutions came and attempted to operate their own radio stations. The rapid, early development of this station activity and the subsequent failure to operate their own stations was a parallel movement at both levels. Causes of the failure were similar: lack of funds and lack of know-how and administrative guidance and support.

The third division traces the development of the broadcasting activities at New Castle High School, New Castle, Indiana where this course has been offered for several years. This material indicates how the present set of objectives and the course of study evolved. The course of study and its procedures are then presented.

The fourth division presents an evaluation of the course, some recommendations, and the conclusions reached.

An evaluation of the course is made in terms of the historical approach to what has been achieved in other schools and with what objectives. It is also evaluated in terms of the general objectives of secondary education today. The adaptability of the course is pointed out by presenting some suggested revisions to meet three possible school situations: (1) the school which has little broadcasting equipment, (2) the school which desires a speech emphasis in a radio course, and (3) the school which desires a television emphasis in a broadcasting course.

The recommendations presented are the results of needs felt and ideas created during the years this course was evolving and during the research for the historical materials for this study.

The conclusions reached in this study are: (1) this course in broadcasting, as presented here, for the upper levels of the secondary school, is practical and can be recommended to other schools with similar facilities and needs, (2) it is flexible and can meet other school situations and needs, and (3) broadcasting as a course of study seems to have attained academic recognition in both the secondary school and in institutions of higher education.

Two trends were noted at the collegiate level of education. One was a move toward a philosophy of professionalism in academic training in broadcasting; the second, a broader concept toward broadcasting seems to be occurring. The move is toward a concept of mass communications which includes all mass media.

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INTRODUCTION

The achievements of science since the turn of the century have advanced human civilization more than in the previous five hundred years. Life has become easier and more pleasant. Man can move about faster and can communicate with his fellowman almost everywhere on the face of the earth. Accompanying all this change and seeming efficiency have been technological problems and problems in human relations. In less than seventy-five years, radio, television, and the airplane have made this world seemingly very small; they have made our modern society aware of men and their affairs on the other side of the world, men about whom there had previously been little thought or concern. There developed a need for knowledge and skills that would help unravel the mysteries of these men and their affairs.

In short, there was a need for education, technological and sociological. Thus the achievements of science, which in themselves are the result of education, produced needs for more education. Today, because of these new media of communication and transportation, education is faced with new challenges and wider vistas.

Research reports spell out in detail the story of how man has changed his ways of doing and thinking because the new media of communication, radio and television, have brought into his daily awareness a whole world, its activities, its conflicts, needs, and desires, its wide range of human emotions.

It is not the purpose of this study to trace or report the story of the impact of these media upon society. It is, however, the purpose of this study to show one small means available to man which may sharpen his ability to comprehend and assimilate these media into modern living and thinking. That way is to provide training at the secondary level of education in and with these new communication tools. Such training would not be purely vocational, but would aim toward a broad, general comprehension of radio and television, their uses, the skills they demand, their potentials.

Radio-Television Education in Our Society

Education has been defined as the process by which society preserves and transmits its intellectual and cultural heritage and expresses itself through teaching and learning.¹ For effective transmission, teachers should be skilled in the arts of communication. These teachers should possess an understanding and an appreciation of those devices, and a knowledge of their history and service to mankind. The printing press was such a device. Later the chalkboard and then the motion picture and numerous other tools came to the aid of the teacher. In the late twenties of this century, radio, and in the mid-forties, television, became available tools for the communication of the knowledge and culture of our civilization to present day society.

¹Arthur B. Moehlman, School Administration, (New York: Houghton Mifflin Company, 1951), p. 3.

By 1948, it had been established that radio was a dynamic, social force. Willey and Young, discussing the dynamic force of radio in elementary education, wrote that:

Radio can, and does, become a great index to public taste. The attempt to learn about public opinion via radio is no longer a gross error, an inexact effort at measurement but has been developed into a real science.²

By 1948, it had been established that television was a dynamic, social force, too.

Horizons have been greatly expanded: millions of people have seen the ballet, have travelled to distant lands, have explored some of the country's best museums; experiences they could never have in their own life times. Television has taken its viewers into the United Nations, into the meetings of Congressional investigating committees. It has led a mass audience into intimate, active participation in the political heart of the country in a way never dreamed possible. The range here is without bounds.³

Today, after only thirty-eight years, a very short span of time in terms of man's history, radio has reached a universality of use and acceptance that other technical tools took centuries to attain. One hundred and thirty-nine million radio sets keep our nation tuned to "today's news today."⁴ And now we have television. The National Broadcasting Company's Research Department estimated there were 44.5

²Ray D. Willey and Helen Young, Radio in Elementary Education, (Boston: D. C. Heath & Company, 1948), p. 218.

³William Y. Elliott (ed.), Television's Impact on American Culture, (East Lansing: Michigan State University, 1956), p. 181.

⁴"Radio's Dimensions Today," Sponsor, (June 21, 1958), p. 43.

million television sets in use at mid-year 1957.⁶ The potential viewing audience is one hundred and twenty million.⁷ Figures for June 1958, show that of the estimated 50.6 million homes in the United States, 48.7 millions have at least one radio set in operation⁸ and 42 million homes have at least one television set in operation.⁹

Reviewing the statistics concerning TV set saturation and audience potential, H. K. Neuburn says of this information:

Any activity which involves such a percentage of the child's time is worthy of considerable attention on the part of every educator.¹⁰

Results of research and experiments currently being carried on in almost 150 closed circuit installations¹⁰ and the nation's 32 educational television (ETV) stations¹¹ as well as numerous telecourses over

⁶Television Factbook No. 25 (1957), p. 25.

⁷H. K. Neuburn, "Television and the Future of Education," Educational Forum, XIII (May, 1958), p. 309.

⁸Spencer, loc. cit.

⁹Broadcasting-Telecasting (June 30, 1958), p. 39. Also for more detailed set information, see: The Advertising Research Foundation, National Survey of Radio and Television Sets Associated with U. S. Households, May, 1954. (New York: The Foundation, 1954).

¹⁰Neuburn, op. cit., p. 390.

¹¹Franklin P. Dunham, Ronald R. Lowdermilk and Gertrude Broderick, "Appendix G: Closed-circuit Educational Television in Schools, Colleges, Universities, and Defense Installations," Television in Education. Office of Education Bulletin, No. 21 (Washington: Government Printing Office, 1957), pp. 107-110. There are 111 installations listed here.

¹²CEI. Factbook, (May, 1958).

commercial stations indicate that as much learning takes place when instruction is by television as by classroom instruction.¹²

The impact of these media upon society in general has been such that it merits wide-ranged research and discussion, but the influence of these media upon the high school student is particularly pertinent to this study.

In 1946, Paul Lazarsfeld reported on a study made by the National Opinion Research Center.

According to the findings of this survey, 65% of the high school pupils questioned believed that they had gained general knowledge from radio listening, 35% said they had acquired practical information from the medium, and 28% indicated that they had gained enjoyment of cultural information from the radio.¹³

Radio and television are dynamic forces in our society; they play important roles in the life of today's high school student. People of high school age are now, and will continue to be, consumers of the radio and television product; they should understand the product. The consumer role encompasses all students. However, the growth of the industry has created another need, that of providing foundations for

¹²JOEY. Four Years of Progress in Educational Television. (Washington, D. C., 1956), pp. 82-83.

Paul Monroe (ed.) Encyclopedia Educational Research. (New York: Macmillan, 1950), pp. 958-959. This survey of research done on learning by radio instruction reports same findings.

Hideya Kusata. An Inventory of Instruction Television Research. A project of the Institute of Communications Research at the University of Illinois (Ann Arbor, Michigan: Educational Television and Radio Center, December 1, 1956).

¹³Paul Lazarsfeld, The People Look at Radio, (Chapel Hill: University of North Carolina Press, 1946), p. 122.

careers. The industry and its related fields have opened many new employment possibilities. Many of those who act as consumers will also be employed, directly or indirectly, in the business of broadcasting.

The development of the radio-television industry was rapid. The tremendous activity in electronics research and development, and the quick expansion of the electronics manufacturing industry has demanded trained personnel. Over 3000 A. M. and 500 P. M. radio stations and almost 500 television stations are now licensed by the F. C. C.¹⁴ Some of the commercial stations are beaming programs into the schools of their communities and many are presenting local students on a public relations basis. These figures indicate that there is much activity in broadcasting and this activity requires personnel.

Industry turned to education to help meet the need. In 1956, the United States Office of Education made this report concerning the needs of the industry.

The rapid increase in the production and use of radio, television and electronic equipment is one of the most amazing developments of our day. Expansion in the use of radio came first and it represents one of the very large industries of the country today. As the use of radio almost overshadowed the use of the piano and the phonograph in the 1920's, so today television threatens to overshadow the popularity of radio. The television industry alone has increased its production of TV sets from 7500 in 1946 to 6,500,000 sets in 1950 (Figures from Deshurst, Frederic J., and Associates, America's Needs and Resources, New York: The Twentieth Century Fund, 1955, p. 357). According to America's Needs and Resources, the development of electronics during the past decade

¹⁴Broadcasting-Telecasting, op. cit., p. 98. (3206 A. M. stations, 524 P. M. stations, and 415 T. V. stations in operation.)

is ushering in a new and revolutionary era of automation.¹ (same)
Many industries are now in the process of converting to electronic
controls to modernize their production.

Because of this enormous expansion in the entire field of elec-
tronics, it is important to recognize that this field should be
emphasized in whatever ways possible in school programs, whether
by courses or by extra class activities. Our economy will
require engineers, technicians, machine operators, assemblers,
and also communications specialists in the field of radio. The
benefits of radio and amateur radio communications as a worth-
while hobby should be also recognized. The United States has more
licensed amateur radio operators than all the rest of the world
put together.¹²

It is apparent to the most casual observer that radio and television
are dynamic forces in our society. Today's high school student, in his
present and future role as a consumer of the radio and television
product, should be made aware of the workings of the industry, its socio-
logical potential, and its responsibilities. In addition, many of these
students will one day be engaged in professional activities directly or
indirectly related to the radio and television industry. A few will be
employed by radio and television stations; others will be engaged in the
design and manufacture of equipment; others will find their work in
advertising agencies; some will be marketing new products; and still
others will be working in related media. A rudimentary, but compre-
hensive knowledge of the media can be especially helpful to all of these
young people.

¹²U. S. Office of Education. Extracurricular Activities in aviation,
photography, radio for secondary school pupils. Bulletin No. 11,
(Washington, D. C., Government Printing Office, 1956), p. 28.

An awareness of a need for formal training, both on the sociological and professional levels, was first felt by educators at institutions of higher learning. In addition to their recognition of broadcasting as a social force, colleges and universities answered the demand for trained professional workers. Eventually there was a demand for such training at the secondary level. Here also, educators felt the responsibility to do more than provide vocational training. Both university and public school administrators insisted that any study of these media should lead to an appreciation and understanding of their function in our society.

Assumptions

The need for maintaining such a course of instruction on the secondary level is based on three assumptions, two of which have to do with the sociological implications of the media. First, it is assumed that because broadcasting has such an impact upon our daily lives, there is a need for intelligent assimilation, and that intelligent assimilation can be the product of organized, directed study in which young people are trained to understand and manage this new tool of living. Secondly, it is assumed that broadcasting is now a vital part of our culture and that the story of how it came to be and what man is doing about controlling and directing it is part of every child's heritage. The third assumption has to do with the educator's responsibility to meet employment demands; because of the demands for trained personnel, educators must accept the responsibility to provide professional training for interested young people.

Educators have been challenged to incorporate a study of these media in their curricula which would enable our population to understand and appreciate them. Those responsible for planning and guiding our educational programs must accept this responsibility.

Need for the Study

The impact of radio and television upon society and industry was first recognized by colleges and universities. Eventually, administrators at the secondary levels of education felt the need to incorporate in their curricula a study of these media that will lead to understanding and appreciation.

High schools are now adding courses in broadcasting to their speech or English areas of study. Most of the text books in radio and television now available are geared to college use and are therefore not too acceptable for high school use. Most high school speech texts include a chapter on radio and/or television but this is inadequate for a semester's study. Teachers who are asked to teach these courses are usually in the speech, English, music, social studies, or audio-visual fields. Their specific training does not include sufficient background in radio-television to enable them to adapt the existing text materials.

Thus, there is a need for a text book, or a detailed course of study that will meet these requirements:

1. It should present sufficient material for at least a semester's study.

2. It should require a calibre of work that will challenge the student in the eleventh and twelfth grades of high school.
3. Its objectives should be within the broad range of the educational philosophy of the secondary school.
4. Methods and content within the course should meet the approval of the collegiate and professional broadcasters.

Purpose of the Study

The purpose of this study is to provide a description of a course in broadcasting offered to the upper levels of the secondary school and to present an evaluation of the course in terms of established patterns drawn from the histories of previous courses in broadcasting.

The course of study as presented here was offered in New Castle, Indiana Senior High School during the school year 1957-1958. This course was the result of a development based upon a process of selection, rejection, and addition applied to the materials of the historical study, to the materials and methods projected in available college textbooks, and experimentation in the classroom.

Since the study is primarily concerned with the presentation of a curricular offering in the area of broadcasting for eleventh and twelfth grade high school students who have had some speech training, it has seemed advisable to set this presentation in broad perspective by first examining the history of broadcasting in education and proceeding from there to a survey of secondary school broadcasting activities.

The development of the curriculum at both levels was contingent upon the development of stations owned and operated at both levels.

It has been pointed out above that there is a need for such a course. Four criteria which such a course should meet were listed. In addition to those criteria, the writer believes that such a course of study should also meet these conditions:

1. It should be flexible so that both large and small schools might find it useful,
2. It should be constructed so that it can be adapted to meet the needs of the schools
 - a) which do and do not present a prerequisite in speech,
 - b) which may have a maximum or a minimum of broadcast equipment and facilities,
3. Its content and objectives should be justifiable financially and academically,
4. It should provide students with experiences that:
 - a) Will maintain and further the development of their language skills,
 - b) Will continue to develop their powers of observation, reasoning, and problem-solving,
 - c) Will add to their awareness of our past culture,
 - d) Will provide them with a basis for understanding and evaluating a new tool of living in the present-day world.

Background and Procedure

In order to create such a course of study, it was necessary to determine the answers to these questions:

1. Was there a need for such a course?
2. What has been the history of the secondary school curricula in the areas of broadcasting?
3. What and how much have schools been offering in these areas?
4. What is the trend and basic philosophy of what has been offered?

As background for this study, the writer has examined the available literature and publications concerned with radio and television as subject matter at the secondary level. An examination was made of research materials on the impact of these media upon our society. The problems, failures, and successes of educational broadcasting as shown by past and current studies were investigated. A review was made of current trends in secondary educational philosophy.

The writer, who has been a teacher at the secondary level in various areas of speech, English, and psychology, was assigned the task of being one of two persons responsible for establishing the sixth ten-watt frequency-modulation radio station to be owned and operated by a city school system.¹⁰ Operating that station five years, and teaching radio courses for many years prior to the station's existence have

¹⁰WESH FM, City Schools, New Castle, Indiana, 91.1 megacycles.

provided perspective and techniques which the writer believes are practical.

In gathering and treating these materials for presentation, the writer has found it necessary to combine the historical and problem-solving methods.

Scope and Limitations

This study is a translation of personal experiences and investigation into a course of study in broadcasting for use at the high school level. The study has been limited to radio and television as a curricular offering with the emphasis upon radio.

Radio is less than forty years old and television is younger than that. Consequently, research has been limited to the last forty years.

No doubt there are some units on the study of broadcasting being taught in English, drama, speech, and social studies classes that were not discovered by this writer. The difficulty in such an investigation lies in the fact that the content of courses is not discernible from their titles. But an effort has been made to obtain as broad and thorough a picture of curricular work in broadcasting as the available literature would permit.

Definitions

Upper levels of secondary education—is used in this study to refer to the eleventh and twelfth grades of the twelve-year public school program.

Course of study—indicates a basic outline of related materials that includes objectives, procedures, and suggested activities for an eighteen-week or one-semester study, for which there will be some credit granted towards graduation. It is assumed that most high school classes meet daily and class periods usually run between forty-five and fifty-five minutes.

Educational radio and television—There is much confusion that surrounds the use of this title and also a similar one, "television and radio in education." It is recognized that there are several facets of so-called educational broadcasting. Therefore, in this study, the title, "radio or television in education," will refer to the inclusion of courses of study about radio and/or television in the curriculum which teach

1. Techniques,
2. Skills,
3. Arts,
4. An appreciation of the industry and/or clubs and workshops in the extra-curricular program.

"Educational broadcasting" or "educational radio and television" will suggest the use of the broadcast program for instructional and enrichment purposes in the classroom.

CHAPTER I

HISTORY OF DEVELOPMENT OF BROADCASTING IN HIGHER EDUCATION

Introduction

In order to set this investigation in broad perspective, the history of broadcasting in education is examined. Since this investigation is concerned with a course of study for the secondary level of education, it seems advisable to present the findings of this historical study in two parts: broadcasting activities in institutions of higher education and broadcasting in secondary education. Therefore, this chapter traces the history of the development of broadcasting in higher education, focusing on significant factors, trends, and influences upon the development of broadcasting in education, generally. It presents that history in two parts: the development of station operation and the development of a curricular interest in broadcasting.

The Rise and Decline of Educationally Owned Stations

The history of broadcasting shows an early recognition by educators of broadcasting's potential for education. The rapid rise of educationally owned and operated stations bore evidence of this interest. (Table 1.1)

Although the history of broadcasting is usually considered as beginning about 1921, there are evidences of successful broadcasting experiments before that time. DeForest is reported to have successfully broadcast in France as early as 1908, and in this country in 1916.¹ Music was successfully broadcast through the laboratory facilities of the University of Wisconsin in 1917.² However, a Westinghouse transmitter officially went on the air as KDKA on November 2, 1920,³ and thus became the first licensed broadcasting station. The first program by KDKA, a regularly licensed broadcast station, was the reading of the Harding-Cox election returns. On January 13, 1922, the University of Minnesota and the University of Wisconsin went on the air, thus becoming the first educational stations to operate.⁴ By 1925, the FCC had authorized 571 stations; 176 of these were owned by educational institutions (see Tables 1.1 and 1.2). By 1930, 612 stations were on the air; 197 of them were educationally owned. By 1935, the proportion was one to three; 231 of the 605 authorized stations were educationally owned (see Table 1.3). In other words, educational institutions were receiving about one-third of the licenses that were being issued.⁵

¹Sydney W. Head, Broadcasting in America, (Boston: Houghton Mifflin Company, 1956), p. 132.

²E. E. Frost, Jr., Education's Own Stations, (Chicago: University of Chicago Press, 1937), p. 134.

³Head, op. cit., p. 107.

⁴Carroll Atkinson, American Universities and Colleges That Have Held Broadcast Licenses, (Boston: The Reader Publishing Company, 1941), p. 17.

⁵It should be noted in Table 1.1 (column 2) that most of the licenses received by institutions of higher learning were not being held. See discussion later in this chapter.

Furthermore, institutions of higher education were receiving the majority of these licenses. By 1933, 202 broadcast licenses had been issued to educational institutions; of these 202, institutions of higher education held 124⁶ (see Table 1.1).

A factor that aided in this early development of radio stations owned by educational institutions was the enthusiasm and stimulation that came from various national organizations.

The 1923 Oakland-San Francisco convention of the National Education Association sponsored a series of informal speaking programs over a local station. In 1926, the N. E. A. sponsored a series of speeches locally in Washington, D. C. over WRU in cooperation with the National Broadcasting Company. The 1928 Boston convention of the Department of Superintendents of the N. E. A. sponsored its first nationwide hook-up.⁷

⁶Frost, loc. cit. For a detailed account of this early rush to get on the air, see:

Walter S. Monroe (ed.), Encyclopedia of Educational Research, (New York: Macmillan Company, 1950), pp. 953-955.

Elaine Ertou, "Developments in Educational Radio and Television," The School Board Journal, CXVIII (April, 1946), p. 53.

Carroll Atkinson, Development of Radio Education Policies in American Public Schools, (Edinboro, Penn., Edinboro Educational Press, 1939), pp. 1-34.

Carroll Atkinson, Universities Have Held License, op. cit.

S. E. Frost, Jr., op. cit.

William B. Levenson and Edward Stasheff, Teaching Through Radio and Television, (New York: Rinehart and Company, Inc., 1952), pp. 30-61.

Richard B. Hall, "The Story Behind ETV," The N.E.A. Journal, XVII (February, 1953), p. 6.

⁷Atkinson, Development of Radio Policies, op. cit., p. 29.

TABLE 1.1
EDUCATIONAL BROADCAST LICENSES BETWEEN 1921 AND 1936^a

Year	Number Received	Lost	Cumulative Total	Received by Higher Education ^b
1921	1	0	1	0
1922	73	7	67	60
1923	39	18	63	23
1924	38	24	102	17
1925	25	37	90	9
1926	10	8	92	3
1927	6	8	90	1
1928	4	23	71	2
1929	1	13	59	1
1930	0	9	50	0
1931	1	2	49	1
1932	0	4	45	0
1933	0	5	40	0
1934	2	1	41	0
1935	1	3	39	1
1936	1	2	38	0
Total	202	164	942	123 ^c

^aFrost, op. cit., pp. 3-5.

^bAtkinson, Universities Have Held Licenses, op. cit., p. 16.

^cThe above totals due to the fact that Alabama College and University of Alabama did not hold original license but assumed joint ownership of station licensed to Alabama Polytechnic Institute on February 25, 1929. It must be remembered that St. Norbert College owns and operates two radio stations." Ibid.

TABLE 1.2

BROADCAST FACILITIES: 1922 TO 1958^a

Year	AM		FM		TV	
	Authorized	On the Air	On the Air	Authorized	On the Air	Authorized
1922	382					
1923	573					
1924	530					
1925	571					
1926	528					
1927	682					
1928	677					
1929	618					
1930	612					
1931	608					
1932	606					
1933	610					
1934	591					
1935	605					
1936	632			21		
1937	676			20		
1938	747		37	19		
1939	748		10	23		
1940	847		22	25		
1941	897		67		8	
1942	925		60		5	
1943	912		41		4	
1944	924		47		6	
1945	955		53		6	
1946	1,215		58		6	
1947	1,795		238		12	
1948	2,034		587		30	
1949	2,179		737		69	
1950	2,303		691		104	
1951	2,385		649		107	
1952	2,420		629		103	
1953	2,584		580		198	
1954	2,697		553		402	
1955	2,840		540		458	
1956	3,020		530		496	
1957 ^b	3,164	3,000	513	552	477	638
1958	3,353	3,212	526	634	418	665
1959 ^c	3,447	3,289	543	709	441	668

^aBroadcasting-Telecasting, 51 (October 15, 1956), p. 130. All figures as of June 30, each, between 1922 and 1956, came from FCC sources. FM-TV were authorized to commence regular broadcasting in 1941. FM stations prior to that year were under experimental high-frequency authorizations, and TV stations under experimental visual broadcasting grants.

^bBroadcasting-Telecasting, 53 (July 8, 1957), p. 87; 1958 figures from 55 (July 28, 1958), p. 112. Figures are for June 30, each year.

^cBroadcasting, 56 (March 16, 1959), p. 163.

TABLE 1.3

COMPARISON OF TOTAL AM STATION AUTHORIZATION AND
EDUCATIONALLY ORIENTED STATIONS

Year	Total	Educational
1925	571	176
1930	612	197
1935	635	201
1936 ^a	632	202 ^b

^aFrost's study ended with 1936 figures.

^bOf this 202, 164 had ceased to hold their licenses by 1936. See Tables 1.1 and 1.2. It is interesting to note, also, that figures for 1957 show 552 FM stations authorized (Table 1.2) and that 148 were non-commercial stations (Table 1.6).

In 1926, a group of educators met in a national radio conference which was called by Secretary of Commerce Herbert Hoover. At this meeting they formed the Association of College and University Broadcasters, which in 1934 became the National Association of Educational Broadcasters, or the NAEB.⁸ This is the oldest organization in the field of educational broadcasting; it has been instrumental in the formation of similar agencies, such as the JET and the ETEC.⁹ The NAEB was one of the first fund raisers for the JET and was responsible for the idea of a "network center," such as the ETEC was to become when it was suggested to the FAE.¹⁰

In 1930, the National Advisory Council on Radio was organized to stimulate an interest in the medium. With other similar organizations, it cooperated in much of the early research into radio in education.¹¹

Apparently the first organized effort at radio education was developed through the leadership of Ray Lyman Wilbur, then Secretary of the Department of the Interior. The work he began in 1929 led to the organization of the National Committee on Education by Radio in 1930.¹²

⁸Hall, "The History of ETV," op. cit., p. 5.

⁹Harry J. Skornia, "Services of the NAEB," The NAEB Journal, XVII (February, 1958), p. 7.

¹⁰Ibid.

¹¹Levenson and Stasheff, op. cit., pp. 40, 270.

¹²Roy DeVerl Willey and Helen Ann Young, Radio in Elementary Education, (Boston: D. C. Heath and Company, 1948), p. 386. For a more complete report on this organization, see Frank Earnest Hill, Tune in for Education: Eleven Years of Education by Radio. (National Committee on Education by Radio, 1942). Also see Atkinson, Development of Radio Policies, op. cit.

A colorful phase of radio education history has been the struggle of educators against domination of the field by commercial interests . . . The National Committee on Education by Radio, financed by the Payne Fund, . . . announced its purpose . . . in 1911 . . . [was] " . . . to secure to the people of the United States the use of radio for educational purposes. . . ."¹²

This Committee challenged the old Federal Radio Commission. It introduced bills into the Senate and published articles demanding the rights of the educational broadcaster to broadcast. Believing that its work was done, the Committee dissolved itself in 1911. Willey and Young summarized the work as follows: "This Committee was extremely active and it achieved its purpose of protecting the right of the educational broadcaster."¹⁴

When the Federal Radio Commission became the new Federal Communications Commission (by the Act of 1934) and had power to act, much of the bitterness of the struggle between industry and education disappeared. The FCC formed the Federal Radio Education Commission; Commissioner John W. Studebaker became chairman. The purpose of this committee was to join industry and education together, to eliminate controversies and misunderstandings, and to unify their aims and methods.¹⁵

These were the national groups that maintained an interest in and supported the movement of educational radio in those early days. They fought to preserve the broadcaster's rights to broadcast and tried to encourage institutions of higher learning to enter into broadcasting.

¹²Atkinson, Development of Radio Policies, op. cit., pp. 5-6.

¹⁴Willey and Young, loc. cit.

¹⁵Ibid., pp. 387-388. Atkinson, Development of Radio Policies, op. cit., pp. 5-8.

Some of these same groups and others with a similar purpose were to be active in the late forties when frequency modulation and television were to become realities.

Radio was a novelty in the beginning. The American people, like the educators, were intrigued with this new electronic mass medium of communication. In the early days of radio, people were not concerned with what they heard; they were more interested in discovering how far away a station was located; they dialed around the band to discover how many different stations they might "pull in" on their sets. Between 1922 and 1926, radio sets were sold by the millions.¹⁶

In spite of all this general public interest in radio, in spite of the eagerness of educators to get on the air, and in spite of all the support and encouragement from various civic groups, institutions began to permit their licenses to expire (see Table 1.1). This initial rush to get on the air was followed by a sharp decline in the number of educational stations. By 1932, the trend was obvious; by 1937, 164 stations had ceased to operate; and by 1945, only twenty-six stations were on the air.¹⁷

¹⁶Hull, log. cit. Willey and Young, op. cit., p. 380.

Radio sets are still sold by the millions. By the end of 1956, it was estimated that there were 53.2 million radio homes in the United States, there were 37.5 million radios in automobiles, making a total of 113.5 million radios in use in the United States. Figures from 1957 Broadcasting-Telecasting Market Book Issue, p. 30. (See Table 1.4.) Today, it is estimated that there are 156 million radio sets in use, about twice as many as ten years ago. (See Table 1.4.)

¹⁷Monroe, log. cit. Ertou, log. cit. Hull, log. cit.

TABLE 1.4
RADIO SETS IN USE^a

Year	Radio Homes	Radios in Autos	Total Radios
1931	14,000,000	100,000	15,000,000
1941	29,700,000	8,750,000	56,000,000
1951	48,750,000	20,000,000	107,250,000
1956	53,200,000	37,500,000	143,500,000
1957 ^b			
1958 ^c			156,000,000

^a~~Broadcasting-Telecasting Yearbook-Market Book~~, 1957, p. 30. Figures for end of December, 1956. Year 1931 was first year reported.

^bUsing A. C. Neilson figures as of March 1957, "The Real Radio Story," Television Age, V (August 12, 1957), p. 29, indicates 47.7 million potential radio homes, but only 66% or 31 million are reached; whereas there are 39.3 million potential television homes and 90% or 36 million reached.

^c"They're Taking a New Look at Radio," Sponsor, XII (June 21, 1958), p. 32, indicates "radio listening is up about eight percent on a weekly case basis, and there is a slight decrease in total hours tuned in." In other words, more people are listening to radio but listening is being done over shorter periods of time. "... today, there are 156 million radio receivers in use, which is a little over twice as many as ten years ago."

Frost reports in detail this decline in the number of stations (See Table 1.5).

On January 1, 1937, only thirty-eight [licenses] were held by educational institutions, . . . It is significant to note that of the 164 broadcast licenses lost by educational institutions, 50, or 30.5 percent, were held by their respective institutions for a period of less than one year; 85, or 51.8 percent, less than two years; 109, or 66.46 percent, less than three years; and only 55, or 33.54 percent, three years or more.¹²

. . . from the 1920's to the present the story of educational involvement in broadcasting has been the record of a devoted and often confused pursuit by many people with many methods (and sometimes no methods at all) of educational goals in radio. . . .¹³

It is evident that there was a sharp decline in the number of institutions owning radio stations and that those which gave up their licenses operated for only brief periods of time; about two-thirds operated less than three years (Table 1.5).

Reasons for this sharp decline in the number of educational radio stations are cited by several investigators, who apparently agreed as to the causes for lack of success. There is an obvious similarity in their reports. The lack of funds, of broadcasting skills, of adequate facilities, of receiving equipment, of skill in classroom utilization and evaluation are most often listed as causes of failure. Some studies also indicate that the competition offered by the commercially owned stations and the influence of federal regulation, which tended to favor the commercial stations by strengthening them, was too great.¹⁴

¹²Frost, *op. cit.*, pp. 3-5.

¹³Hull, *op. cit.*, p. 6.

¹⁴Warner, *loc. cit.*

TABLE 1.5
LENGTH OF TIME EDUCATIONAL INSTITUTIONS HELD THEIR
BROADCAST LICENSES BETWEEN 1922 AND 1937^a

Years Held	Number	Total Lost	Percentage of Those Lost, 164
Less than one	50	50	30.5
1 - 2	35	85	51.8
2 - 3	24	109	66.46
3 - 4	16		
4 - 5	13		
5 - 6	6		
6 - 7	5		
7 - 8	7		
8 - 9	2		
9 - 10	7		
10 - 11	2		
11 - 12	6		
12 - 13	4		
13 - 14	5		
14 - 15	20	55 ^b	33.54
	202	164	100.00

^aFrost, op. cit., pp. 4-5.

^bThere were 38 stations in operation in 1937; 164 had ceased operations. The percentages reflect how long those stations which ceased operations remained on the air. No figures are available for determining how long each of the 38 stations on the air in 1937 had been operating.

Educators seemed to put the responsibility on their commercial competitors for their failures in broadcasting. There was some bitterness on the part of educators, but apparently only in isolated instances. But it must not be inferred that all commercial broadcasters were uncooperative with the educational broadcasting movement. Atkinson, one of the earliest to make a thorough investigation into the history of educational broadcasting, refers to his correspondence relative to this problem of competition. "There are numerous confidential complaints that educational radio policies have been stymied"; he calls it a "bitter word-battle."²¹ Apparently Atkinson was impressed with the positive rather than with the negative aspects of the relationship between the commercial and educational broadcaster.

Yet the bitterness of educators in the past has been levied entirely against the commercial broadcasting interests who have been in most instances generous with their free time and cooperation, . . .²²

Hall also implied that he believed the educators guilty of this kind of attitude in his report of the history behind ETV; ". . . educators . . . tended to blame American commercial broadcasters for their plight."²³

Atkinson apparently felt impelled to defend the commercial broadcasters.

Commercial interests, as a whole, have lined up as strongly as possible with reputable educational interests, not only for the

²¹Atkinson, Development of Radio Policies, op. cit., p. 8.

²²Ibid.

²³Hall, op. cit., pp. 6, 27.

sake of being able to make an accurate and imposing-looking report of their services to the community but also because educators are improving the radio broadcasts they prepare and present and thus are helpful in many instances to build up rather than tear down the station's listening audience. There are isolated instances, of course, where this cooperation has been lacking. . . . Commercial stations have borrowed freely from ideas and techniques developed by educators; school people have returned the compliment by imitating successful commercial program ideas. Both groups today have been getting together upon frequent occasions for the purpose of mutual self-improvement by exchanges of ideas.²⁴

Looking back now, it seems that educators were guilty of more than just blaming commercial radio for their plight. They were sometimes guilty of not being educators in the sense that they failed to evaluate this new tool in education; they failed to recognize the fact that if a new tool is to produce worth-while results, skill in its use and understanding of its function must be obtained first. As C. M. Jansky, a Washington consulting engineer told a group of educators:

"Early educational stations were developed primarily by engineers . . . education as a whole paid little attention to what was going on . . . The pioneer was the engineer, and not the specialist in education or the educational administrator . . . The prime reason for the loss of ground by educational stations is due to the fact . . . our leading educators . . . never looked upon . . . their stations as major activities."²⁵

Writing "American Radio," which was to be a part of the University of Chicago Freedom of the Press Report, Llewellyn White ignored the fact that most of these stations were really experiments in physics or electrical engineering laboratories; he described this "virtual

²⁴Atkinson, Development of Radio Policies, op. cit., pp. 11-12.

²⁵Hall, op. cit., p. 27.

declination of education's dream of mass education by radio" as "the light that failed."²⁶

In a discussion of the impact of the broadcast media upon society William Elliott summarizes the factors involved in this decline of educational radio stations.

The mortality rate of educational stations reached its peak long before the Federal Communications Commission was formed in 1934. The reasons for their demise fall into three categories: natural, environmental, and governmental. The greater portion of drop-outs can be accounted for by the weaknesses which seem inherent in educational stations: financial difficulty and faculty indifference. Other stations were driven off the air by the increased competition of commercial operators. Erratic hours of broadcast and amateurish programming lost the stations' audience to the commercial professional. In retrospect, much of the attrition was inevitable though regrettable. Universities jumped into radio before they appreciated the burdens that broadcasting entails. When they realized the measure of the onerous responsibility they had assumed, they extricated themselves as best they could.²⁷

Although Dorothy Klock was writing for the reader-audience of secondary principals, her point concerning education's use of radio is applicable here:

²⁶Hull, op. cit., p. 6. Many of the early stations did have their initial impetus in the physics and electrical engineering areas. Some examples are WCAL (St. Olaf College), WMAA (Purdue University), and WEAR (Michigan State University). Interest in those areas is dated as early as 1917. These stations received their licenses to operate in 1922. For further details see the Journal of the AEE, series of articles, "Educational Radio Stations," in the October, 1949 and February and March, 1950 issues, volume IX. For complete report on each station's early history and their difficulties, see Carroll Atkinson, American Universities and Colleges that Have Held Broadcast License, op. cit. Also see Frost's Education's Om Stations, op. cit.

²⁷William Y. Elliott (ed), Television's Impact on American Culture, (East Lansing: Michigan State University Press, 1956) p. 66.

Experience has demonstrated in so many fields, no new tool in the hands of man can be of benefit to him unless he has learned through education what the purposes, the uses, and the dangers of that tool are.²⁰

Without a complete understanding of the purposes and proper educational uses of radio, educators tried to utilize its product. Naturally, inexperience in handling the tool produced frustration, disappointment, and even failure in some cases. Inexperience and lack of specific skills, equipment, and know-how were major factors in the decline of the number of educationally owned radio stations. Charles Siepman, author and critic, stated it succinctly when he wrote that educational broadcasting was "at best a struggle against almost hopeless odds; at worst a story of sheer professional incompetence."²¹

A New Era in Broadcasting

The period between 1921 and 1938 may be considered as the first period in the history of broadcasting in education. Atkinson calls it a "trial and error period."²²

In 1938 all this activity of struggling stations and organizational pressures of various kinds seemed to come into focus. The FCC announced that five channels in the ultra-high-frequency band had been allocated for assignments to noncommercial broadcast stations.²³

²⁰Lorothy Klock, "Teaching Speech and Civic Responsibility in School System Radio Stations," Bulletin of National Association of Secondary School Principals, XXVII (January, 1953), p. 56.

²¹Hall, loc. cit.

²²Atkinson, Development of Radio Policies, op. cit., p. 96.

²³Levenson and Stanheff, op. cit., p. 52.

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²¹Hall, loc. cit.

²²Atkinson, Development of Radio Policies, op. cit., p. 96.

²³Levenson and Stanheff, op. cit., p. 52.

This FCC announcement apparently produced no great flurry of enthusiasm or activity. Conditions were more or less static. A few stations relinquished their licenses,²² but there was no significant trend either upward or downward. However, it should be remembered that the United States was involved in a world-wide war during the greater part of the 1940's and that the nation, as a whole, was directing all its attention and energies into the war effort.

By the end of the war, frequency-modulation broadcasting (FM) had emerged and the FCC had already (1945) reserved twenty channels for non-commercial use;²³ a new period of broadcasting history had been entered.

Enthusiasm was renewed and an upward trend was soon noted in both commercial and noncommercial broadcasting.

There were only fifty-five authorized commercial FM broadcasting stations in 1946; just one year later, their number had jumped to 238. This tremendous spurt was followed in the commercial field by an upward climb until the year 1952. In 1952, there were twenty fewer stations than the year just prior; this was the first time that commercial FM failed to increase its number of stations. Each year since, there has been a very slight decline, (see Table 1.2). Some who study the economics of the situation predict that commercial FM will level off and maintain a stable condition at its present figure.²⁴

²²In 1937, only thirty-eight licenses were held by educational institutions. See Frost, *op. cit.*, pp. 3-5. By 1945, only twenty-six stations were operating. See Moore, *loc. cit.*; Hall, *loc. cit.*

²³Levenson and Stasheff, *op. cit.*, p. 54.

²⁴"An FM-TV Operations," *Broadcasting-Telecasting*, 51 (October 15, 1956), p. 130, and *Broadcasting*, 56 (March 15, 1959), p. 163.

While commercial FM was having its spurt of development, educational or noncommercial FM was doing likewise. It maintained a steady, though slow, increase each year. By 1950, the FCC had authorized eighty-two noncommercial FM stations. By 1954, 123 institutions held FM licenses; 117 were actually operating. By 1957, educational stations represented twenty-one percent of the total FCC authorizations.²⁵ It is obvious then that this development was steady from the beginning in 1946 (Table 1.6).

During the fifteen years between 1922 and 1937, educational institutions received 202 licenses and lost 164; during the eleven years between 1946 and 1957 educational institutions received 148 FM licenses and 135 were in operation in 1957. This shows a loss of only thirteen. Thus it would appear that the FM development is healthier and more stable than the earlier AM development.

It should be pointed out that these figures do not include those institutions that from the beginning maintained their AM operation or chose AM operation in recent years. There are today, thirty-seven such licenses in operation.

One factor in this FM development should be noted. In 1948, the FCC authorized the use of a low-power transmitter. Syracuse University had successfully demonstrated the feasibility of a ten-watt transmitter for a period of two and one-half years. The development of the ten-watt transmitter made it possible for the small city school system and small

²⁵Figures taken from FCC's Annual Report for each year. The 1957 report calls special attention to the twenty-one percent ratio of non-commercial stations and commercial stations.

colleges and universities to enter into broadcast activities. It was economical and did not require the high standards of engineering skill of the more powerful stations. But it was hoped that these smaller operations would slowly graduate into more powerful stations.²⁸

The low-power stations increased very rapidly (Table 1.6). In 1951, thirty-nine of the ninety-five noncommercial stations were ten-watt operations. Two years later, there were ten more; five additional ten-watt authorizations were granted the following year.

It is interesting to note that in 1953, the University of Honolulu acquired one of these ten-watt licenses, and still maintains that operation today. Also, in 1956, both Wisconsin and Alabama established their educational FM regional networks.

Figures from the Office of Education, November 1957, indicate there were 153 FM stations and thirty-seven AM stations operated by educational institutions (see Tables 1.6 and 1.7).²⁹

In the meantime, while the FM movement was taking hold, educational television was developing as another phase of educational broadcasting (Table 1.7).

²⁸FCC Annual Report, (Washington, D. C., 1947), pp. 40-41.

²⁹Office of Education, "List of Educational AM and FM Radio and Television Stations," (mimeographed) November 1957. Ten of the thirty-seven AM stations sold time; three of the FM stations sold time; three AM stations shared time with a commercial outlet. The difference in figures between the Office of Education and the FCC may be due to the difference in time at which the figures were taken and the fact that a number of stations were not strictly noncommercial licenses and were not operating in the band reserved for education's use. The NABE Directory of Members also gave useful information.

TABLE 1.6

NONCOMMERCIAL FM STATION DEVELOPMENT FROM 1946 TO 1957^a

Year	Authorized	On the Air ^b	Ten-Watts
1946	24	6	
1947	38 ^c	8	
1948	46	22	
1949	58 ^d		
1950	82		
1951	95		39
1952	104		42
1953	116		49
1954	123	117	54
1955	127 ^e	124	
1956	136	126	
1957	148	135	

^aFigures taken from FCC Annual Report for each year. Noncommercial FM allocations were authorized in 1946.

^bThe FCC Annual Report, which serves as the source for these figures, omits "on the air" data for years 1949 through 1953.

^cIn 1947 there was a tremendous spurt in the FM development. Total authorizations by FCC on July 1, 1946 were 55. The number jumped to 238, July 1, 1947. These are the figures for commercial stations.

^dJuly 17, 1948 the FCC authorized a low-power (ten-watt) license after Syracuse University had successfully demonstrated for two and one-half years the operation of a ten-watt transmitter. (FCC 1947 Annual Report, pp. 40-41). The report says that much of the noncommercial activity in 1947 centered around the establishment of ten-watt stations, but gives no figures.

^eThe FCC Annual Report for 1955 reported 127 noncommercial authorizations for this year; but the 1956 Report in comparing 1955 and 1956 figures, indicates there were 129 authorizations in 1955. The above figure is used in the table since that is the figure used by FCC in its official report.

TABLE 1.7

SUMMARY OF COMMERCIAL AND NONCOMMERCIAL TV STATION DEVELOPMENT^a

Year	Authorized		On the Air	
	Commercial	Noncommercial	Commercial	Noncommercial
1946	40		6	
1947	66		11	
1948	109		29	
1949	117		69	
1950	109		104	
1951	109		107	
1952	108		108	
1953	483	17	198	1
1954	573	30	402	6
1955	582	34	458	11
1956 ^b	607		496	22
1957	638		477	23
1958	665		418	32
1959 ^c	668		441	40

^aFigures for years 1946-1955 inclusive, taken from Richard Chapin, Mass Communications (East Lansing, Michigan: Michigan State University Press, 1957), p. 84. It should be noted that his figures for TV stations on the air for the years 1947 and 1948 vary one point from those listed by the FCC as shown in Table 1.2.

^bFigures for the remaining years from Broadcasting-Telecasting: 51 (July 21, 1956), p. 107; 53 (July 8, 1957), p. 87; 55 (July 28, 1958), p. 112.

^cBroadcasting: 56 (March 16, 1959), p. 163.

The ETV movement began with the emergence of television at the end of World War II, but the first station was not licensed for operation until 1953. One went on the air that year. In 1958, five years later, thirty-two ETV stations were on the air³⁸ plus five stations operated noncommercially by educational institutions.³⁹ Two states, Alabama and Oklahoma, had established regional networks (Tables 1.6 and 1.7). By March, 1959, forty such stations were broadcasting on a regular schedule.⁴⁰

This is educational broadcasting and telecasting; all these stations are owned by universities and colleges, libraries and museums, municipal corporations, public school systems and state boards of instruction, and religious groups. The great majority of them operate noncommercially (Tables 1.8 and 1.9).

Looking at this history in retrospect, Lervenson and Stasheff, and Hall seem to agree that it was at this point in history that the educational radio movement began "to develop a synthesis of purpose" and to bring into focus a working philosophy.

Two factors that seem to be significant in this move towards a working philosophy and the establishment of some policies and definite goals were the emergence of television and a meeting of educational broadcasters that occurred in 1949.

³⁸JCF Partners, (May, 1958). Broadcasting-Telecasting.

³⁹Office of Education, List of A-F-E Radio and TV Educational Stations, 1957, pp. xii.

⁴⁰Broadcastings 56 (March 16, 1959), p. 163.

TABLE 1.8

FM-AM EDUCATIONAL STATION OWNERSHIP BY TYPES OF INSTITUTIONS^a

Type of Institutions	FM and AM	FM	AM
Universities		58	13
Colleges		30	13
Municipal Corporations		3	0
Private Schools and Institutes		3	3
Boards of Education, School Districts		41	1
High Schools		3	0
Junior Colleges		3	0
County School Boards		1	0
Libraries		2	0
State Board of Higher Education		1	0
State of Wisconsin		8	2
Total	190	153 ^b	37

^aFigures taken from the Office of Education Directory of AM-FM-TV Stations, November, 1957.

^bThis figure does not agree with the FCC 1957 Annual Report. The difference is due to the difference in time at which the reports were made.

TABLE 1.9

EDUCATIONAL TELEVISION STATION OWNERSHIP BY TYPES OF INSTITUTIONS^a

Station	Number
Owned by Municipal Corporations or Foundations	
KQED (9) San Francisco	10
WTTW (11) Chicago	
WYES (8) New Orleans	
WGBH (2) Boston	
WTVS (56) Detroit	
KTCA (2) Minneapolis-St. Paul	
KETC (9) St. Louis	
WHYY (35) Philadelphia	
WQED (13) Pittsburgh	
WKNO (10) Memphis	
Owned by Boards of Education (also see KNBE)	
KRMA (6) Denver Public Schools	5
WETV (30) Atlanta Public Schools	
WCET (48) Cincinnati (City and County Schools)	
WTBS (2) Miami, Dade County Schools	
WVVS (10) Milwaukee Vocational and Adult Schools	
Owned by Universities	
WILL (12) University of Illinois	10
WEAR ^b (60) Michigan State University	
KUCN (12) University of Nebraska	
WUNC (4) University of North Carolina	
WOSU (34) Ohio State University	
KUHT (8) University of Houston	
KCTS (9) University of Washington	
WIA (21) University of Wisconsin	
KNBE ^c (5) University of New Mexico and Board of Education, Albuquerque	
KUED (7) University of Utah	
Owned by State Departments of Instruction	
KLSE (13) Monroe, La.	3
WIPR (6) San Juan, Puerto Rico	
KOAC ^d (7) Corvallis, Ore.	
Owned by States or State Legislatures	
WAIQ (2) Andalusia	4
WTIQ (7) Sanford	
WBIQ (10) Birmingham	
KETA ^e (13) Oklahoma City	
Totals (35 VHF and 7 UHF)	
Alabama network ^f	

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^aInformation taken from FCC Annual Reports; U. S. Office of Education's Directory, November 1957; JERT's 1958 Educational Television Directory; and Broadcasting-Telecasting.

^bWEAR-TV (Michigan State University), Channel 60, operated on a non-reserved channel until July 1, 1958. During suspension of operations, the Michigan State University Television Development waited for complete confirmation to operate Channel 10. On March 15, 1959, it resumed operations as WWSB, Channel 10, on a shared-time basis with WILX-TV, a commercial station owned by the Television Corporation of Michigan. This is the only operation of its kind.

^cNote that KNBE is jointly owned by the University of New Mexico and the Albuquerque Board of Education. It was listed under the universities because the university was listed first in the list of owners.

^dKOAC is owned by State Board of Higher Education.

^eKETA is owned by the Oklahoma Educational Television authority, a statutory corporation established by the state legislature, which holds the construction permit for KOED-TV, Tulsa. Oklahoma plans a state-wide network for the future.

^fStations licensed to educational institutions, operating commercially are:

WHEU (16) Notre Dame University
 WOI (5) Iowa State College of Agriculture and Mechanic Arts
 NWL (4) Loyola University
 KOSU (8) University of Missouri
 WDAY (2) St. Norbert College, Green Bay, Wis.

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In 1949, Dean Wilbur Schram, formerly of the Communications and Journalism School, University of Illinois, called a meeting of educational broadcasters from the United States, Canada, and Great Britain. This meeting was sponsored by the Rockefeller Foundation and the University of Illinois. This initial meeting and subsequent meetings had three pertinent results for the life of educational broadcasting. First, this group eventually became a key group in the fight for educational television channels and the ETV movement. Second, this group fostered the development of plans for a nation-wide educational radio broadcasting network. Third, it was responsible for the projection of a similar network idea for television which would become the Educational Television and Radio Center.⁴¹

Presently serving these radio and television stations are two "network" organizations, the NAEB and the ETEC.

The NAEB operates a type of network service for its 130 institutional members. It is a simulated network service in that its programs are offered by tape and not simultaneously at the time of production. This network offers to its member stations between 100 and 150 programs per quarter; these programs cover a wide variety in content: music, drama, information, education, and programs for in-school use. The NAEB also maintains arrangements, on an exchange basis, with several foreign broadcasting services, such as the BBC, Radio-Diffusion, and Radio Italia. It also provides a wide range of services for its station members and its

⁴¹Mill, op. cit., p. 28.

individual members, including workshops and seminars, scholarships for research, information about current research and production techniques, consultant services, and a placement bureau. The NARS maintains its headquarters at the University of Illinois.

Serving the educational television stations in a somewhat similar fashion is the ETNC (Educational Television and Radio Center), a non-profit educational corporation which maintains its offices in Ann Arbor, Michigan, and New York City. The ETNC is dedicated to the "concept of educational television on a national basis."⁴²

The Center provides a number of services for its affiliated institutional members. It supplies television programs on film, kinescope recording, and live productions in cooperation with NBC. It also provides for research grants and causes research to be done. Closely tied in with its program development activities is the continuing plan to improve technical standards among the educational stations themselves. It disseminates printed materials relevant to ETV, such as reprints of magazine articles, original research reports, and instructional materials.

The Center . . . (is) a small organization of . . . program advisors, most of them young and borrowed from university staffs, quartered in an unpretentious building on the outskirts of . . . (Ann Arbor). Through its exchange system, the Center provides seven hours of weekly programming to all ETV stations on its circuit--less than a quarter of most they need. But almost all of this material is produced originally at the local stations themselves, and a sampling of a typical week's fare . . . (is remarkable) not by its uniformity but its wide variety.⁴³

⁴²"Presenting National Educational Television," (Pamphlet published by Joint Council of Educational Television, Ann Arbor, Michigan).

⁴³William Harlan Hale, "A Legacy from the Model T to the Age of ETV," XVI, The Reporter, (May 30, 1957), p. 14.

Summary

In summary, broadcasting became a program service around 1920; it was in that year that Westinghouse transmitter, KDKA, broadcast the Harding-Cox election returns. However, there are evidences of successful broadcasting activity as early as 1908.

It seems that educators recognized that broadcasting might have some usefulness for education. Almost immediately there began a movement among educational institutions to acquire radio stations. The universities of Wisconsin and Minnesota share the honor of being the first educational stations; both stations went on the air on January 13, 1922.

These two stations spearheaded a movement which developed rapidly. By 1935, the FCC had authorized a total of 612 radio stations; 197 licenses were held by educational institutions. By 1937, education had 202 licenses; 124 were held by institutions of higher education. It may be assumed that institutions of higher education lead the educational broadcasting movement and that they operated the majority of those early stations.

A number of national agencies were instrumental in this broadcasting movement. They made their influence felt by their own broadcasting activities, by their pressures on the federal government to protect the educational interests, or by their direct encouragement given to institutions to enter into broadcasting. For example, the National Education Association participated in several radio broadcasts; some were nationwide hook-ups. The forerunner of the present National Association of

Educational Broadcasters was organized in 1926; the National Advisory Council on Radio and the National Committee on Education by Radio were both established during the 1920's.

But in spite of all this support, the educational broadcasting movement began to fail. By 1937, 164 of the 202 licensed institutions had ceased to operate.

So it may be said that educators rushed to get on the air; their numbers rose rapidly; they maintained about a one-to-three ratio with commercial broadcasters. But their decline was almost as rapid. By 1937, just fifteen years after the first educational license was issued, over eighty percent had suspended operations.

Looking at these figures another way, this sharp decline in station operation reveals that the length of time any one station existed was very brief. Over two-thirds of the institutions which had licenses operated for less than three years.

Investigators agree as to some of the causes of this failure by educational institutions to continue to broadcast successfully. Many of the causes were inherent within education; some were the direct responsibility of the educators themselves. The major factors, then, that led to failure were the lack of funds and facilities and lack of skill in broadcasting; some studies indicate that commercial competition was also a factor. However, evidence seems to support the belief that when educational broadcasters prepared quality programs for their own stations or for commercial stations, audiences were built and maintained and then

there was adequate cooperation given by commercial broadcasters.

Looking back now, it must be admitted that educators approached the task of broadcasting with insufficient knowledge, with no basic philosophy, and they failed to consider broadcasting the major activity which their early rush to get on the air indicated they believed it to be.

By the end of the thirties, after a flourishing, enthusiastic beginning, a sudden decline in broadcasting activity resulted in a rather commonly accepted belief that educational broadcasting was a failure.

During the forties, the educational radio movement remained quiet. Few stations were added; those that survived the troublesome thirties managed to stay on the air. Only twenty-six were in operation in 1945.

At the end of World War II, two factors gave new life to the educational movement. They were the emergence of F-I broadcasting and television.

Apparently the work done by those early stations and committees accomplished some good. In 1945, with the emergence of F-I, the FCC reserved channels for education's use. This meant that assignments were possible, that institutions did not need to worry about being usurped. There was tremendous enthusiasm and an upward climb in the number of stations.

Since 1946, the FCC has authorized 148 noncommercial stations. Seventy-six of these are operated by universities and colleges.

One factor that has aided in this steady growth is the ten-watt transmitter which the FCC has authorized. This meant that the small

city school systems and the small colleges and universities could broadcast. The more powerful transmitter licenses entailed too much expense and engineering know-how. This new rule on the low-power license brought about another spurt of development.

Today, noncommercial FM operations represent about twenty-one percent of the total FM operations.

Almost parallel with the FM movement was the ETV movement. Its beginning was marked by difficulties. A series of meetings of educational broadcasters in 1949 under the sponsorship of the Rockefeller Foundation and the University of Illinois resulted in three ideas pertinent to educational broadcasting. This group became the key group in the fight for reserved channels for education's use. They fostered the idea of a nationwide network of program service and they developed the idea of the ETE.

Today, educational radio and television stations have two organizations which service them: the National Association of Educational Broadcasters and the Educational Television and Radio Center. Both provide a wide range of services to their affiliated institutional members, such as program services, research aids and information, and technical assistance.

In April, 1952, the FCC reserved 242 TV channels (twelve percent of the total) for noncommercial use. Since then additional assignments have been reserved, making a total of 256 in January 1953. Forty ETV stations are now (March 1959) on the air; and as many communities in as

many states are investigating the possibilities of educational television. In addition, almost 150 closed-circuit television installations are in operation.

So it may be said that the early period of educational broadcasting was not a complete failure. That period was a trial-and-error period which provided experience which is bearing fruit in the fifties.

The Development of a Curricular Interest in Broadcasting by Institutions of Higher Education

During the first wave of enthusiasm for broadcasting and the accompanying activity by educators, which resulted in much confusion and a considerable amount of failure, these educators learned an important lesson. They discovered that a working knowledge of a new tool and an understanding of its potential were necessary before the tool could be fully utilized. So courses of instructions began to appear in college catalogs. Head analyzes the situation as follows:

Education by broadcasting has received a great deal more attention than education for broadcasting. The relative emphasis is natural. Educators at first thought of using broadcasting as another device for furthering existing educational aims. Moreover, until the broadcasting industry took shape and became established there was nothing definable to educate for in broadcasting.

.....
It is instructive to compare the academic history of journalism with that of broadcasting, since journalism is the academic field most analogous to the emergent field of broadcasting. . . . The first journalism courses were practical inductions into the mysteries of the trade—typography, reporting, editing, and so on. Then came courses with more intellectual content—the history, economics, and ethics of the field. Next came research and evaluation.⁴⁴

⁴⁴Sydney W. Head, Broadcasting in America, (Boston: Houghton Mifflin Company, 1956), p. 412.

As early as April, 1933, the New York Times reported that colleges and universities were then offering sixteen or more courses "in broadcasting speech and microphone technique"; and "more than fifty other institutions of higher learning which do not offer formal courses in this field" had reported that they "provide some instruction in broadcasting in connection with other courses or to voluntary groups in the university."⁴³ In this same survey, Hillson reported that the catalog description of these early courses "includes everything." At this early date, he pointed out the potential and the necessity for detailed study of dramatic art and microphone techniques, and cited the need for specialized instruction.⁴⁴

At first, courses in radio performance and production appeared in catalogs as offerings of journalism, English, and music departments; a few schools established separate departments of radio. However, by 1938 the majority of colleges and universities had placed the responsibility for radio training with speech and drama faculties; more than two-thirds of the existing radio courses were offered by speech departments.

Head and Martin report that whereas only sixteen universities offered radio instruction in 1933, 300 institutions were offering at least one course in 1938; by 1948, more than 400 institutions offered at least one course in broadcasting; thirty-five were offering non-engineering degrees, and by 1954-55, 334 institutions were offering at least two courses in

⁴³William A. Hillson, "Radio Drama and the Speech Curriculum," Quarterly Journal of Speech, XI (April, 1934), p. 206.

⁴⁴Ibid., p. 207.

addition to their radio and/or television workshops; eighty-one schools listed major sequences in broadcasting which led to degrees.⁴⁷ There was, then, a considerable development in curricular interest in broadcasting between 1933 and 1948; interest had grown enough to warrant the offering of broadcasting degrees by the middle fifties.

Even though colleges were rapidly adding courses to their curricula, they were slow in determining the content, procedures, and objectives of those courses. At first, they offered training for writing, performance, and production. This was a natural sequence to the problems the schools faced during their attempts to operate stations. They had discovered the lack of know-how in writing, performing, and producing for the new medium; consequently, courses were designed to meet these needs.

It was not unnatural, then, that most of the early instruction was offered within the framework of the speech departments. Radio was thought to be a medium for the voice; it was obvious that the industry needed people with voice training.

But the question of place, value, and function of radio education in school and college was paramount. Courses in writing, performing, and production were vocationally slanted; the colleges and universities seldom consider vocational training to be one of their primary functions. So institutions of higher education began to examine the basic philosophy for offering such courses. Armand Hunter, in 1944, reflected the deep

⁴⁷Sydney W. Head and Leo A. Martin, "Broadcasting and Higher Education: A New Era," Quarterly Journal of Broadcasting, (Winter, 1957), p. 40. They used for their source of figures, the Office of Education survey of colleges and their curriculum offerings. See also Donald W. Miley, "The Place of Radio in the Speech Curriculum," Quarterly Journal of Speech, XXIV, (December, 1938), p. 622.

TABLE 1.10

**RADIO COURSE OFFERINGS BY DEPARTMENTS FROM A SAMPLING
OF FIFTY INSTITUTIONS IN 1938^a**

Department Offering Work	Number of Courses	Number of Credit Hours
Speech Departments	65	156
Radio Departments	14	28
Journalism Departments	9	22
English Departments	5	8
Total	94 ^b	214 ^b

^aRiley, loc. cit. Riley operated from a sample of 230 college bulletins and, out of this group, discovered fifty institutions which offered radio instruction.

^bRiley indicates that there were 100 courses totalling 228 hours; yet his tabulations for individual departments fall short of these figures when they are totalled. Perhaps he omitted a fifth category of "Others," totalling six courses and fourteen credit hours.

concern institutions felt about the problem of place, function, and value of the radio course in education; he offered one answer to the problem of basic philosophy:

The place and function of a program of education for radio within the framework of the school or college is still a very live issue in the critical thinking of many educators and professional men. The educator often feels that courses in radio lack content, stature, and educational value, and that they are used as a device to build enrollment by capitalizing upon student interest. The professional man tends to believe that a sound and practical training can be given only through actual experience in the daily routine of broadcasting. . . .

.
A program designed to accomplish this purpose and to stand the test of any criteria (educational or professional) would have to present first of all, a clear cut and definite statement of its objectives, . . . it is exactly at this point that much of the criticism from educational sources comes.⁴⁰

Hunter then set up three objectives which he deemed necessary if broadcasting were to merit academic standing. Such training should develop within the student an understanding of the social implications of the medium, its political and economic significance, and certain standards of taste and evaluation in terms of content and form. It must provide a practical and professional training in the skills and techniques of broadcasting. It must develop a body of research, create a teacher-training unit, and acquire skill in utilization of radio in the processes of education.⁴¹

Apparently Head and Martin also recognized the distance between the

⁴⁰Armand L. Hunter, "Education for Radio," Quarterly Journal of Speech, XII (October, 1944), pp. 299-300.

⁴¹Ibid.

two points of view (the educator's and the professional's) in their discussion of broadcasting's new era.

Initially to introduce broadcasting as a subject of study into the college curricula at all, required a rationalization which said, in effect, 'We know that broadcasting is not in itself a fit subject for college instruction, but in so far as it is an aspect of speech (or journalism, or drama, or any other established discipline) we can give it house room.'⁵⁰

But courses of instruction were introduced into the curricula of colleges and universities and the number of such courses reached rather startling figures. Even this widespread acceptance of courses in radio left much to be desired. There was an obvious lack of organization within the various schools offering these courses and the courses were apparently lacking in direction.

Obviously such widespread educational activity calls for the development of some kind of mutual understanding about objectives, standards, methods. The trouble has been that so many of these courses owed their primary allegiance to educational disciplines not primarily concerned with broadcasting that the development of common understanding has been slow.⁵¹

Evidence that there was general lack of similarity and unanimity among the institutions offering these courses is available from several sources. One such source, the Federal Radio Education Committee, reported that at the outbreak of World War II, approximately 600 institutions were offering credit courses and "except for the engineering side, there was a striking lack of agreement on goals to be achieved or on methods for

⁵⁰Nease and Martin, op. cit., pp. 39-40.

⁵¹Ibid.

accomplishing them."²²

This concern about the lack of direction and organization within this curricular structure, as has already been pointed out, was prevalent among educators everywhere. Numerous studies and articles appeared in the late forties. All lamented the status of broadcasting offerings. Studies, as late as 1949 and 1950, indicated a multiplicity of titles, a wide range of credit, a lack of general standards and purpose, as well as a lack of generally accepted standard terminology.²³ Titles in the field of radio, as indicated in college catalogs, were misleading, reports Williams; he says the variety was "carried beyond bounds." The most popular title for a beginning course in radio seemed to be "Radio Speech." Other titles for apparently a similar course were:

²²Federal Radio Education Committee, "Standards for College Courses in Radio Broadcasting," Quarterly Journal of Speech, XXXI (April, 1945), p. 186.

²³Harry M. Williams, "Status of Courses in Radio," Quarterly Journal of Speech, XXXIV (October, 1949), p. 389.

Other courses which give similar functions to this current lack of agreement about the content of radio courses are:

Federal Radio Education Committee, "Directory of Colleges Offering Courses in Radio-Television," (Washington, D. C., 1949).

Shania Galle, "A Survey of the Place of Radio in the Curricula of Colleges and Universities in Pennsylvania," (Unpublished Doctoral dissertation, Pennsylvania State College, 1950). Also reviewed in Speech Symposium, (vol. 17-18), p. 211, (March, 1951). Galle reaches conclusions similar to the Speech Association of America's Radio Committee report which is reviewed by Williams, loc. cit.

Sydney A. Diamond, "College Radio Workshops--A Survey," Journal of the Association for Education by Radio, IX, (October, 1949), p. 22.

1. Radio Speaking
2. Introduction to Radio Broadcasting
3. Principles of Radio Broadcasting
4. Broadcasting Techniques
5. Fundamentals of Broadcasting.⁵⁴

The wide range in credit was equally "beyond bounds." For example, departmental offerings ranged from two quarter hours to six semester hours of credit. Courses which apparently were similar in content were offered at all four class levels (freshmen through senior years), (see Table 1.11), and gave credit ranging from one-fourth quarter hour credit to one semester hour credit.⁵⁵

The Speech Association of America's Radio Committee in 1948 also indicated there was a lack of general standard terminology in the field of broadcasting among educators. An example the report used was the term radio education. There are three accepted interpretations for this term. To some, it refers to the training of students for a vocation in the industry; to others, it suggests utilizing the broadcast as a supplement in the classroom; and its third common usage refers to radio broadcasts as public relations programs. This lack of standard terminology results in confusion.⁵⁶

The 1948 report of the Radio Committee of the Speech Association of America uncovered sufficient evidence to warrant a careful study of curricular offerings of instruction. A careful study of 218 college catalogs revealed that 115 were offering courses in broadcasting for

⁵⁴Williams, loc. cit.

⁵⁵Ibid.

⁵⁶Ibid.

TABLE 1.11

**RADIO COMPREHENSIVE SURVEY COURSE (BEGINNING COURSE)
OFFERED AT DIFFERENT CLASS LEVELS**

Class Level	Number of Institutions Offering
As freshman course	9
As sophomore course	39
As junior course	15
As senior course	4
As a graduate course	1

credit. The startling fact discovered was that of the 115 institutions, 52% offered no more than two courses, (Table 1.12). Only thirteen schools met the requirements of "Standards of University Association for Professional Radio Education"; these standards required that one-fifth to one-fourth of the total credit hours towards a Bachelor's degree should be in specific radio courses.⁸⁷

The figures reported by the Committee concerning the departments offering these courses reconfirmed that Speech Departments were offering the bulk of the work (Table 1.13). Over two-thirds of the institutions studied (81 in 115) placed their radio offerings in the Speech Departments; the second department to be assigned this responsibility was the English Department.

More evidence of the concern of educators over this general state of disorganization and lack of goals and general terminology is apparent in the programs of the various meetings of educators in seminars, institutes, and conferences held during this period. One such conference was the Stephens College Conference on College Radio held in Columbia, Missouri in 1946. The papers read at that conference dealt almost completely with the content of courses, with the curriculum organization, and with the content of programs being broadcast.⁸⁸ Some of the titles of papers read at that conference were as follows:

⁸⁷ Ibid.

⁸⁸ Dale Aarnes and Kenneth Christiansen (ed.), Problems in College Radio, (Columbia, Missouri: Stephens College, 1946).

TABLE 1.12

NUMBER OF INSTITUTIONS AND RADIO COURSES OFFERED,
AS REPORTED IN 1948, LEADING TO DEGREES

Number of Institutions	Number of Courses
36	2
24	1
11	3
9	4
9	6
5	5
3	7
3	9
2	10
2	13
2	14
1	11
1	12
1	15
1	17
1	19
1	20
1	25
1	28
1	29
Totals 115	250

Note: The 250 courses represented credit values ranging from one-fourth quarter-hour credit to one semester hour credit.

Williams, loc. cit.

TABLE 1.13

DEPARTMENTS OFFERING RADIO COURSES IN 115 INSTITUTIONS IN 1948^a

Departments	Number of Courses
Speech	81
English	21
Radio	10
Journalism	4
Others	9
Total	115

^aWilliams, loc. cit.

1. "The Radio Curriculum--A question of Content, not Content."
2. "The Radio Curriculum: Clearing Away Confusion."
3. "New Operating Procedures and Viewpoints Needed in Radio's Curriculum."

The Speech Association of America's Committee on Radio reported in 1948 that institutions were following at least one of three patterns in their curricular offerings:

1. They were providing activities centered about the training of individuals who expected to enter the radio broadcasting profession,
2. They were attempting to foster an understanding of the social, political, economic, cultural, and international significance of radio, or
3. They were providing courses designed to train teachers in classroom uses of radio both at the secondary and college level.⁴⁰

Today, there is a considerable amount of curricular interest and activity in broadcasting on both the graduate and undergraduate levels. A survey of colleges and universities offering courses in radio and television in 1956-57 reveals that 515 schools offered some kind of course work. Eighty-seven of these schools offered sufficient work in these areas to grant degrees. Ten of the eighty-seven provided for work leading to the doctoral degree (see Table 1.14).⁴¹

⁴⁰Williams, loc. cit.

⁴¹Forest L. Wynn, "Colleges and Universities Offering Degrees in Radio and Television: An Analysis," Quarterly Journal of Broadcasting, I (Summer, 1957), pp. 278-283.

Harold F. Niven, "Colleges and Universities Offering Course Work in Radio-Television, 1956-57," Quarterly Journal of Broadcasting, (Winter, 1957), pp. 97-117. This study also attempts to classify the courses or analyze the content of the courses.

TABLE 1.14
INSTITUTIONS OFFERING RADIO-TELEVISION COURSE WORK
LEADING TO DEGREES IN 1956-57^a

Degree Work	Number of Institutions
Doctoral	10 (10) ^b
Master's	38 (48)
Bachelor's	39 (87)
Total	87

^aForest L. Wren, "Colleges and Universities Offering Degrees in Radio and Television: An Analysis," Journal of Broadcasting, I (Summer, 1957), p. 278.

^bThe first set of figures in each case represents the number of institutions in which this is the terminal degree. The figures in parentheses provide a cumulative total and an indication of those institutions which offer all levels of degrees up to and including the degree noted on the indicated line.

Television as an activity and as an area of study is new to college and university campuses; radio is comparatively new. "One of the first courses known to be offered in radio was at Kansas State College, Manhattan, in 1931; no major concentration in the area developed at any institution before World War II."⁴¹

As has been stated earlier, the responsibility for training in radio broadcasting was placed in most institutions of higher education within the framework of the speech departments. When television emerged, instruction in television techniques was added to the broadcasting curricula in those departments. At first there seemed to be two distinct tendencies regarding the curricular development of television. One was to offer separate courses in television; the other method was to add the study of television to the existing courses in radio. Many institutions, today, offer both types of programs: (1) the parallel but separate courses, and (2) the hyphenated radio-television courses. Some college catalogs suggest separate courses with such designations as "Television Directing" and "Fundamentals of Radio Broadcasting"; still others suggest that the content deals with both radio and television as in the case of "Radio and Television in Education," "Foundations of Broadcasting," and "Broadcasting Regulations."

Wann reports that twenty-eight schools have now separated their course work in radio-television from speech; but individual institutions differ somewhat in the names they give to these new departments.⁴²

⁴¹Wann, loc. cit.

⁴²Ibid.

At Michigan State University, for example, course work in radio and television is placed in the Department of Television, Radio, and Film, which is in the College of Communication Arts. Wham notes that seventeen schools use the title, "Radio-Television"; three use "Communication Department"; other titles are "Radio-TV Arts," "Radio-TV Broadcasting," "Radio-TV and Motion Pictures," and "Telecommunications." There is, then, a lack of conformity in labelling departments and courses; there is also, no doubt, a lack of conformity in the underlying philosophies of the various schools. While some efforts have been made to reach general agreement among broadcasting educators as to the general goals in broad concepts, there have been, understandably, no efforts to make each school a carbon copy of the others.

It may be concluded, then, that the study of radio and television has been awarded academic recognition in recent years. The number of schools offering such work, the prevalence of degree work being offered, and the establishment of separate departments in at least twenty-eight schools indicate that educators in general and administrators in particular approve of these areas for academic study.

The Speech Association of America now lists "Radio and Television" as one of its major areas in the general field of speech. "In the years since the end of World War II, the area of radio and television has won its place as a subject of specialized graduate study. . . ." Graduate studies are now listed under their own area heading, radio and television, in Speech Monographs²³ reviews of graduate work.

²³Edgar Willis, "Research in Radio and Television by Graduate Students in Speech," Quarterly Journal of Speech, XLI (October, 1955), p. 261.

With the advent of television, collegiate curricular offerings were expanded; separate departments were established in some schools; graduate study in these areas was given recognition. During this period of obvious curricular development, there was growth in another way. The content of these courses was gradually undergoing an evolution.

Head compares the development of a curriculum in broadcasting to the development of the journalism curriculum. At first, courses introduced the student into the "mysteries of the trade"; courses in broadcasting introduced the student to the skills of writing, performing, and producing for radio. As the industry expanded, educators began to give a broader view of broadcasting. Again following journalist's pattern of growth, courses in broadcasting began to include the history, economics, and ethics of the industry. Thus, the history of the broadcasting curricula entered its second phase. During this second period of curricular history, courses were designed to give the student a philosophy and a set of standards about broadcasting. There were courses in station management, program development, business and advertising, and audience measurement. Such courses were not skills courses; they dealt with broadcasting in its more broad social, economic, and artistic contexts. Although the emphasis remains on the use of broadcasting (teaching the skills and utilizing the program), there seems to be an increased awareness by educators of their responsibility in another direction, that of providing "professional education for those who are going to enter the broadcasting industry."²¹

²¹Head, op. cit., p. 412.

The broadcaster wields an instrument which can influence the thinking and acting of human beings; he is responsible to the various publics for the content of the broadcast message. The responsibility for training the broadcaster belongs to the university which is prepared to explore the ethical and sociological significance of broadcasting, and to foster the development of reasoned insight. Head states the case for the universities effectively.

The importance of this responsibility lies in the fact that in the foreseeable future commercial broadcasting will continue to reach vastly more people with vastly more hours of programming. . . . If colleges and universities can directly influence the programming of commercial stations by educating the people who make the program decisions so that they will make these decisions wisely and conscientiously in terms of social needs, education will have accomplished a very great service to society.⁴³

So today, there seems to be evolving a major philosophy about broadcasting in education. This curricular development is entering a third stage, described by Head as one of "research and evaluation." This evolution suggests something more than a mere addition of new courses to the curriculum.

Paul Deutschman says this is an age of "communication revolution" brought about by changing methods of communication. Obviously the television medium is one causal factor; but the expansion of the magazine medium, the development of the book as a mass medium, the development of communications machines (such as the various I.B.M. machines) is going on all over the world.⁴⁴ Naturally the universities reflect this

⁴³ *Ibid.*

⁴⁴ Paul J. Deutschman, "Some Developments in Doctoral Work in Communications," *Journal of Communications*, VIII (Summer, 1958), p. 77.

changing attitude. Today, there is considerable research being conducted in the field of communications, which obviously includes radio and television. In turn, this research and its findings condition and shape the nature of the content of the courses that are offered.

During the first years of radio, it was not the departments and schools of speech that nurtured the research and graduate study programs; it was the schools and departments of economics, law, and science which accepted research in the area of broadcasting. Apparently the first graduate thesis pertaining to broadcasting was written in 1923, at New York City College; this thesis examined the growth and development of the radio industry. Apparently the first doctoral dissertation was a study of the economics of the industry, written at the University of Wisconsin, in 1925.

The first recorded Master's study which emphasized broadcasting and which was accepted in speech was written at the University of Southern California in 1929; this study explored the relation of certain types of voices to successful radio broadcasting. "This was not a prelude to a rush" says Edgar Willis, who made a study of the research performed by Speech Departments and Schools up to and including 1955.⁸⁷

Examination of the graduate work performed in the areas of radio and television provides several facts relevant to this study. Apparently there were forty-six studies in these areas performed before 1935. Analysis of these forty-six reveals that five were doctoral studies;

⁸⁷Edgar Willis, loc. cit.

only nine were written before 1931; the major interest areas were utilization and the generally accepted speech areas (see Tables 1.15 and 1.16).

The conclusions may be drawn from an analysis of these studies: (1) broadcasting subjects invited graduate research as early as 1923 and an increasing amount of graduate inquiry has been carried on in subsequent years, and (2) although subjects treated under the heading of "broadcasting" were set in general speech or classroom utilization frameworks, many other curricular areas were also interested in broadcasting.

Some indication of the interest in research may be gained by analyzing one category of the titles of graduate studies listed in the Journal of Broadcasting.⁸⁸ This issue listed 1275 studies in subject categories. This was the first attempt ever made to collect such information in one listing. The largest category was "Education: Classroom Use of Radio." Assuming that this category is representative of the trends in the whole field (see Table 1.17), it will be observed that there was a small but steady flow of studies between 1931 and 1955; the years 1939 and 1940 were apparently peak years for study in this one area of broadcasting; classroom utilization and the general speech areas were the most popular for research.

Willis reported that by 1935 only five institutions had reported any graduate work in their schools or departments of speech;⁸⁹ the current examination revealed that nineteen colleges and universities were

⁸⁸"Graduate Theses and Dissertations on Broadcasting," Journal of Broadcasting, II (Winter, 1957-58), pp. 56-90.

⁸⁹Ibid.

TABLE 1.15

SUBJECTS TREATED IN GRADUATE STUDIES WRITTEN BEFORE 1935^a
(See also Table 1.16)

Year	Total Number	Number	Subject
1923	1	1	History
1925	2	1	Economics of industry
		1	Social aspects
1927	2	1	Economics
		1	Utilization
1929	3	1	Advertising
		1	Farm audience
		1	Voice in radio
1930	1	1	Oral style in delivery
1931	10	4	Elementary classroom utilization
		2	Public speaking
		1	Agriculture
		1	Federal regulation
		1	Oral styles
		1	International aspects
1932	9	1	Economics
		1	International aspects
		1	Radio drama analysis
		1	Writing, producing drama
		2	Elementary classroom utilization
		2	Music appreciation
		1	Advertising
1933	8	1	Advertising
		1	Elementary classroom utilization
		2	Delivery and diction
		1	High school sound system adapted for radio
		1	High school students' listening
		1	Survey of college radio
		1	Music
1934	10	2	Advertising
		2	Children's programs
		1	International aspects
		1	Comparison with newspaper effectiveness
		1	History
		1	Federal regulation
		1	Vocabularies of Hoover and Roosevelt
		1	College classroom utilization

^aForty-six studies were noted as the total graduate studies performed before 1935. Speech Monographs and Journal of Broadcasting, II (Winter, 1957-58), pp. 56-90 were the sources used.

TABLE 1.16

**SUBJECT MATTER RANGE OF FORTY-SIX GRADUATE STUDIES
WRITTEN BEFORE 1935
(See also Table 1.14)**

The following categories were studied in relation to radio:

Newspapers		1
Audience reactions		2
History		2
Federal regulations		2
Agriculture		1
Advertising		5
Economics		2
Social aspects		1
International aspects		3
Survey of commercial radio in one city		1
Survey of college radio		1
Utilization		14
College utilization	1	
Secondary school utilization	2	
Elementary school utilization	1	
Geography lessons	1	
Music appreciation	3	
General utilization	6	
General speech areas		11
Voice, diction, vocabulary	5	
Public address	3	
Drama	2	
Use of sound systems	1	

Total

46

TABLE 1.17
TREND OF GRADUATE STUDIES IN CLASSROOM UTILIZATION^a

Year	Number	Year	Number	Year	Number
1927	1	1939	12	1948	1
1931	5	1940	9	1949	5
1932	1	1941	6	1950	3
1933	3	1942	5	1951	2
1934	3	1943	5	1952	1
1935	3	1944	2	1953	3
1936	3	1945	3	1954	1
1937	6	1946	4	1955	1
1938	3	1947	2		

^a"Graduate Theses and Dissertations on Broadcasting," op. cit.

responsible for those early graduate studies. The University of Wisconsin sponsored ten of the forty-nine; Columbia University, five, and the State University of Iowa, four. In 1940, Ebank reported that there were only thirteen studies related to broadcasting in the 1136 theses listed by Knower in Speech Monographs.⁷⁰ In fact, it was not until 1940 that Speech Monographs even listed the radio research performed in speech schools.⁷¹

Knower's "Index" in Speech Monographs listed, in 1946, 126 Master's theses and thirteen dissertations; for 1953, there were listed 474 theses and 48 dissertations in radio and television.⁷² This would indicate that speech departments did a considerable amount of research after 1943 in the field of broadcasting.

Examining the subject-matter range of these studies performed in speech, Willis found in the Master's studies that almost half (43.24%) were concerned with program writing and production; one-fourth pertained to educational broadcasting; whereas only five percent of the dissertations were concerned with program writing and production, but thirty percent were interested in broadcasting and education. Almost half of the dissertations studied audience analysis⁷³ (see Table 1.13).

⁷⁰H. L. Ebank, "Trends in Research in Radio," Quarterly Journal of Speech, XVI, (April, 1940), p. 286.

⁷¹Ibid.

⁷²Willis, "Research in Radio and Television by Graduate Students in Speech," op. cit., p. 262.

⁷³Ibid.

TABLE 1.18

SUBJECT MATTER RANGE OF GRADUATE STUDIES, LISTED IN
KNOWER'S "INDEX," 1953, PERFORMED IN SPEECH*

Subject matter	Percent by A.A.	Percent by Ph.D.
Program writing, production	48.34	5.0
Educational broadcasting	25.0	30.0
Audience analysis	0.0	45.0
Broadcasting and Society	10.83	15.0

*Willis, "Research in Radio and Television by Graduate Students in
Speech," op. cit., p. 262.

TABLE 1.19

THE RANK AND PERCENTAGE OF TOTAL SPEECH GRADUATE RESEARCH FOR EACH
SUBJECT MATTER CATEGORY FOR YEARS 1953-1958^a

Category	1953		1954		1956		1957		1958	
	Percent	Rank	Percent	Rank	Percent	Rank	Percent	Rank	Percent	Rank
Fundamentals of Speech	9	4	6	5	13	4	12	4	10	5
Public Address	22	2	34	1	27	1	31	1	27	1
Interpretation	1	7	2	7	6	7	2	7	1	7
Radio-Television	6	6	2	6	9	6	9	5	5	6
Theater	15	1	24	2	23	2	26	2	26	2
Speech-Hearing Disorders	10	3	21	3	13	3	13	3	20	3
Speech Education	7	5	11	4	9	5	7	6	11	4

^aInformation taken from Speech Honorandis each year.

However, the lack of graduate research in speech does not indicate a lack of interest. In 1937 Princeton University established an Office of Radio Research; and Ohio State University set a five year study committee to evaluate the broadcasts that were going out to schools.⁷⁴

The preceding review of the role of graduate work performed in the areas of radio and television presents several obvious conclusions.

First, in spite of the fact that Speech Schools and Departments were given the responsibility of offering the course work in these areas, they were not the first to develop programs of graduate study. However, in recent years, Speech Schools and Departments have produced a considerable amount of graduate research.

Secondly, although Speech Schools and Departments do produce a considerable amount of research, many other schools and departments perform research in the fields of radio and television.

Third, because radio and television interest other areas of study in the university curriculum and because the volume of research is increasing, a philosophy about broadcasting seems to be evolving that makes the subject of broadcasting take on a new and more broad concept. Another factor in this changed concept is the "communication revolution."

As has been stated, the universities reflect this changing attitude and their graduate programs are perhaps the first to indicate such a change.

⁷⁴Ibid.

Naturally, each school or department in the university approaches a study of communication from its own orientation. Even so, those interested in communication have a "commonality of parentage."⁷⁵ More activity seems to stem from journalism than any other area. Today there are seven universities offering the doctoral program in mass communications. All are related somehow to journalism. "In most cases there is little relationship to speech, although increasingly speech graduate students are participating through course work."⁷⁶ Admittedly, some of these programs are journalistic in a professional sense but there is a "concern about and a study of all the mass media as social institutions."⁷⁷

Thus, it would seem that the direction of curricular offerings and graduate research in the areas of radio and television are pointed towards the broad concept of mass communication and its effects upon society. So it may be said that the development of the curricular program in broadcasting has reached its third stage, as described or predicted by Head. It is now in a period of research and evaluation.

Before closing this review of the development of a curricular interest in broadcasting by institutions of higher education, there are two subjects yet to be discussed: (1) some graduate studies in broadcasting at the high-school level, and (2) the work of the Association for Professional Broadcasting Education, and the work of the subsequent organization, the Association for Professional Broadcasting.

⁷⁵Lentzschman, loc. cit.

⁷⁶Ibid.

⁷⁷Ibid.

Examination of the graduate work performed in the field of broadcasting revealed only twenty-five studies were concerned with broadcasting as a factor in the high-school curriculum (see Table 1.20). Five proposed courses of study for the secondary level; the latest of these studies was performed in 1947. Four more proposed courses for specific localities or high schools, or they proposed adaptations of radio work for speech courses. Another large category, five, surveyed the radio-television activities in American high schools; three more surveyed activities in specific localities. After an examination of these studies pertaining to the secondary school, several assumptions may be made.

The very small number of such studies would indicate a lack of interest by research areas in broadcasting as a curricular item for high schools.

The five which surveyed high school radio activities plus the three which surveyed activities in certain localities total almost one-fourth of all the studies performed; this might be interpreted to mean that graduate-schools believe there is sufficient activity to merit investigation.

The array of titles as shown in Table 1.20 is not very impressive and must lead to the conclusion that broadcasting as a subject for academic study on the secondary level has not yet gained the acceptance that such study has in higher education.

Since the early forties educators were concerned about the professional quality of courses of instruction being offered in radio and television in institutions of higher education. Likewise, professional

TABLE 1.20

**ANALYSIS OF GRADUATE STUDIES PERTAINING TO BROADCASTING
IN THE SECONDARY SCHOOL CURRICULUM.^a**

Year	Institution	Subject
1939	Iowa State College	Proposed course of study or plan for integrating into curriculum
1941	University of Arizona	
1941	New York University	
1948	University of Maine	
1947	Ohio State University	
1935	Louisiana State University	Proposed course of study for specific locality or units within another course
1939	University of Iowa	
1949	University of Washington	
1952	University of Washington	
1949	College of Pacific	Offered review of equipment and brief outline for study of radio production
1954	University of Southern California	Operations manual for administer- ing radio-television program in high school
1941	College of Pacific	Surveyed radio-television activi- ties in specific high school locality
1942	Louisiana State University	
1945	Michigan State College	
1951	Kent State University	
1953	Columbia University	Surveyed trends and activities in the United States
1942	Wayne University	
1948	University of Michigan	
1950	Texas Christian University	
1942	University of Michigan	Studied values and methods of radio training
1954	University of Southern California	
1939	Wayne University	Radio as a correlative factor in curriculum
1948	New York University	Use of sound equipment for radio instruction
1952	University of Wisconsin	Influence of mass media research on high school Language Arts programs
1955	Montana State University	Analysis of problems in teaching in radio

^aFour of the above studies were doctoral dissertations.

broadcasters were changing some of their concepts about their business. As the broadcasting industry expanded, it was becoming increasingly aware of its own status in society; broadcasters were beginning to realize that theirs was a business enterprise vested with social and ethical responsibilities. Following this realization came the awareness that their future was dependent upon a steady flow into the industry of qualified personnel. "The catch-as-can recruitment of the pioneer days"⁷⁰ was no longer adequate.

These changing concepts, by professionals and educators about their business of broadcasting and teaching broadcasting, resulted in a meeting in the fall of 1947. This was a meeting of educators and broadcasters called for the expressed purpose "to explore the possibilities of formal accreditation of degree and curricula broadcasting."⁷⁰ By the fall of 1948, after examining 400 curricular offerings, the committee of broadcasters and educators decided that ten of the schools, whose curricula were examined, should be cited for their "progress in the development of broadcasting curricula."⁸¹

These ten schools became charter members of the University Association for Professional Radio Education (UAPRE). By 1955, their number had increased to nineteen.

⁷⁰Head and Martin, op. cit., p. 40.

⁷¹Ibid., p. 41.

⁸⁰The ten schools cited were: Alabama University, Denver University, University of Nebraska, Northwestern University, University of Southern California, Syracuse University, Temple University, University of Texas, Tulsa University, and the Texas School of Mines (now Texas Western University).

⁸¹Ibid.

It was soon learned that the association could not function as an accrediting organization. The reason for this is explained by Head and Martin:

The proliferation of accreditation by departments had become an academic sore spot, with institutions threatened with loss of control over their own operations. The issue came to a head . . . (about the time of the forming of UAPRE), and the National Commission on Accreditation announced that thereafter no new accrediting organization would be recognized by colleges and universities unless first approved by the Commission. Such approval could not be obtained for UAPRE.²²

It was then evident that accomplishing the desired objective (to raise standards towards professionalism) through accreditation was not possible. Obviously, the organization had no teeth. Seeing the handwriting on the wall, a few of the members of UAPRE and some professional broadcasters²³ began to formulate a new organization on a different premise.

The motivation behind the new organization was primarily the same as that which prompted the former one, namely to raise standards of courses, teaching, and facilities towards a more professional quality. The major differences in the two organizations was to be in the means of accomplishing the desired objective.

It was decided that any school which offered courses in radio and television might join. Because it was recognized that there would be differences in quality of work done in those schools, it was hoped that

²²Head and Martin, *op. cit.*, p. 42.

²³*Ibid.* Gives a complete report of this organizational meeting. They name the members of the committee responsible for the planning of APBE.

the leading schools might exert their influence upon other schools; thus standards would be improved.

A new organization was formulated; the National Association of Radio-Television Broadcasters (now the NAB or National Association of Broadcasters) became a willing member and agreed to help finance the organization. This willingness to become affiliated with such an organization was the result of commercial broadcasters recognizing their need for a steady flow of suitably trained personnel; this affiliation offered a means whereby they might have a part in the shaping of the training of their future personnel.

On May 23, 1955, members of NABPRE voted to dissolve their present organization and to form a new joint industry-education organization. The members then accepted the plans for the new organization, which was to be known as the Association for Professional Broadcasting Education (APBE).

As of March 1958, APBE numbered forty-three active members and seven associate members. Active members are those institutions which offer degree work in radio and television; associate members are those schools which offer only courses not constituting a major.

The APBE has established a publication, the Journal of Broadcasting, which is issued quarterly. APBE provides many services for its institutional members, such as maintaining an exchange of teaching materials, sponsoring institutes and clinics for students, faculty, and station personnel, and providing an analysis service for evaluating curricula.

At present, the APBE is planning an employment exchange service on a national basis.

APBE maintains an Executive Secretary in a permanent office, in cooperation with NAB (formerly the NABTS), in Washington, D. C.; other officers are elected from the membership.

Thus far, in its short history, APBE has concentrated on the end product for which radio and television curricula primarily exist, namely the training of personnel for the profession of broadcasting. So it may be said that the work of APBE is basically oriented towards commercial broadcasting.²⁴

Thus it is evident that the APBE marks another milestone in the development of curricular interest in broadcasting by higher education. Its particular function has been to bring to bear certain influences which seem to be causing colleges and universities to change their concepts about broadcasting curricula. The change is to a broader base so as to include the ethical and social significance of the media of radio and television, and to improve course content towards a more professional quality.

This examination of the background of the curricular interest in broadcasting as a course of instruction in institutions of higher education has been an attempt to trace its development. To do that, the appearance of courses and the subsequent increase in the number of

²⁴Interview with Professor Leo A. Martin, former president of UAPBE, July 30, 1958.

courses in the curricula of colleges and universities was first determined.

Apparently courses of instruction were included in college offerings early in the 1930's. It was established that in 1933, sixteen schools made such offerings.

The number of schools offering course work in radio and television increased slowly but steadily; likewise the number of courses increased. But it is apparent that a few schools were responsible for the majority of the courses offered; a great many schools offered only one or two courses.

By 1955, over 400 schools were offering courses of instruction; eighty-one institutions offered sufficient work for the doctoral degree in radio and/or television.

Although a number of departments and schools offered these courses, the responsibility for the bulk of the courses was lodged with the speech faculties as early as 1933. It has remained there until the present time. They have been responsible for over two-thirds of the courses offered.

A new philosophy or basic concept concerning the content of courses seems to be evolving out of the current "communication revolution." This new attitude seems to be resulting in a move to establish separate departments for these courses. To date, twenty-eight schools have established such departments; so far there seems to be no agreement as to titles for these new departments.

This move to separate departments and the evolution of a new concept about broadcasting as a medium of mass communication was the logical sequence in the development of courses. Even though the early courses in radio were lodged in speech departments, and their numbers increased steadily, educators were slow to determine the objectives and content of these courses.

The content of these courses seemed to evolve through three stages. First, the early courses presented only the "mysteries of the trade," the skills in writing, performing, and producing. Then, as the result of the industry's growth and education's concern over content, the second stage was entered. Educators added "content" to the courses; courses included the history, the economics, and the ethics of broadcasting. With the advent of television and FM broadcasting, the curriculum development began to enter its third and present phase, research and evaluation.

A review of graduate studies netted several conclusions. It was established that although speech departments very early assumed the burden of the curricula for broadcasting, they did not develop the early graduate research. However, since 1930, there has been a steady flow of research in the fields of radio and television. Many departments and schools have been responsible for this research. But since about 1940, the speech schools and departments have sponsored one-half to two-thirds of the studies.

Pertinent to this study were twenty-five graduate studies dating from 1933 which concerned radio in the high school curriculum; there were no significant trends noted.

The University Association of Professional Broadcasters, and the later organization, the Association for Professional Broadcasting Education, have given broadcasting education in the universities and colleges a definite direction toward professionalism. Through their efforts to improve standards, to give more content to the courses offered, and through their relations with professional broadcasters, this is in the process of being achieved.

Summary

There are several possible results when the terms "education" and "broadcasting" are combined; the history of two of these combinations has been examined in this chapter. First to be treated was the history of broadcasting activities which took place under the sponsorship of educational institutions. The other combination considered in this chapter has been the development of education for broadcasting, or the history of broadcasting curriculum.

Broadcasting by schools has developed in three relatively distinct periods. The first, dating from about 1920 to about the middle of the 1930's, was a period of tremendous activity; this activity centered around the struggle to get on the air and stay on the air. The second phase, characterized by relative inactivity, existed in a period roughly bordered by 1935 and 1945; radio stations owned by educational institutions continued to go off the air during these years. The third period began with the end of World War II. The emergence of FM radio and television and the FCC's reservation of educational channels marked the

beginning of this period. It was noted in this latter period that educators accepted the new responsibilities and opportunities with a different attitude, which was based on experience. Their method was more orderly, more directed toward carefully established goals.

The early history of educational ownership of broadcasting facilities is filled with data concerning the great number of colleges and universities that attempted to obtain broadcast licenses and to operate radio stations. These early years were marked by two factors: (1) the lack of broadcasting experience on the part of educators, and (2) the threatened domination by commercial broadcasters.

Various national groups and committees operated on behalf of educational broadcasters during these three developmental stages. These national organizations performed significant services in the struggle to maintain broadcasting facilities for educational purposes.

Of particular value was the work of the National Committee for Education by Radio. Other groups which played a part in the development of broadcasting by higher education were the N.E.A., the Office of Education, and the FCC's Federal Radio Education Committee.

Educational broadcasting stations multiplied rapidly soon after the beginning of broadcasting. By 1937, they reached a peak of over 200. But the problems of management and programming became too great a burden; the struggle to stay on the air was too much; the mortality rate among the stations was great. By 1937, the trend was obvious. By 1947, less than thirty stations were operating.

There is apparently considerable agreement among investigators as to the cause of this sharp decline in station operation. Most of the studies indicate a lack of funds and facilities, a lack of skill in broadcasting and in utilization, as well as a general lack of interest.

The second combination of "education" and "broadcasting," education for broadcasting, also may be viewed historically as occupying three relatively distinct periods. This study supports Sidney Head's statement that broadcasting education has progressed through three stages.⁸⁵ The first courses offered were of a practical nature; the emphasis was placed on the skills involved in writing, performing and producing. These courses became the offerings of journalism, music, English, and speech departments.

Quite naturally, radio was thought to be a medium which depended upon voice only and thus the industry needed those people who had voice training. Consequently, most of the instruction eventually appeared within the framework of the speech departments. By 1938, the majority of schools had placed the responsibility for radio training upon the speech departments.

The first stage, emphasizing skills, began around 1933 and came to a close in the middle thirties. Although this emphasis was retained as broadcasting education entered its second phase, the curricular scope was broadened; studies of the surface characteristics of the medium were reinforced with more intellectual offerings. The political, economic, and social aspects of broadcasting were considered to be important corollaries to broadcasting skills. This period came to a close with the end of World War II.

⁸⁵Head, op. cit., p. 412.

The third stage, one in which research and evaluation were given increasing consideration, seems to be a natural outgrowth of the preceding phase in which the educator became concerned with more substantial course content.

Proof that education for broadcasting has entered this third phase is evidenced by the increasing number of schools offering course work leading to graduate degrees. During the school year of 1955-56, 515 institutions of higher education reported that they were offering some kind of course work in broadcasting. Eighty-seven schools offered courses of study which led to a major. Ten of the eighty-seven schools provided opportunities for doctoral research.

Pertinent to this study were twenty-five Master's theses dating from 1933 which concerned radio and the secondary level of education. Seven doctoral dissertations dating from 1939 were also noted. However, there was no significant trend observed in their subject matter.

By 1947, broadcasting was a significant part of American life. Educators and professional broadcasters were apparently aware of a need for a joint organization which could provide an opportunity for both the educator and the professional broadcaster to work towards more common objectives with a more uniform body of techniques and which would provide a channel of communication for understanding each other's basic philosophy.

The UAPBE was formed in 1947 as a first step toward answering this need; it was succeeded in 1955 by the APBE. It is too early to predict

the success of the new organization; however, its very existence is a promising indication.

Perhaps it is a mistake to commit to paper judgments concerning contemporary happenings; however, it would seem that the third stage, both of broadcasting by education and education for broadcasting, is on much more solid ground than the preceding stages. Educators, facing a new opportunity and a new challenge, seem to be more cautious as they plan for the future. The prevailing concept of the mass media is much more broad; the curricula and graduate research reflect this serious intent. More schools are offering course work in broadcasting, but even more significant is the trend toward the formation of separate departments for training in mass media communication. The colleges and universities are now concerned with training minds as well as hands.

Institutions of higher learning are recognizing the potential of radio and television for society. They are accepting the responsibility. Education for broadcasting as well as by broadcasting seems to be following a more logical and soundly academic pattern.

had not worked the promised miracles."²⁶

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After tracing the development of radio policies in American public
ls, Atkinson cited the problem that faced educators in the few
prior to 1940; the problem became a major factor in the decline of
tionally owned stations, and in the ineffectiveness of the early
me over commercial stations:

analysis of the lack of success of these early programs that did
ot continue invariably would show a lack of definite organization;
roadcasting in the schools was left to the initiative of one or
two individuals and when the early enthusiasms wore off, the programs
were allowed to die. A successful broadcasting policy requires
organization; definite responsibility placed upon some department,
committee, or individual; and a spirit of active cooperation among
administrators, teachers, students, and the public.²⁷

From his studies, Atkinson, one of the few researchers who ventured
to make judgments in this area as early as 1938, reached several conclu-
sions, one of which is pertinent to this study. He stated that if radio
were to serve education properly and adequately, city school systems
would have to assume leadership in educational broadcasting.²⁸

Just what Atkinson meant by educational broadcasting is not indicated,
but it is assumed he included the whole range of activities: station
operation, in-school use of the broadcast program, the public relations
program, and perhaps a curriculum offering (which prepared the student to

²⁶Atkinson, op. cit.

²⁷Ibid., pp. 9-10.

²⁸Walter S. Monroe, Encyclopedia of Educational Research, (New York: Macmillan Company, 1950), p. 953. Monroe summarizes all Atkinson's research. Atkinson, in his own conclusions, recommends the use of students in educational broadcasting because of the motivation and learning possibilities. Education by Radio, op. cit., p. 122.

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evaluate and appreciate his general listening, and special training to assist in some of the broadcast duties).

Much of the necessary inspiration for this early pioneering came from the Office of Education and several state departments of instruction:

Only four years after the first commercial broadcast, Dr. John J. Tigert, then Commissioner of Education, evidenced keen and early interest in the possibilities of radio in education. He wrote "The school, the library, and the newspaper are usually ranked as the three great educational agencies. The radio promises to take its place as the fourth, and it appears to be fast fulfilling that promise. . . ."²⁹

All this interest and activity in station operation, programming for in-school use and for public relations involved high school students and aroused their interest. After reviewing Frost's report (of 202 educationally owned radio stations), Atkinson's conclusions regarding broadcast activities (in American educational institutions), and other studies on this subject, Levenson and Stasheff summarize this activity from 1922 to 1926 as follows: "throughout the land evidences of real accomplishment were apparent."³⁰ The story of twenty-two public schools which actually attempted to operate stations has already been reviewed in this study. Thus it can be seen that high school students were learning some of the skills of broadcasting but it must be admitted that the method was somewhat "trial and error."

Before describing some of those early and more formal attempts to teach the skills of broadcasting, the work and the influence of the

²⁹Levenson and Stasheff, *op. cit.*, p. 38.

³⁰*Ibid.*, pp. 38-40.

Office of Education and several state departments of instruction should be examined.

By 1930, the Office of Education had become interested in radio education; in 1931 a specialist was appointed to the office and given the assignment "to study and promote education by radio."³¹ The Office of Education Radio Specialist cooperated with commercial and educational stations; it experimented with production techniques; it helped to discover what was needed by educational institutions in terms of personnel and organization. It developed a script exchange service; by 1939 more than twelve hundred scripts were available to schools. In addition, it issued four important pamphlets which were instructional aids to those groups, civic or educational, interested in radio production; they were Radio Manual, Radio Glossary, Handbook of Sound Effects, and Public Policy.³²

All through the radio era (1920-1948), the Office of Education continued its important function of aiding the schools in their radio education activities. Since the advent of television and the resulting agencies that were established to assist and guide schools involved in educational television (e.g. Educational Television and Radio Center and Joint Council on Educational Television), the Office of Education has not been so active. It does, however, continue to service public schools in a general way.

³¹Atkinson, Development of Radio Education Policies in American Public School Systems, op. cit., p. 27.

³²Willey and Young, op. cit., pp. 387-388. See also, Atkinson, op. cit., pp. 27-28.

State departments of education were also active in promoting radio's use in education. In 1932-33, twenty-three state departments reported that they were using or were planning to use radio in some way; nine indicated that they were broadcasting regularly. By 1938, there was evident a growing interest in classroom listening; and there was also some evidence that state departments were making plans to assist schools in selecting the programs to be used and the equipment to be purchased for classroom utilization. By the late thirties, fifty-seven states and territories had developed regular policies regarding the use of radio in education; fifteen indicated they had some kind of policy; and twenty-two had no policy for the use of radio. Statements of these policies all seemed to have one point in common; they centered around the program which presented the schools in a favorable light (the public relations program).²⁰ This would suggest that state departments were primarily interested in public relations broadcasting, rather than classroom utilization, or radio as a curricular item.

State departments of instruction today continue to exert a certain amount of influence and leadership in education for and by broadcasting.

Of the 190 educational radio stations (153 FM and 37 AM reported by the Office of Education as of November, 1957), forty-five FM stations are owned by public school systems (Table 1.8); none are owned by state boards or departments of instruction; although New York, Wisconsin, and

²⁰Atkinson, Radio in State and Territorial Educational Departments, (Boston: Hoador Publishing Company, 1942), pp. 14-15.

Alabama have networks of educational stations that serve the public school needs and other groups as well. These networks are joint efforts sponsored by several agencies, primarily state departments and state universities.

The May 1958, NET Yearbook shows thirty-two educational television stations now on the air. A study of their ownership (Table 1.9) reveals that three are owned by state departments of instruction; state legislatures hold licenses for four stations; ten universities and ten municipal corporations or foundations (which usually include the public schools as one agency in the corporation) hold licenses; and five boards of education operate educational television stations.

A study of the ownership of both radio and television stations indicates that public schools do have plenty of opportunities for broadcasting; in many cases they even have a voice in the management of the stations being used.

All this activity with radio and television by schools, universities, state departments of education, and other state and national groups has had its effect upon the secondary schools and their curricular offerings.

In attempting to trace the curricular development in broadcasting, it becomes necessary to examine the available evidence of all broadcasting activity by high school students. Most of that evidence is found in reports of other aspects of radio activity, such as the public-relations programs and station ownership. Reports of radio and television activity by high school students are also found in studies of the content and objectives of related courses, such as English, speech, and dramatics.

Such evidence dates almost from the beginning of radio's history.

The agricultural Middle West seems to have been the pioneer in broadcasting education; it was apparently in the Middle West that the first high-school-owned-and-operated station was located, and apparently the first formal course of study in broadcasting was offered in the Middle West. Central High School, Omaha, Nebraska was "granted a federal license on February 14, 1923, to operate on 360 meters (834 kc), with 300 watts power, on 'unlimited' time. The call letters assigned were KFCZ."³⁴ The instructor in "drafting the radio class work" assembled the broadcast transmitter in the building. "Regular class work was offered by the school with the inauguration of the station."³⁵ This, apparently, was the first class offered in radio by any high school.

The emphasis in these early courses was primarily on the technical aspects of broadcasting. Technical High School, Omaha, Nebraska became the second school in that town to have its own station; they went on the air fourteen months after Central High School. At first, the station was used for technical instruction only; but students also broadcast music, debates, and lectures. Four years later the station was deleted but the course was continued. Reports from two sources failed to indicate the content of the course after the station's deletion.³⁶

Broadcasting activities in cooperation with local commercial or university stations, dating from 1932, were reported in the schools of

³⁴Frost, *op. cit.*, p. 299.

³⁵Reed, *op. cit.*, p. 94.

³⁶Frost, *op. cit.*, pp. 302-303. Also, Reed, *op. cit.*, p. 95.

Duluth and Minneapolis, Minnesota; Springfield, Missouri; Grand Forks, North Dakota; Aberdeen and Watertown, South Dakota. This activity was primarily a weekly broadcast of school news and talent. The Watertown students were permitted to broadcast the sports because "it was discovered . . . (this) tended to increase the attendance at games." The Grand Forks students broadcast daily over the University of North Dakota station.³⁷

Another very early evidence of a definite course in radio was the one offered as an elective in Rhodes High School, Cleveland, in 1933; the course emphasized voice work. Later another course was added which included work on dramatic sketches, student-written and-reported news programs. Subsequent courses, provided opportunities for intensive dramatic production experiences. Values reported to result from this course of study were that it provided greater motivation to improve the voice skills and to increase knowledge. The teachers liked teaching these radio courses because they were more advanced and the students were more enthusiastic. By 1945, the curriculum had broadened to include voice and diction work, script writing, and general production techniques.³⁸

A Federal Writers' Project publication lists a number of these early broadcasting attempts by high schools. For example, the Maaram High School in New York City broadcast lessons in accounting (already described

³⁷Good, op. cit., pp. 61-121.

³⁸William A. D. Wilson, "Using Radio as a Teaching Tool in High School," Quarterly Journal of Speech, XXV (April, 1939), pp. 279-80. Also, William Levenson, Teaching Through Radio, (New York: Farrar and Rinehart, Inc., 1945), pp. 235-236.

as the first known use of radio lessons in the classroom). Students built the station; then they broadcast noncurricular student programs; the faculty broadcast the lessons.³⁹

Students in a Vocational School in Buffalo, New York, built a complete radio station in 1922; then they broadcast programs by the students of the city's schools.⁴⁰

Similar activities are cited between 1922 and 1927 in Los Angeles and Oakland, California; Cook County, Illinois; Cleveland, Ohio; Atlanta, Georgia; Upton, Massachusetts; and Hartford, Connecticut. The programs described were apparently of two kinds: lessons presented by teachers and student programs of school news and music. Audiences as large as twenty-five thousand were reported.⁴¹

In 1939, Carroll Atkinson published the results of a study which attempted "to picture radio educational development in American public schools by recording the most important historical facts and by describing current policies of 125 (or 10.3 percent) of American public school systems, representing population centers over eight thousand."⁴²

³⁹Levenson and Stasheff, *op. cit.*, pp. 39-40. See also, Atkinson, Development of Radio Education Policies in American Public School Systems, *op. cit.*, p. 40, and Wiley and Young, *op. cit.*, p. 304.

⁴⁰Levenson and Stasheff, *op. cit.*

⁴¹*Ibid.*

⁴²Atkinson, *op. cit.*, p. 1. He included in his study two towns with population under eight thousand; thirty-two were between eight thousand and twenty-five thousand; seventeen were between twenty-five and fifty thousand; fifty cities represented populations between one hundred thousand and one million; and five were over one million in population.

An examination of these individual reports prepared by the superintendents of the systems suggests a number of observations which may be relevant to this study:

1. Placement of responsibility for planning and managing the radio program.--Only three schools mentioned such responsibility. These indicated that it had been placed upon an agency that had other functions which were a primary duty, such as a "Curriculum committee on research study." Some superintendents admitted that they needed such a person or group to accept this responsibility.

2. Placement of responsibility for actual production.--This responsibility apparently was assigned to a variety of persons. The music department or director and the English teacher were given this assignment more often than any other teachers, although speech, journalism, social studies teachers, and one vocational advisor were reported as directors of their school's radio program. Sometimes the responsibility merely rotated through various departments; sometimes it rotated between the music and dramatics classes. As many as twenty-five reported they had no set policy; teachers and students acted independently.

3. Results of student broadcast activity.--Only two reports included comments about results. These superintendents concluded that writing talent was discovered and good speech resulted.

4. Objectives of school broadcasting activity.--Although a number indicated they had a "definite policy" regarding radio education, very few spelled out their objectives for including such activity in their school programs. Those that did were referring to the student activity

rather than to the use of the radio program in the classroom. Those objectives that were stated were varied. They ranged from (a) giving many students (or giving music and dramatic students) a chance to perform, to (b) the chance to study amateur broadcasting, and (c) a chance to develop the student's character and personality.

5. Classes offered.--The word "class" was used by the superintendents in these reports only thirteen times. Credit for any work done was indicated only twice. This was "special English credit for outstanding work" in one case; in the other, one-fourth credit was granted. The titles of these courses, when they were included in the reports, were varied and suggested somewhat the content. For example, "Radio Speech Class" and "Senior English Class" clearly indicate the emphasis of the classes; radio procedures were perhaps a means or a method for achieving the desired speech or English results. The objectives, when indicated, also suggested the content of the courses. Usually the classes in radio were preparing programs for broadcast over a local station; the programs were either for public relations or for displaying student talent. However, a few schools apparently did offer courses of study which included radio theory and techniques, announcing and acting, and writing "their own scripts." The lack of instructional materials for classes was mentioned only twice. These indicated that their teachers gathered what could be found and a syllabus was prepared for their students.

6. Radio clubs.--Compared with the thirteen times the word "class" appeared, it is interesting to note that clubs were mentioned fourteen times. These clubs were given a variety of names, such as Radio Guild,

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Radio Club, Radio Committee, Radio Workshop; and one was called the Journalism Club. The most often used title: "Radio Club."

7. Broadcast facilities within the school.--The facilities used were mentioned frequently; only one reported that they had none. Those facilities ranged from "a room wired for broadcast" or a "radio booth" to studios and direct lines from the auditoriums or music rooms to the local stations. Only two superintendents gave any indication as to the quality of what was being broadcast. One said theirs was "good" and a second reported theirs was "very poor" and "since it took so much time, the program was being dropped."

8. Motivation for student broadcasting activity.--Many of the reports pointed out that a school became involved in broadcasting when the local station either asked for a program or just offered the schools time for a program. One speech teacher's enthusiasm for radio, after she attended the first Adult Workshop offered by New York University in 1936, inaugurated the activity in her community. Interest was generated by two departments of science.

9. Additional information.--Thirty-one cities, in the 126 studied, had detailed reports about their in-school use of radio programs but failed to indicate any use of local students. The larger cities tended not to include any mention of student activity; whereas the smaller cities emphasized that portion of their radio education programs. This should not be interpreted to mean that the larger cities concentrated on in-school use of radio to the exclusion of any other radio activity;

it does perhaps indicate where their major emphasis was. Evidence that there was student activity in larger cities came from Detroit; that report indicated that "practically all the high schools and intermediate schools have radio clubs." Nor should it be interpreted that the smaller cities made less use of the broadcast program in their classrooms.

Some of the thirty-one reports suggested that there was a considerable amount of activity but there was no definite policy regarding that activity.

The efforts to secure radios and to make plans for informing teachers about the programs were impressive.

One superintendent was very interested in adding radio activity to his school system, but he "was voted down."

Another interesting point which was noted was the fact that so many superintendents were directly involved in these student activities. They supervised students' scripts and helped prepare bulletins for teachers.

Even "acts of God" caused schools to become involved in broadcasting. Three fires, an earthquake, and a janitor's strike resulted in the schools concerned broadcasting lessons to students in their homes; credit was given when the assigned work was presented at school later.

To sum up the Atkinson report of these schools and their radio education activities and policies, which may be considered as representative of all the American schools, it must be admitted there was an awareness of radio as a tool for education's use. Educators were experimenting in various ways, such as using the network programs or preparing their own

for in-school use, and broadcasting programs to interpret the schools to the community. The lesser emphasis seemed to be upon broadcasting as a course of study, although educators apparently recognized broadcasting as a valuable extracurricular activity.⁴³

From this study of approximately ten percent of the American public schools' policies regarding radio education prior to 1939, the following conclusions may be made.

1. The lack of policy, the lack of definite objectives, and the lack of assigned responsibility for the radio activity seems to be most prevalent.

2. The majority of schools had students involved in broadcasting activity even before 1939. Responsibility for such activity was generally placed upon the English, music, speech, or journalism teachers, or departments. Results of such activity were not included in sufficient cases to make any conclusions.

3. So few indicated their objectives in sponsoring student broadcasting activity that it is difficult to reach any conclusions. From those seven that did make specific statements, it may be assumed that the general purposes were to provide opportunities for training in the generally accepted areas of speech (speaking, acting) and to provide opportunities for music and dramatics students to perform. Minor objectives might be said to be the study of the technical aspects of

⁴³These conclusions were reached after analyzing Atkinson's 126 individual reports and are not included in his own summary. These particular items seemed pertinent to this particular study.

radio, to raise the standards of appreciation, and to provide writing experiences.

4. There seemed to be no strong trend towards either a class or a club, but there was definitely some organized effort to supervise the student projects. In the small majority of schools, this activity was extracurricular; however, there were sufficient instances of classes being offered to conclude that there was some trend towards a curricular offering as early as 1939. In some cases, this was work in conjunction with another course, such as English, speech, or dramatics.

5. The lack of instructional materials was apparently no major problem.

6. By 1939, apparently a few teachers had had some college training or commercial experience.

7. Apparently, schools had adequate facilities for teaching, and for preparing their broadcasts for local station use and for in-school programs.

8. The initial impetus for much of this student activity came from local stations' invitations to use their facilities.

9. The larger cities seemed to have very elaborate policies and plans for utilizing the broadcast program; whereas the smaller cities tended to emphasize student activities and through them to do some public relations work and some in-school programming.

Atkinson himself reached the following conclusions from his study of broadcasting activities in the public schools:⁴⁴

⁴⁴Atkinson, Development of Radio Education Policies in American Public School Systems, pp. 211., publishes the 126 individual reports

1. Nearly half (46.6 percent) of the school systems represented were broadcasting over local stations, varying from a few programs a year to a schedule of several programs each school day.

2. Broadcasting was done more frequently by older students than younger students; although his findings indicate there was a considerable amount of activity at the elementary level.⁴⁵

3. Apparently schools were beginning to offer classroom instruction in radio techniques for academic credit; eight schools reported this practice.

4. The percentage of schools doing some broadcasting seemed to rise sharply and steadily as the size of the city increased. Most of this broadcasting was for in-school use. About half of the school systems studied used radio in the dual role of classroom utilization and as an activity for pupils; fourteen and one-half percent (14.5 percent) used radio in no way; and only two and one-half (2.5 percent) failed to cooperate with the investigation.⁴⁶

Among Atkinson's final conclusions which are pertinent to this study are these:

from superintendents. Also, Education by Radio in American Schools, (Nashville, Tennessee: George Peabody College for Teachers, 1938) is his published conclusions from his study of 1227 school systems. See Atkinson, op. cit., pp. 107-123. Of these, 571 systems reported activity in broadcasting by their schools. He found that 68.6 percent of this activity was by high school students. It is also interesting to note that the FCC had licensed 714 stations as of 1938 in 439 cities. The FCC reports 747 licenses at the end of the year, 1938. See Table 1.2 in this study.

⁴⁵Atkinson, Education by Radio in American Schools, op. cit., pp. 48-50.

⁴⁶*Ibid.*, pp. 3-4, 113-114.

1. Radio is an important instructional tool in modern education and one that will receive increasing attention from professional educators.
2. Radio is proving to be a constructive influence in the teaching of related school subjects: English, speech, history.
3. The radio expert is beginning to enter into educational organizations as a specialist in both broadcasting and classroom reception techniques.
4. Public school systems are best adapted for the planning and production of in-school programs.
5. Public school broadcasting policies should be planned so as to use the services of as large a number of students as possible, consistent with the presentation of creditable performance.⁴⁷

Many of Atkinson's conclusions were on solid bases and his prophecies are now fact. Radio (and television) is accepted as an important instructional tool and of value to many related subjects (even more than those he listed). Broadcasting by and for education is receiving more and more attention by educators. The period of "trial and error" was ended; a period of study, and evaluation, and planning was ahead.

The curricular use of radio by the secondary school was such a vital subject of interest and discussion, the entire January 1939 issue of Educational Method was devoted to this topic. Detroit's Western High School's experience was reported in this issue by Arthur Stenius, a faculty member. Discussing their aims and procedures, he wrote:

When a person uses the term 'radio in education,' he usually intends to convey some thought of dealing with educational method rather than one concerned with subject matter offered to students.

⁴⁷Ibid., pp. 17-123.

Yet, radio must be recognized as much more than teaching techniques in the schools of today.⁴²

Stenins pointed out that the colleges and vocational schools were teaching radio as a vocational subject and indicated that he believed they should; he regretted that the secondary schools were slow in recognizing their students' needs.⁴³

It is interesting to observe today that some of the city school systems which are leaders in the ETV movement were leaders in the early days of radio, both in the station operation activity and in developing radio curricula; some of these are New York City; Cleveland and Columbus, Ohio; St. Louis, Chicago, and Portland, Oregon. These school systems have a long history of developing a broad program of broadcast activities and study.

Reports of activity in broadcasting by high school students after the late thirties are not as numerous as they were before that date. Apparently no study similar to the Atkinson study has been made. There are, however, individual reports about schools and their broadcasting activities. Many of these are listed under "workshops." The AER Journal, the Quarterly Journal of Speech and Senior Scholastic Magazine are largely responsible for these reports. Levenson and Stasheff, Jennie Callahan, Lassarfeld, Woelfel and Tyler are some of the investigators who have reported on this activity. Some other periodicals which have occasionally

⁴²Arthur Stenins, "Radio Units and Courses in High School," Educational Method, XVIII (January, 1939), p. 171.

⁴³Ibid.

included articles on student activity are The Instructor, the Curriculum Journal, The Bulletin of the National Association of Secondary School Principals, the School Board Journal, and Sponsor. These examples indicate a wide range of source-interest, such as Speech Association of America, the curriculum and administrative areas of education, and the radio industry itself.

It is possible to establish a meaningful pattern of public school activities between the late thirties and early fifties by examining the individual cases from such cities as Detroit, Minneapolis, Cleveland, and others, as well as projects carried out by the Michigan Association of Teachers of Speech and similar organizations.

The Detroit school system has long been radio conscious. Before 1938, it was reported that "practically all the high schools and intermediate schools have radio clubs."⁵⁰ A report of Western High School's work in 1939 indicated that their course integrated the sociological aspects of radio into their civics, economics, literature, and composition classes; thus the entire student body received some insight and understanding of the broadcast medium. Later a course was inaugurated whose aim was to give a "true concept of the magnitude and importance of the industry" and consider certain phases vocationally. The basic units of this course were:

1. The physical science of radio,
2. History of radio,

⁵⁰Atkinson, Development of Radio Education Policies in American Public School Systems, op. cit., p. 63.

3. Broadcasting as an industry,
4. The uses of radio in advertising, education, entertainment, war, at seas, etc.,
5. Government regulations,
6. International radio, and
7. Vocations in radio.⁶¹

It seems that this course was about radio and not in radio.

Apparently it was a survey course and not an activities course which taught the skills of broadcasting.

By 1945, an experimental course, offered as an elective, was developed to cover a semester's study. The content of the course included physical science, history of radio, station operation, use of radio, government administration, international radio, short-wave broadcasting, television, and a vocations study.⁶² Apparently the course content did not change very much between the mid-thirties and the mid-forties.

Interest in radio was high in the Minneapolis high schools in 1939. Schools were taking radio into account and finding it a valuable study. In addition to a workshop, units on radio were introduced into English, speech, and drama courses. They found the insertion of radio into the drama classes to be the most practical; here six weeks were spent on radio. Students of the class were able to use the high school's sound system and the local radio stations as outlets for their productions. Teachers admitted that an exhaustive study of radio could not be made in thirty days, but it was felt that this survey would serve as a stimulus

⁶¹Stedins, loc. cit.

⁶²Norman Woolfel and I. Keith Tyler, Radio and School, (New York: World Book Company, 1945), p. 173.

to the students to continue a study of radio on their own time. The results reported from this program were that students appreciated the opportunity to take such a course and indicated that it gave them an overall idea of the importance of cooperation. Teachers reported that it provided an activity for the components of the English course, such as reading, writing, speaking, and a direct approach to the problem of listening.⁵³

Evidence that radio as a course of study was being recognized by the secondary schools of the nation is found in the fact that in 1938, the Michigan Association of Teachers of Speech appointed a committee of five people in the fields of teaching, research, and professional broadcasting to present an outline for a one-semester course in Radio Speech.⁵⁴ This committee presented a detailed outline which was later published in the Quarterly Journal of Speech.⁵⁵

The committee agreed on four basic factors prior to their formulation of such a course:

1. A course in Radio Speech should be a course for advanced students.
2. Students should show a speech aptitude.

⁵³Arth Wethercott and Donald Bird, "High School Radio Workshops," Educational Method, XVIII (January, 1939), pp. 176-7.

⁵⁴Those five people were Aleath H. Garrity, teacher in the Lansing High School; Garnet Garrison, professor of Radio and Speech at Wayne University; Axel Grunberg of Station WWJ, Detroit; Edgar Willis of the Research Department of the Detroit Board of Education; and Cyretta Morford of the Detroit Public Schools.

⁵⁵Aleath Garrity, Garnet Garrison, Axel Grunberg, Edgar Willis, Cyretta Morford, "Suggested Course Outline to be Covered in one Semester Course in Radio in High School," Quarterly Journal of Speech, LXIV (April, 1938), pp. 294-299.

3. Students should have a speech background.
4. This course should not be a substitute for speech fundamentals.⁵⁶

They next listed their objectives for such a course:

1. To develop qualities of speech significant in radio.
2. To give fundamental training in specialized and professional fields "which may be built upon, rather than replaced, should the student decide upon radio broadcasting as a career."
3. To insure greater appreciation of radio.
4. To furnish a background necessary for understanding and appreciation of radio's continuous changes.
5. To cultivate an intelligent appreciation of one of our most democratic institutions.⁵⁷

The committee outlined a course of five basic units; they suggested the activities and the amount of time that should be spent on each.

Unit I was a survey of psychological factors to be covered in two weeks. Units II and III were, according to the authors, the most important units. Unit II was a four weeks' period spent on reading with the aim of gaining control over speech factors. Unit III was a six weeks' period spent on speech composition. An oral test was recommended for units II and III. Unit IV covered a two weeks' period on acting. Producing a play was the project. The final unit of five weeks had as its aim, the coordinating of all the skills learned by a continuous group of programs.⁵⁸

In evaluating this course, it must be remembered that the assignment was to prepare a course in "radio speech." Therefore, in terms of that frame of reference, the committee has offered a practical course. In terms of a course in radio or broadcasting, the course reviewed fails to

⁵⁶Ibid.

⁵⁷Ibid.

⁵⁸Ibid.

offer some phases of the subject matter, radio, that probably should be included, such as a survey of the sociological significance of the medium. These areas were included in the Detroit courses reviewed. It must also be remembered that the Michigan course was designed for students who had some speech training and some speech aptitudes. Therefore, the new content and skills that were specifically radio oriented could be presented much faster than they could to a class with no speech background. In unit V, a continuous series of programs is suggested in order to bring into play all the skills learned. Nowhere in the details of the course were such skills as the following mentioned:

1. The skills necessary in writing the routine show.
2. The skills to be learned in the use of music and sound effects in the production of the dramatic show.
3. The skills in reporting and delivering the news.
4. The skills of interview and discussion.

It seems that a course in radio should include the training for such skills. Also, a study of vocational and career opportunities should, perhaps, be included. This kind of study in high school courses, unless they are specifically located in the vocational training areas, is sometimes frowned upon by educators; this philosophy stems from a belief that the high school program should not be vocationally slanted, that it should be broad and general because it is terminal education for more than half their students.²² However, the writers of this course included as one

²²The high school years are the period in life when the young person is surveying his interests and talents, looking for his future work; therefore it is the responsibility of every high school teacher "to open as many doors" to the future as possible. This does not mean a detailed study is necessary.

of their objectives, to give specialized and professional training for a career in broadcasting should the student choose such, "which may be built upon rather than replaced." This is most desirable. But nowhere in the course outline was such a study prescribed. Of course, a course may be vocationally slanted by teaching proper techniques and skills without presenting a study of job opportunities and requirements. If the Michigan outline intended such a presentation, it would then meet its second objective.

Proceeding chronologically, the next noted evidence of curricular interest in radio was in New York City's high schools. For several years prior to 1944, the students in the city's fifty-four academic high schools and twenty-six vocational high schools had auditioned regularly for membership in the All-city Radio Workshop. Members trained for actual broadcast experiences over WJKE, the city schools' radio station. "In September, 1944, the Board of Education set up six advanced courses, carrying credit, in collaboration with NBC. The CBS network joined the school board in its efforts to expand the broadcast experiences available for high school students."²⁰

The Board set a four-point objectives

1. To enrich teaching.
2. To provide for experimentation.
3. To help set standards of evaluation.
4. To offer means for regular appearances.

²⁰Edward Stanheff, "Television and High School Dramatics," Quarterly Journal of Speech, LXI (December, 1945), p. 490.

The Board's policy was to build a unit of trained youngsters so that the school station's professional staff could use them in their programs produced for in-school use. This cooperation with and by the commercial stations produced the realization that radio and television must be recognized in American schools' broadcasting policies.

By 1945, the advanced courses in radio offered by New York City high schools included units on television techniques. Reporting on this fact, Stasheff writes, "We have boldly added television techniques to our most advanced course in radio production"; in Schenectady, high school students "face the cameras in General Electric's WGB studios regularly."²¹

The team of Woolfel and Tyler, writing in 1945, reviewed some of the curricular progress to date; they reported this about the Rochester, New York program of study:

Probably the most significant development in the curricular use of radio--at least outside the fields of science and of vocational education--has been the experimental tenth-grade curriculum in Rochester, New York. Here the work in Grade 10 is centered around the 'influence of the radio upon life and thought' and a definite attempt has been made to plan a curriculum utilizing the many educational opportunities offered in radio listening and radio production. Rochester teachers who planned and wrote the course expressed their purpose as being two-fold: 'To make of leisure-time listening an educative experience and to vitalize and motivate oral and written composition by the use of radio techniques.' These teachers go on to point out that a 'radio unit in a course of study may no longer be considered an unwarranted innovation. We live in a radio centered world. . . .'²²

²¹Ibid.

²²Woolfel and Tyler, *op. cit.*, p. 176.

Cleveland schools have been pioneers among American school systems in formulating and carrying out definite radio education policies. Experimentation with the use of the broadcast program within the classroom began as early as 1925. A Rockefeller Foundation grant made possible the acquiring of an ultra-high-frequency radio station (established by the FCC especially for education in 1938). Cleveland's WBOE began broadcasting operations in late 1938; today WBOE is one of the leaders in in-school broadcasting.⁶³

Parallel with this development of radio's in-school use by the Cleveland schools, elective courses of instruction in radio were offered as early as 1933. By 1945, their radio courses included appreciation, voice and diction work, and script writing.⁶⁴ By 1949, twelve of the city's high schools were tied together in a central workshop by their use of station WBOE, the school's station. The workshop activities centered around the preparation and production of four types of scripts:

1. Administrative bulletins and announcements.
2. Promotional drives for extra curricular activities.
3. Instructional scripts, prepared by invitation of another department or for WBOE for in-school use. ⁶⁵
4. Original scripts for "broadcast assemblies."

World War II had its effect upon the high school curriculum just as it affected other facets of American life. It caused the curriculum to be revised and adjusted in terms of the needs of the times. Its specific

⁶³Atkinson, *op. cit.*, pp. 69-74.

⁶⁴Levenson, *op. cit.*, p. 39.

⁶⁵"High School Radio Workshop," *Senior Scholastic*, LIV (September 18, 1949), p. 18T.

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⁶⁵"High School Radio Workshop," *Senior Scholastic*, LIV (September 18, 1949), p. 187.

effect upon radio was cited by one high school teacher as follows:

Because radio is essential in modern war, the radio class suddenly has been lifted to a higher status in the new high school curriculum.⁶⁶

The end of the war brought many changes too. FM and TV had emerged; the FCC had reserved channels in both media (FM in 1945 and TV in 1952) for education's exclusive use; colleges were expanding their curricula in broadcasting;

Not to be outdone by the colleges catering to student interests, many high schools are now offering courses in radio, some unfortunately with no other specific objective than a desire to appeal to public interest. Course content is frequently left entirely to the discretion of the teacher, usually the speech teacher, whether or not he has any sound knowledge or experience in the field of broadcasting.⁶⁷

During the forties, educators were doing some serious thinking about curricula. Numerous institutes and conferences during this period attest to this fact. Although high schools were not as intensively interested and active, there was some concern about radio's place in the curricula and there was some activity. Some schools were actively interested in establishing FM stations. A number of schools were establishing high school workshops. A few were adding courses to their curricula or including units of radio study in related courses.

That this was the trend is reflected by the many articles and speeches which appeared at this time. A speaker from the professional

⁶⁶Cyretta Norford, "Radio Classes in the High School War Time Program," *Quarterly Journal of Speech*, XXIX (October, 1943), p. 283.

⁶⁷Norford, "Why Not Begin at the Beginning?" *Ibid.*, XXXII (February, 1946), p. 55.

broadcasting field indicated that "more than a thousand high schools" were offering some kind of training and experience in radio skills.⁶⁸

A professional educator noted the increased radio training being offered by high schools:

While hundreds of high schools throughout the country now sponsor Radio Workshops or Broadcasting Clubs, many have incorporated the actual intensive study of radio in the curriculum, usually as an elective. . . .⁶⁹

Typical of the kind of statements being made was this one from Elisabeth Marshall of WBEZ, Chicago's school station, "Radio workshops are becoming increasingly popular throughout the country."⁷⁰

Another trend-revealing statement comes from Jennie Callahan, in her book, Radio Workshop for Children:

With a little encouragement from administrators and teachers many state boards of education would lend their support to school systems wishing to establish radio workshops. A number of state boards of education are interested in setting up FM stations that would make facilities available to a great number of their schools. Some state boards admit that they are discouraged in their planning by conservatism and lethargy in many of their schools. Others are hesitating, on the strength of the myth that good radio programming is beyond the scope of the average educational system.

School workshops with local station cooperation, are combating this disturbing accusation. Pioneer school systems that have established radio departments say the placement of radio in their schools and their weekly schedules offer sufficient proof to

⁶⁸Hale Aarnes and Kenneth Christensen, Problems in College, (Columbia, Missouri: Stephens College, 1948), p. 53. Miss Grace Johnson, Manager, Continuity Acceptance, American Broadcasting Company, was speaking.

⁶⁹Dorothy Halgrave, Speech for the Classroom Teacher, (New York: Prentice-Hall, Inc., 1946), p. 373.

⁷⁰Elisabeth Marshall, "Radio Services the Language Arts," Education, LXVII (May, 1947), p. 560.

please the skeptics. As soon as educators remove the handicap of skeptics in their ranks and train themselves in radio techniques, they will prove their own ability to fit broadcasting brilliantly into our national educational pattern.⁷¹

Gertrude Broderick made this observation relative to public school interest when she cited the performance of superintendents at a School Broadcast Conference:

Increased interest by school administrators was noted at the recent School Broadcast Conference in Chicago when three city school superintendents from different parts of the country discussed the subject . . . (radio).⁷²

Obviously, then, the years between 1939 and 1952, were marked by a slow, steady, unspectacular growth in curricular interest and development of radio as a course of instruction in the high school. Content was being examined and evaluated; procedures and activities were being developed experimentally. This development of curricular content was a solid basis upon which to build. The "trial and error" period had long passed. Passive resistance from those who either feared the consequences or could not envision such a study in the curricula was no longer a factor. Prejudice based on a philosophy of established disciplines, and resistance that is normal human behavior to new ideas, had been overcome. Broadcasting as an entity within itself, as a discipline of academic merit was now establishing its own methods and techniques of instruction, its own set of values and objectives.

⁷¹Jennie Callahan, Radio Education for Children, (New York: McGraw Hill Book Company, 1948), p. 316.

⁷²Gertrude Broderick, "Radio in the Curriculum," School Life, LXXX (April, 1947), p. 28.

Although this study is specifically concerned with radio as a course of study in the formal curriculum, the radio workshop as a related activity must be considered. Very frequently the term "workshop" is used to indicate a cocurricular or extracurricular activity. However, "workshop" is frequently used in reference to a laboratory or activity type of course. Therefore the term, "radio workshop," is sometimes used when the writer or speaker is talking about a course of study for academic credit. Because of this confusion, it is difficult to separate the two programs. In fact, in today's high school there seems to be a "vanishing wall between courses and extra activities."⁷³ Today's high school is going through an evolution of "growing emphasis on extracurricular activities, but with an unwarranted dichotomy between curriculum and extracurricular activity."⁷⁴ Some of these emerging developments are recognized by the Office of Education in the following statement:

Old labels cover a wide variety of new educational experiences. Social studies include current events, use of community resources, consumer education, . . . English has gone far beyond grammar and rhetoric and a study of classics. Most school subjects have become broad fields of learning.

.....
Once sharply marked, the dividing line between curriculum and extracurricular activities has become blurred. The glee club, band, and orchestra have now become part of the curriculum. Student publication activities have been absorbed into journalism courses, . . . The curriculum has increasingly included learning activities carried on outside the school building.⁷⁵

⁷³J. E. Shannon, "The Vanishing Wall Between Course and Club," *Clearing House*, XVII (September, 1952), p. 8.

⁷⁴~~ibid.~~

⁷⁵Office of Education, *A Look Ahead in Secondary Education*, Bulletin No. 4, 1954, "Emerging Developments in the Secondary Education Program," (Washington, D. C.: Government Printing Office, 1954), p. 79.

Although this study is specifically concerned with radio as a course of study in the formal curriculum, the radio workshop as a related activity must be considered. Very frequently the term "workshop" is used to indicate a cocurricular or extracurricular activity. However, "workshop" is frequently used in reference to a laboratory or activity type of course. Therefore the term, "radio workshop," is sometimes used when the writer or speaker is talking about a course of study for academic credit. Because of this confusion, it is difficult to separate the two programs. In fact, in today's high school there seems to be a "vanishing wall between courses and extra activities."⁷³ Today's high school is going through an evolution of "growing emphasis on extracurricular activities, but with an unwarranted dichotomy between curriculum and extracurricular activity."⁷⁴ Some of these emerging developments are recognized by the Office of Education in the following statement:

Old labels cover a wide variety of new educational experiences. Social studies include current events, use of community resources, consumer education, . . . English has gone far beyond grammar and rhetoric and a study of classics. Most school subjects have become broad fields of learning.

.....
Once sharply marked, the dividing line between curriculum and extracurricular activities has become blurred. The glee club, band, and orchestra have now become part of the curriculum. Student publication activities have been absorbed into journalism courses, . . . The curriculum has increasingly included learning activities carried on outside the school building.⁷⁵

⁷³J. R. Shannon, "The Vanishing Wall Between Course and Club," Clearing House, XVII (September, 1952), p. 8.

⁷⁴Id.

⁷⁵Office of Education, A Look Ahead in Secondary Education, Bulletin No. 4, 1954, "Emerging Developments in the Secondary Education Program," (Washington, D. C.: Government Printing Office, 1954), p. 79.

The principles of modern education are realistic in their approach to the learning process. They seem to accept a belief that education is an activity that is instructional, purposive, and significant to the student. Modern education accepts the fact that the broad range of activities within and without the classroom are learning situations, that each motivates and implements the other. Hence the radio club or workshop becomes a classroom regardless of credit granted.

Since the distinction between the two is so insignificant (credit and time of meeting appear to be the major differing factors) and because both the course and the club are prevalent in today's high schools, they are considered together within the framework of this study. However, wherever possible, the distinction between the two will be considered.

The appearance of the workshop or club was a normal procedure. Several factors seem to be responsible for their mushrooming. As has been reported earlier, many schools obtained their own broadcast licenses because of the interest of a group or person within the school. The station provided a laboratory for that interest.

Once the station was established, programs were necessary; so other students and sometimes faculty members became involved. A lack of know-how caused some stations to cease operations; others turned to available agencies for help. For example, they turned to the various services of the United States Office of Education for scripts and production help.

These radio workshops or clubs developed in another way. With the advent of radio, the possibility of presenting programs by the schools,

to spell out their goals and problems, opened up new avenues of communication between school officials and their communities. These public relations programs became, and still are, a large portion of the school broadcasts.⁷⁶ But programs need talent and directors. At first, adults were used almost exclusively, then the school child was used.⁷⁷ The speech, theater, music, or English teacher was the most logical person to direct such programs; one of these usually received the assignment.⁷⁸ Then in order to have a group trained and coordinated for producing the necessary radio program, the teacher did the most logical thing, formed a group of students interested in the various phases of broadcasting (writing, acting, speaking, music, sound effects, simple board operation, etc.), into a club or workshop or team. In turn, these groups frequently wanted to produce more than the occasional public relations program required of them; consequently they produced, in cooperation with local stations, a series of shows with student talent (news, music, drama, group discussions).⁷⁹

⁷⁶The Office of Education made a survey of the television programs produced over commercial stations by educational institutions in 1955-56 which revealed that at least 32% had public relations as their reported purpose.

⁷⁷Atkinson, *op. cit.*, p. 2.

⁷⁸Karl Robinson, Teaching Speech in the Secondary School (2nd ed.), (New York: Longmans, Green and Company, 1954), pp. 99-100. Robinson, and others, point out the possibility of such assignments to the future speech teacher and advise preparation.

⁷⁹It is common practice today in cities where there is a school-owned station and where there is a definite policy and program for in-school use of broadcasts to recruit talent for these in-school programs from a central high school workshop. New York City, Detroit, St. Louis, Cleveland are examples of such practices. Students from all high schools generally audition to become members of the central workshop. Generally, many of the individual high schools will have their own training workshops.

Workshops developed sometimes through another chain of circumstances. Development of Rd and TV resulted in more hours of listening. Teenagers became interested in learning about this new tool of communication. Their regular class program at school did not offer an opportunity for such study, so they prevailed upon some teacher with allied interests to sponsor such an activity. Eventually, a club or workshop was established in order to have a framework within which to plan the activity. In some cases, an administrator would appoint some teacher to sponsor the activity, after student pressure for such indicated to him it was warranted. Or in some cases, a teacher's enthusiasm for radio would fire the students' interest and a club would result.

As has often happened, these clubs or workshops would eventually request a class in order to gain status and to have more direction from a teacher than is generally permitted in the extracurricular program.

Many subjects in today's curriculum were originally extracurricular activities. For example, the high school newspaper and yearbook, the annual school play, the band and orchestra were once produced by interested groups in after-school hours.⁸⁰ Today, they generally appear within the curriculum as courses in journalism, dramatics, and music.

Since it is apparent that there is a trend in modern secondary education towards the disappearance of the wall between course and club and since there is the dual use of the term "workshop" to indicate both class and club, it seems advisable to attempt to define a "workshop" and to try

⁸⁰Office of Education, Bulletin No. 4, 1954, A Look Ahead in Secondary Education, pp. 411.

to discover the relation of a workshop to the school in general, to the speech areas in particular, and to other related areas.

There seems to be some disagreement as to the meaning of "a workshop." Ben Darrow defines a workshop as a "grouping of people interested in the better broadcasting of scripts now available."⁶¹ Sherman Lorton calls it "... a place where a group get a program ready."⁶² Edgar Dale classifies workshops as formal and informal groups; the formal workshop actually broadcasts and the informal workshop is one which studies, observes, and simulates.⁶³ Levenson reports that educators are generally enthusiastic about workshops; he defines them according to a statement from the Committee on Radio Workshops of the National Advisory Council for Radio:

The radio workshop is a laboratory for experimentation and training in broadcasting techniques and education content. The experimental phase of the workshop deals with materials of learning suitable for radio use in terms of the interests, of general radio listeners, and of large special groups; with effective broadcasting techniques, including preparation of materials and their presentation; with methods of stimulating listener interest, of organization of listening groups, and of encouraging cooperation with existing social agencies, such as schools, civic organizations, governmental bodies, women's clubs, and commercial groups, and with the improved use of studio equipment, and radio facilities generally.⁶⁴

These definitions, when they are analyzed, are not contradictory.

In essence, they seem to indicate that workshops are laboratories, a

⁶¹Ben Darrow, "Radio Workshops--Next Step," American School Board Journal, XXIV (December, 1938), p. 38.

⁶²Thomas Risworth, "Radio Workshops," Education on the Air. (Columbus, Ohio: Ohio State University, 1940), p. 262.

⁶³Edgar Dale, Audio Visual Methods in Teaching. (New York: Dryden Press, Inc., Publishers, 1946), p. 292.

⁶⁴Levenson, op. cit., p. 223.

place where scientific or technical work is done. In the case of radio, one should add that a workshop is a place where artistic endeavors are attempted or created, where learning takes place either vicariously or under supervision, or where there is learning that occurs through activity and the use of equipment as opposed to learning by reading and from lectures. Academic credit for such work is not an important factor.

In some modern classes or clubs all the foregoing benefits occur; in others, one or a combination of the preceding occurs.

So it is understandable why the term "workshop" is applied to classes as well as to clubs; they are places where there is activity which is meaningful for the individual and which uses specific equipment to accomplish that end.

Obviously any results or values that may accrue from such activity would be similar, whether the activity is in a class which grants credit or in a club that the individual student has voluntarily joined. The values of such activity are discussed later in this study.

The 1950's brought television and an increased momentum in in-school use of radio and television. The F1 school station movement was just gaining momentum. Television brought an increased awareness of the broadcasting media's potential for education. Leading high school speech texts were revised to include units of study on television. High school workshops began to include television work. If real studios and cameras were not available, designs for sock-up cameras were. The story of radio was being repeated.

Pittsburgh is a city that has long been radio conscious. From the construction of KDKA, the first licensed radio station on the air, to its educational television station, WUPD, there have been a long series of broadcasting events to make this city and its schools radio and television conscious.

Examples of how this radio consciousness has spilled over into the schools and colleges are the establishment of the municipal station WUPD, (which is now seeking to put a second station on the air in that city), Duquesne University FM (2.75 KW, WDUQ) station, and its Catholic High School Workshop.

A radio course in the nature of a workshop was established in the early fifties as one of the major activities of the Federation of Catholic High Schools. Using one fully equipped studio, students from forty-three Catholic high schools attend classes on Saturdays and Sundays. They broadcast their programs over WDUQ, Duquesne University's educational radio station.⁸⁵ The objectives of this work were "to give preliminary training in radio, practical experience in theory, opportunity for rehearsal and preparation for student broadcasts."⁸⁶ The course offered work in techniques, acting and writing and for the advanced students, there was the additional experience of assisting in the teaching duties, and directing and producing for broadcast.

⁸⁵WJSH, New Castle Schools, purchased Duquesne's 10-watt transmitter in 1950 when WDUQ obtained permission to operate with 250-watts.

⁸⁶Miss Mary Rosalie, S. C., "Pittsburgh's Radio School for High School Students," Catholic School Journal, LII (January, 1952), p. 11.

A study performed in 1951, designed to discover the trends of radio in the high school curriculum, especially emphasized the progress in the state of Texas. It was assumed in that study that the state as a whole had no policy regarding radio in the curriculum. Apparently the state department is making an effort to help schools establish radio in their curricula and have set forth the following objectives for such an offering:

1. To launch the individual on a career in the field of radio.
2. To give the student actual experience in the production of radio programs.
3. To encourage the student to feel confident of himself while "under pressure."
4. To develop better speaking habits of enunciation, pronunciation, diction, self expression.⁶⁷

Unit I covered the history of radio. Unit II was an introduction to a station by a visit and observation of that station and staff in operation. Unit III was a "voice and diction" study which used the general speech techniques for study. For activities, the outline suggested that students write and deliver the school's announcements. Unit IV was a study of newscasting and announcing. Unit V was titled "sound effects"; although it studied both music and sound and apparently some dramatic exercises. Unit VI concentrated on the production of plays. Unit VII was a vocations study.⁶⁸

⁶⁷William M. Shropshire, "Survey Analysis of Contemporary Trends in Educational Radio in Secondary School Program," (Unpublished master's Thesis, Texas Christian University, 1951), p. 51.

⁶⁸Ibid., pp. 61-62. A complete outline for Texas Teachers may be found in Bulletin No. 4, prepared by the Federated Radio Education Committee for Schools of the Air and Radio in High School Curriculum. This suggests a one-half year program covering history, speech, program evaluation, observation, and production.

As recently as 1952, Levenson and Stasheff reported that "a separate and distinct course in radio has as yet been tried in but few high schools."⁸⁰

It may be said then that generally speaking, radio, as a course of formal instruction, in the high school today, is not found in the majority of schools; where it is presented, it is an elective subject. But there evidently is a considerable amount of activity in the form of workshops and clubs. Another indication of the present status of radio courses in the high school comes from Robinson:

At present radio courses are taught in comparatively few secondary schools. It is not uncommon, however, for the speech teacher to include a unit on radio in the speech course, or to be responsible for radio and television shows in the school or over the local station outlets.⁸⁰

The fact that many of the established high school speech textbooks⁸¹ have been revised to include chapters on radio and/or television is evidence that educators deem the subject one that should be studied in the high school curriculum. This suggests, however, that speech courses should include units on broadcasting and that such work should

⁸⁰Levenson and Stasheff, *op. cit.*, p. 319.

⁸⁰Robinson, *op. cit.*, p. 405.

⁸¹Francis Griffith, Catherine Nelson, and Edward Stasheff, *Your Speech*, (New York: Harcourt Brace and Company, 1955).

Wilhelmina G. Haddo and William Norwood Brigance, *New American Speech*, (New York: J. B. Lippincott Company, 1957).

Low Saret, William T. Foster, and James H. Mahurney, *Speech*, (Boston: Houghton Mifflin Company, 1956).

Andrew T. Weaver, Gladys L. Borchers, and Donald K. Smith, *Speaking and Listening*, (Englewood, New Jersey: Prentice-Hall, Inc., 1956).

concentrate on the oral aspects of radio. Already it has been pointed out that radio techniques provide motivation and procedures for study in other courses; but as such this is not a study of radio. Therefore, the fact that speech textbooks in particular (and some English texts) include whole units of study (or a few projects) in broadcasting is indicative of the attitude of educators. In this respect, the fact that units of study of radio are recommended for inclusion within speech courses is good; but it is good only to a limited degree. It is limited because one or two chapters provides insufficient materials for one or more semester's work and because radio is not being studied as radio but as another subject matter. Radio as an academic subject is broad in scope and has its own disciplines and its own body of literature and research. It is an entity within itself worthy of recognition, and it should be studied because of its sociological effects upon our society.

There are two books available to the high school teacher for a course in broadcasting. The first, Radio English,⁸² is the only known text on radio especially designed for high school use. Here again, the inference is that this is an English book with a radio slant. Examination of the book confirms this suspicion. Exercises and objectives of various lessons are writing-, reading-, speaking-centered and -directed; the microphone becomes a tool for the end-product.

The second book, previously indicated as available for high school

⁸²Florence F. French, William B. Levenson, and Vera C. Rockwell, Radio English, (New York: Macmillan Book Co., Inc., 1952).

teachers of broadcasting, is Television: Techniques for Planning and Performance.⁹³ The authors of this book do not state that it was their purpose to provide a high school textbook, but the treatment of the subject is such that it can be used, to a limited degree, for such a purpose. Projects suggested are possible within the limits of a classroom; the organization is simple, logical, and instructive in such a way that a high school class could comprehend the subject and accomplish a certain amount of meaningful activity. But the book is limited; its subtitle indicates its limits as a book for studying only the techniques for planning and performing for television. So again, this book is not adequate for one or more semesters' study of broadcasting if one accepts the philosophy that a study of broadcasting must include both skills, and the economic, sociological, and ethical aspects of the field. One must accept this philosophy if the subject is to merit academic acceptance.

There are textbooks designed for collegiate use which can be watered down for use by high schools; but there is no book especially designed to meet the high school's needs in terms of student comprehension and limited studio facilities which meets the academic standards outlined in the preceding paragraph.

Close examination of the foregoing materials makes it readily apparent that most schools engaged in radio on the secondary level have a set of working objectives. Some of these objectives are stated by educators in terms of the values that obviously accrue from the activity in

⁹³Samuel L. Becker, H. Clay Harsbarger, Television: Techniques for Planning and Performance, (New York: Henry Holt and Company, Inc., 1958).

broadcasting, either curricularly or extracurricularly; some have made public record of their objectives.

It is obvious, after examination of the report of the activities, and the stated objectives and values, that among those who work directly with classes and workshops there is a wide range in philosophy. This is understandable; each set of objectives is a logical sequence to the events surrounding the entrance of broadcasting into a particular high school. The circumstances peculiar to each situation tended to shape and direct both the work done and the philosophy supporting the work done in classes and/or clubs. Hence goals were set in terms of reasons for the inclusion of such activity in the school's program.

Even though these objectives do seem to cover a wide range of educationally acceptable goals, they have certain commonalities. In fact, they tend to be more alike than different; those differences evolved out of those circumstances which created their philosophy.

The basic philosophy which seems to support nearly all the broadcasting activities in high school may be stated rather generally.

Broadcasting activity in secondary education should:

1. Continue the development of the language skills, particularly speaking and writing.
2. Motivate and provide opportunity for individual self-improvement in a variety of ways.
3. Provide an understanding of the industry, its operation, and its economics.

4. Create an awareness of the sociological implications of the industry.

5. Develop standards of evaluation and appreciation.

Most educators agree that such activity for high school students should provide a means for the continued development of language skills. Probably opportunities for speaking and acting are more readily available than for the other skills; however, experiences in writing are highly recommended. Only a few educators seem to recognize any potential for improving the listening skills by means of broadcasting activity.

Another commonality among the various objectives was the motivation for self-improvement that such activity should give to the student, and then should provide an opportunity for satisfying those needs. This process of socialization, so important to adolescents, is inherent within the nature of broadcasting because the broadcasting activity involves a group of individuals at different tasks, all working for a common goal. Elizabeth Marshall, director of the Chicago Schools' Central Workshop and Assistant Director of the school station, WBEZ, discusses at length the values of this activity. Concerning the possibilities for self-improvement, she says:

Such workshop groups are not ends in themselves. In addition to their being experimental labs for planning, preparing, and producing programs, workshops offer students immeasurable values, such as:

1. Cooperative working with a group
2. Submerging of the individual for the good of the group
3. Respect for right of others
4. Socialization
5. Getting along with others

6. Development of 'stick-to-it-ive-ness' and 'follow-through'
7. Acquiring a sense of timing
8. Sharing of responsibilities
9. Acquiring habits of promptness
10. Opportunity for development of confidence and poise, overcoming self-consciousness and rounding out one's individual personality.²⁴

Jennie Callahan emphasizes these same values; she writes of the dignity gained through achievement, of confidence gained, of personal assets and liabilities discovered, and what to do about them.²⁵ Nelson and Tyler list as one of their six values to be gained from such work: It "provides opportunity to develop poise and other social qualities."²⁶

One goal appearing less frequently, but often enough to be considered as a common objective, is that such activity should provide an understanding of the industry; its operation and economics should be made understandable to the student because of its importance and size in our American life. A second goal calls for the sociological implications to be studied; the student should gain an awareness of current affairs and the effects that broadcasting has upon them.

Group activity in broadcasting should also provide the student sufficient experiences under control and direction so that he may develop a set of standards for the selection and appreciation of what he hears, and develop some skills for evaluation.

²⁴Elizabeth Marshall, "Radio serves the Language Arts," *Education*, LXVII (May, 1947), p. 561.

²⁵Jennie Callahan, *Radio Workshop For Children*, (New York: McGraw-Hill Book Company, 1946), p. 293.

²⁶Edward Nelson and I. Keith Tyler, "Radio and Speech Education," *The Bulletin of the National Association of Secondary School Principals*, LXIX (December, 1945), p. 98.

These objectives, then, may be considered as the ones which are more generally accepted as the working philosophy for broadcasting activity within the high school, whether this activity is in classes offered for credit or offered within the framework of the extracurricular program.

There are, however, differences and variations in the objectives and values as set forth by educators. These should be considered but it must be admitted, as was previously pointed out, that these differences arise out of the circumstances peculiar to each school situation. Some of these need recognition here because of their educational significance and because they appeared more than once. Some of those objectives toward which broadcasting activity in the high school should be directed are as follows:

1. Provide an opportunity for regular professional performances.
2. Provide an outlet for the better quality work done in writing and acting.
3. Improve relations between the community and school.
4. Integrate the learner's experiences.
5. Develop an interest in the arts.
6. Contribute culturally to the student's life.
7. Motivate a study of English and American literature.
8. Stimulate an interest in various phases of contemporary life.
9. Aid the school with broadcast materials, talent, and techniques.

This wide variation of objectives should not suggest that because one school does not offer most of them, that that particular program is not as effective as one which does tend to include more. Rather, this list suggests there is a wide variation in programs and that the reason for such scope is that each program may be coordinated with the total school program of that situation.

Frequently objectives are stated in negative terms. Some educators seem to feel that their philosophy should indicate some functions that should not be included in a program of broadcasting activity. For instance, Levenson and Stasheff have this to say regarding the radio workshop:

. . . the high school workshop is not, and should not be, primarily vocational in its intent. The demands of the radio industry being what they are, both quantitatively and qualitatively, any attempt to do more than mention such employment is, in the writers' ⁸⁷ opinions, quite unfair both to the child and the radio industry.

This attitude towards the workshop seems to be in the minority.

Among the many who do recommend vocational training as one of the objectives for high school broadcasting activities was the Michigan Association of Teachers of Speech; their proposed outline for a semester's work in radio specifically stated that such work should give fundamental training in specialized and professional fields "which may be built upon rather than replaced should the student decide upon radio broadcasting as a career."⁸⁸

After making a study of high school radio workshops and courses, William Shropshire draws the following conclusions:

⁸⁷Levenson and Stasheff, *op. cit.*, p. 306.

⁸⁸Gerrity, Harrison, et al., *loc. cit.*

Generally, the workshop programs are designed to serve as an outlet for work accomplished within the school, to show the place of the school within the community, or to serve as educational programs for adult audiences. Perhaps the best creative work is done for special occasion programs when the aim of the program is not to justify or supplement education, but rather to explore and define the high school student's conception of the abstract qualities of life.⁹⁹

Levenson and Stasheff reviewed a number of workshop objectives and concluded that inasmuch as the student will be a constant radio consumer workshop activity should aid the student to be an intelligent consumer. This implies the development of critical thinking, intelligent discrimination, and appreciation.¹⁰⁰ Secondly, the workshop can and should challenge the creative abilities of the student. In other words, they see the workshop's objectives in terms of what it can do for the student:

The radio workshop can serve as a practical project for the development of skills, in both writing and speaking. It is a 'natural' for the teaching of English; it affords opportunities for the development of desirable attitudes, among them punctuality and reliability; it demonstrates the interrelationship in subject matter; and it provides experiences which in turn make for a more intelligent response to a major influence in modern life.¹⁰¹

And thirdly, they conclude that the workshop has definite values for the school in terms of better student-faculty relations and improved relations between school and community.¹⁰²

⁹⁹Shropshire, op. cit., p. 76.

¹⁰⁰Levenson and Stasheff, op. cit., pp. 306-9.

¹⁰¹ibid.

¹⁰²ibid.



In the fall of 1952, the Superintendent of Schools and the Board of Education invited representatives of Purdue University to discuss with them the steps involved in studying school-building needs and planning for the future. Such a study was initiated under the direction of a citizens' steering committee and Purdue University's Division of Education and Applied Psychology. Results of that study were published in 1953.

Since schools do not operate in a vacuum, but are an integral part of a community, it seems advisable to introduce the community of New Castle.

New Castle, the county seat of Henry County, Indiana, is located fifty miles northeast of Indianapolis, seventeen miles south of Muncie, and seventy miles west of Dayton, Ohio. State highways 3 and 38 intersect at the west edge of the city and U. S. 40 is just nine miles south of the city.

Most of the county is a rich, fertile plain drained by Elletts River and is today one of the important agricultural areas of the state. Until the advent of the automotive industry, New Castle was primarily a trading center which served the surrounding agricultural area. Its townspeople were tradesmen and craftsmen. In 1906, the location of the Maxwell Automobile factory in New Castle began a new era for the town. Other industries followed and in 1952, there were eighteen major manufacturing companies employing thousands of skilled and semi-skilled workers. The Chrysler Corporation, which took over and enlarged the

Maxwell plant, now leads the list with approximately 4,000 employees. Despite the dominance of manufacturing in the town, New Castle is still considered an agricultural center.¹

The socio-economic factors are significant to a school community. Approximately one-half of the families in New Castle are native-born. The percentage of home ownership compares favorably with that in other communities and about twelve percent of the homes have been constructed since 1940 near or outside the city limits. Women represent more than twenty percent of those gainfully employed, and they are usually found in clerical, sales, and service categories of work. A small portion of the workers, both men and women, commute from near-by cities and towns. A large majority of the male workers are in occupations classified as skilled, semi-skilled, and unskilled work in the numerous industries. Other male workers are employed in the professional, sales, and service occupations commonly found in an industrial and trading center.²

A number of civic organizations have been established since World War II and now involve many of the citizens in projects for the betterment of the community. They seem to create a feeling of pride in the community and cause others to become involved in community affairs, such as a detention home for juvenile delinquents, a community swimming pool in one of the parks, an X-ray unit and a pathological laboratory in the county hospital, and acceleration of the schools' building program.

¹A Cooperative Study of the School Building Needs of New Castle-Henry Township School Corporation (by Division of Education and Applied Psychology, Purdue University, Lafayette, Indiana, 1953), p. 1.

²Ibid., p. 16.

The community has a large YCA, which has its own gymnasium and swimming pool; its dining rooms have assumed the function of a civic center where many groups meet regularly. There are two large recreation parks which have a wide range of activities, including golf and swimming. Forty-two churches serve the population. There are two hospitals, one of which has such complete services that specialists from metropolitan areas come to serve the medical needs of much of eastern Indiana. One of the state's ten mental hospitals is located three miles north of New Castle; it cares for about 800 patients. This mental hospital and the county hospital provide the incentive for much civic and philanthropic work. In addition, the town supports two nursing homes for the aged and the County Farm for those incapable of caring for themselves.

Culturally, New Castle is distinctly divided into three social groups. A very small percentage of the population support a series of chamber music concerts, art shows, a poetry society, and a historical society. A somewhat larger percentage find most of their entertainment and cultural satisfactions in Indianapolis. This same group supports a little Theater, which has existed over the last twenty-five years on an "on and off" basis. All such programs (lectures, concerts, and theaters) have not had a continuous existence in New Castle because there is no available place, such as a community auditorium or civic center. The high school gymnasium, which is small (1800 seats) and very difficult to rent because of the heavy school schedule, results in church sanctuaries being the only available meeting places. The YCA dining rooms provide

the only large space for dinner meetings. In the last several years, three elementary schools have been built and have included the new all-purpose type of room (cafeteria, auditorium, gymnasium). These are now available to a limited degree for community affairs. The third group, and the largest group of the population, finds its cultural and recreational satisfactions within the community's park system, night school, and other similar available outlets.

Educationally, New Castle is well located for its young people to seek higher education. Within 100 miles there are a number of recognized colleges and universities, including three state institutions; there are also a number of trade schools and one fine art school. Three are within a commuting distance of twenty-five miles.

More recent data concerning population trends for both the community and the high school already indicate the validity of the Purdue study. In 1950, according to the official census, New Castle had a population of 18,000. According to a census taken in the spring of 1958, at the request of the local Post Office, New Castle's population had increased to 22,000. The most significant increase is noted after 1930 and in the suburban areas. The Purdue study concludes:

If all factors affecting population growth do not change, this community can expect a population of 30,000 persons by 1960, or an increase of approximately 6,000 during the current decade.³

The school community has experienced the same growth. In the fall

³Ibid.

of 1952, the total school population was 4,922;⁴ in the fall of 1958, the total population 5,732.⁵

Development of Broadcasting Activities in New Castle
High School, New Castle, Indiana

Broadcasting activities entered New Castle High School in 1938 when a central sound system was installed. A review of the subsequent activities falls into categories concerning facilities, content, and purpose of these activities. Chronologically, the report of such activities falls into several distinct periods.

The school year 1938-39 was spent in getting acquainted with the sound system; it was a period which the installation engineer spent "getting the bugs out of it." Very little school use was made of it; occasionally the principal⁶ would make use of the system for announcements.

Beginning with the school year 1939-40, that principal became superintendent and a new principal⁷ came into the high school. With him came a definite philosophy concerning student activities. The new principal operated New Castle high school under a philosophy which said, in effect,

⁴Ibid., pp. 26-27. These figures do not include 115 pupils in the six-grade Catholic school.

⁵Courier-Times, New Castle, Indiana (September 9, 1958), page 2, column 6.

⁶The principal then was Mr. Roy M. Valentine, now deceased.

⁷The principal who came in 1939-40, Dr. I. R. Mitchell, remained until 1942. In 1945, he went to Purdue University. At present, he is Director of Teacher Placement and Professor of Education, Purdue University.

that an activity which provides a learning situation should be included in the school program and adults should remain in the background to provide direction. He was also fully aware of the many accusations being made of principals' misuse of central sound systems, such as too frequent interruptions to make announcements and listening-in on classes.

Therefore, the principal assigned the speech teacher⁶ to be responsible for all microphones work. All his messages were written out and sent to the speech room. Members of the speech classes prepared all other announcements. Then, as a part of the speech class work, these announcements were arranged into a program and "broadcast" during the hour room period to the entire student body via thirty-five loud speakers.

The control panel for the sound system was placed in the principal's office; boys in the speech classes learned to operate it. Members of the classes assigned "to broadcast" went to the office for this duty.

The ideas of the principal, the students, and the speech teacher for programs soon resulted in more elaborate programs. For instance, on Mondays a program highlighting some historical event of the current week would be presented; Lincoln's Day, Halloween, Indiana's entry into the union were such ideas. These programs were often arranged in story or dramatic form.

Vocational information would be presented in Tuesday's program. This was produced with other departments providing the factual information and some of the talent. Some of the subjects presented in those

⁶The speech teacher is the writer of this study and the only speech teacher mentioned in this study.

programs were: "why take advanced math?", "why take mechanical drawing?", "why take advanced home making?", or "what is required to become a butcher?" or an engineer, etc. These programs usually consisted of information given by means of an interview between a teacher from the highlighted department and a speech student, or a dialog between two students.

Wednesday was chapel day. Inspirational programs were written and produced by the advanced speech class; sometimes the dramatics class or some of the clubs would cooperate. Elements in the programs would be reading of the scripture, short sermons by public-speaking students, music by the music department, and perhaps some poetry; all would be designed around a central theme. Occasionally, the students would invite local ministers to speak on these programs. These Wednesday programs became quite elaborate during holiday seasons.

Thursday was self-improvement day. Programs for this day were usually presented in cooperation with the Home Economics department. They centered around social and personal problems of teenagers, such as:

1. How do you ask a girl for a date?
2. How often should a teenager get the family car each week?
3. How much should a date cost?
4. What is the proper dress for the "prom"?
5. Why do my parents always seem to say "no"?

The format for these Thursday programs was either a group discussion or several students would pose the pre-set questions and one or two teachers would give the answers; this would be followed by discussion.

Friday was "citizenship" day. Programs on this day were most frequently built as pep programs designed to help the team. Student Council members, coaches and some faculty members would talk. The yell leaders frequently appeared; sometimes there would be featured music by the band or popular music by local students. Sometimes this day would be used to "give orchids" to a student who had achieved some honor for himself and his school. This custom of giving "orchids" continues to this day.

Readers of this report who have known high school assembly or convocation programs will recognize the sources and functions of these programs.

New Castle High School did not have an auditorium; its gymnasium was three blocks distant and did not lend itself to many types of programs. Consequently, the principal utilized the microphone facilities. Even today, the school has no auditorium, so the daily morning news "broadcasts," which are a part of the home room period, have become the core of the school. They weld it together and make it a unit; they give spirit and personality to the school.

It is interesting to note that several of these programs have become traditional and are continued in similar manner today. The custom of recognizing a student who achieves honor for his school and himself, "giving orchids," is one example. The chapel programs are still produced on Wednesdays. The historical highlights that once were presented on Mondays are now presented on whatever day they occur; advance notice is sent to all teachers that there will be a special

broadcast on a certain day. Putting the team on the "victory road" is still a part of the Friday program.

The development of these programs to this point took several years. The speech teacher realized that the time and energy for producing these programs taken from the speech classes was expensive in terms of speech objectives. Also, the lack of flexibility in the equipment was a handicap. The principal also recognized these problems; he asked the speech teacher for ideas on how to improve the situation. The result was two-fold.

First, in 1941, a long cable line was installed; the cable connected the control system in the office and the speech class room at the end of the hall. This made it possible for the classes to have a rehearsal with a "dead" mike in the real room situation; positions around the mike and other mike techniques could be better planned; and there was more floor space available.

Secondly, a class was designed for this work. At first, it was an honor speech class; later in 1941 it became a radio class.

The systematic series of broadcasts begun in 1939-40 were elaborated to reach the stage just described by 1942-43. A one-credit radio class was added to the high school's schedule in 1941-42; it was titled "Radio."

These changes in facilities, the additions to the schedule, and the program development reached this stage by 1943. Between 1943 and 1947, there was little change in the procedure and in the equipment. What changes did occur were due to differences in personalities in charge of

the operation and did not reflect any change in philosophy. The principal and the speech teacher were gone from the system by 1943.⁹

In 1947, the speech teacher returned to the system and was asked to continue the former "daily FA programs." By this time, a radio class was a definite offering in the school schedule.

In 1947, the community acquired a commercial F3 station; the schools accepted a half-hour weekly program spot. The responsibility for this program was given to the speech teacher.

Once again changes were made in the facilities which gave much greater flexibility in operation. During the school year 1948-49, the controls of the sound system were moved from the office of the principal to the speech class room. They were mounted on a desk; an amplifier and panel front from an RCA disc recorder were used as a console board. An Echo tape recorder was purchased and placed at one end of the desk; a turntable from a record player was mounted on the other end. This unit was placed in a front corner of the room and served as the "studio" until the fall of 1950.

By 1949-50, the series of programs produced for the schools for broadcast over the local F3 commercial station had taken a definite format; and the production, a definite routine. A core of student writers, announcers, and assistants had been trained to serve as a staff for these programs which presented or featured the work of some class room, building,

⁹The principal became principal of Richmond High School, Richmond, Indiana. The Speech teacher left for duty overseas with the American Red Cross.

or department each week. Sometimes this meant that a team of workers had to be sent out to record a portion of the program; this was called "remote duty" assignment. A member of the commercial station staff who had received college training in radio aided this program with advice and assistance. Since the teacher did not go with these students assigned to remote duty, the station man frequently accompanied the students; sometimes they went alone.

In 1949, the principal¹⁰ informed the speech teacher that an application for one of the educational FM licenses was being made. Several business men's groups soon gave a total of sixteen hundred dollars for the purchase of equipment; the school provided the studio facilities.

With this money, a General Electric ten-watt transmitter was purchased from Duquesne University;¹¹ additional war-surplus materials and a Magnecord tape recorder were purchased. Student and adult members of the local amateur radio club constructed, wired, and installed (1) a console with two turntables, (2) two tape recorders, and (3) two remote lines, one to the high school gymnasium, and the other to the athletic field. A tower and antenna were erected on top of the high school building which put the antenna ninety-eight feet above ground level.

The school converted the speech class room, 24 by 33 feet, into two small acoustically treated studios (11 x 16 feet and 11 x 8 feet); each had studio windows on two sides (see Figure 3.1 and 3.2). These windows

¹⁰Mr. Earl Lease, now principal of the Mt. Summit High School, Indiana.

¹¹Duquesne University planned to go to 250 watts power.

Figure 3.1

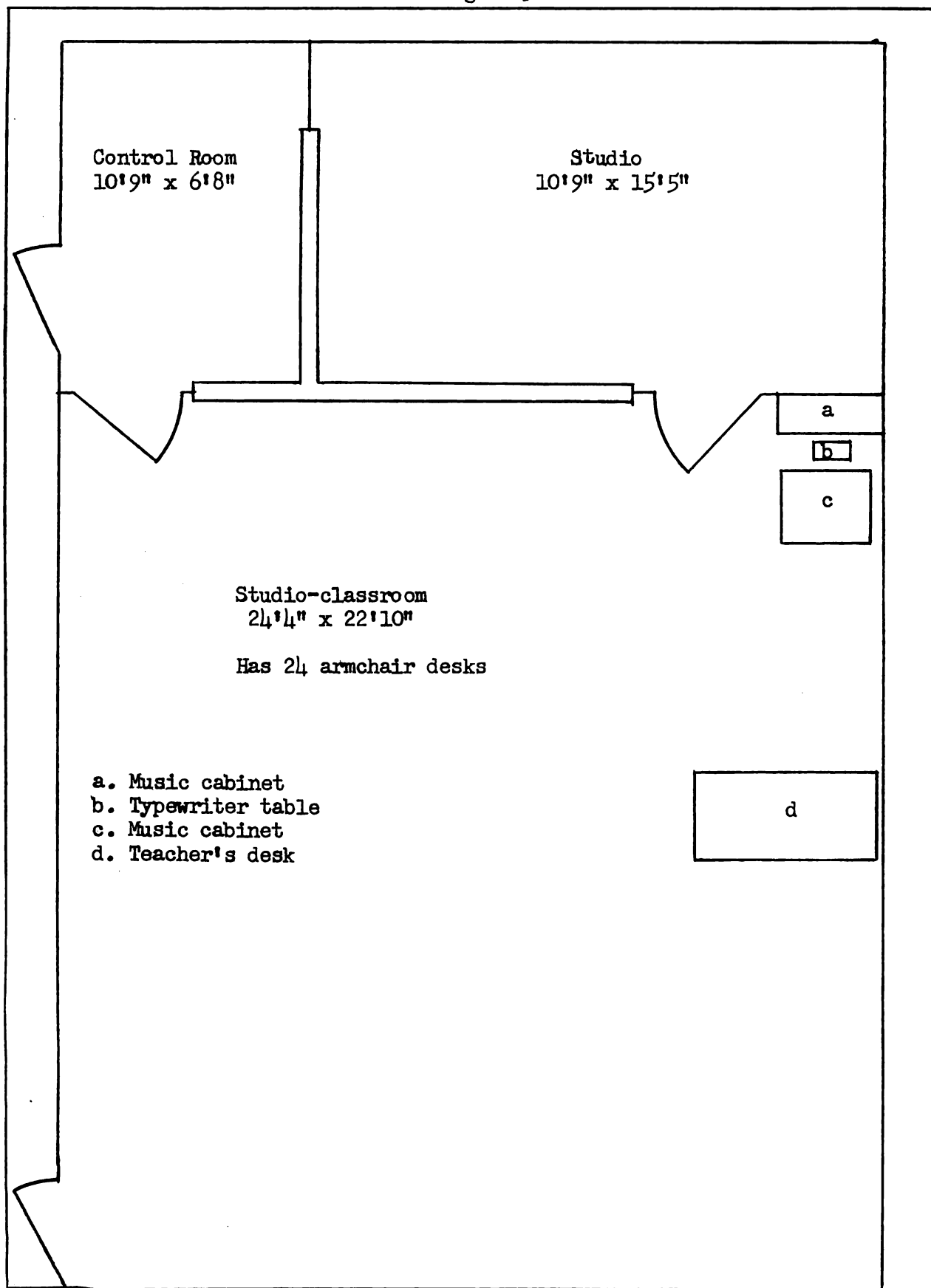
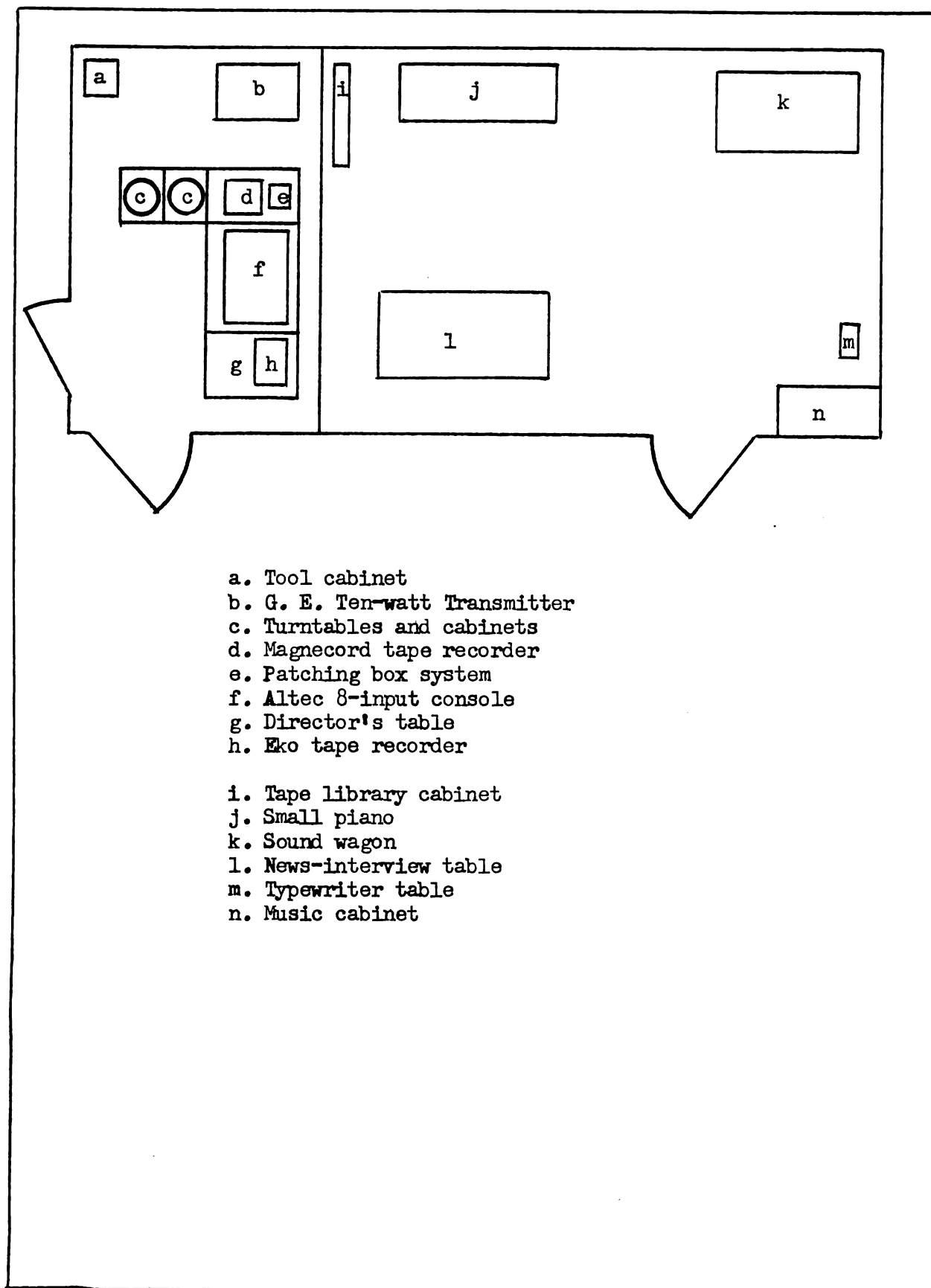


Figure 3.2



provided a view into the larger studio or classroom (now 24 x 22 feet) and into each other. Access was provided to both smaller studios from the larger room but not between each other. The smallest and the largest studios had access to the hallway.

A number of high school clubs combined efforts and contributions which made possible the purchase of the Capitol Music Library from the local commercial station when it changed to a Thesaurus library. A local civic organization gave an annual subscription to the Capitol classical library for five years. The student body contributed popular records. From other miscellaneous sources plus those named, the station has accumulated a library of about two thousand records.

On September 4, 1950, WESH FM went on the air as the sixth¹² ten-watt station in the United States to be owned by a public school system; the first broadcast was a "play-by-play" description of a high school football game by high school announcers.¹³

The school year 1949-50 was spent in planning and preparing for station operation to be integrated into the high school program and into a speech teacher's day of teaching.

The first semester the station operated one hour a day; the second semester, two hours; the second year the station went to four hours of

¹²The first six ten-watt stations owned by public schools: WNAS, New Albany, Indiana; WWS, Huntington, Indiana; Koen, Oceanside, California; Alon, Long Beach, California; WOKX, Springfield, Massachusetts, and WKN, New Castle, Indiana. As of the end of 1957, there were six licensed ten-watt stations in Indiana owned by public schools. This is more than any other state has licensed.

¹³The station identification used was "WESH, Your schools in New Castle, the station owned and operated by and for the boys and girls of the public schools."

daily broadcasting. It was able to do this because it had joined the KARE tape network which provided the station members with tape recorded programs for in-school use and adult informational listening. The following year the station broadcast five hours daily. The teacher never taught less than half a day of speech classes. Two regular radio staff classes were offered. One would begin the day's operation; the other would close and prepare for the next day. For the hours in between a skeleton staff of advanced students maintained station operations while the teacher was busy teaching in the largest of the three room studios where she could maintain a visual supervision over the station. This skeleton staff was composed of an operator and one or two announcers.

Through the planning stages and the initial operation period, members of the local commercial station staff were cooperative in providing technical assistance and staff organization "know-how." The school public relations programs continued to be broadcast weekly after the school station went on the air. Arrangements were made with the commercial station for the school station to record the programs from the air and re-broadcast them the following day. The commercial staff was also helpful in getting a sports announcing team ready.

Although all other school station staff positions required one semester of speech and one of radio course work as a prerequisite, the sports announcing work was open to any boy who wished to try out and, if accepted, who would agree to continue a program of in-service training. As many as twelve boys might have duty assignments during one game. No credit was granted for this work.

Also the beginning radio class personnel became the producers for a daily high school news and weekly chapel program which was broadcast by sound system to the student body and simultaneously broadcast by FM radio to the community at large. This required the cooperation of the radio station class and the beginning radio class.

After two years of operation with non-broadcast equipment, the school purchased about \$2800 worth of broadcast equipment.¹⁴ This was installed in the summer of 1952; the studio was properly wired at this time. An 8-input Altec console, a Magnecord tape recorder, two Rek-o-cut turntables with Gray arms, and four microphones were purchased. Now the local station would accept any program the school station recorded and sent to them for broadcast. Occasionally they would ask some service of the school station or staff, such as the use of a tape recorder, or the loan of a boy to accompany a local staff man on a remote assignment, or a girl to assist with some commercial writing or announcing work, or even the use of a complete program for fill-in service.

In the spring of 1955, just at the close of school, a high wind blew down the antenna and tower structure. It was never replaced.

A change of administration during the previous two years had brought a change in school philosophy and policy. It was felt that the station operation was too expensive and also that classroom space and teacher time were needed on a full-time basis.¹⁵

¹⁴Mr. Joe A. Cruz, now deceased, was superintendent.

¹⁵The last year, 1954-55, of operation cost \$510.81. Three big items of expense were the cost of the KAMJ network, which at that time was \$250.00 and the telephone bills charged for home basketball games which was \$77.00. Postage for returning KAMJ, Purdue University

The license was renewed in August 1955; at that time it was not yet determined whether the antenna would be replaced. The ownership of the station was changed from the city schools to the high school; this change put the station under the principal's supervision.

In September, 1958, the school moved into new quarters, which means that a change in the license would be necessitated anyway; so it was decided to allow the license to expire. Only temporary quarters for the speech and radio work are available in the presently-finished buildings; these areas will be permanently located in the auditorium. That is the last building scheduled to be built on the new campus; construction is to be completed about 1960. Then it will be decided whether the school will return to FM radio station operation. There is some possibility of a minimum amount of closed-circuit television work. Also, it is hoped that the Muncie-Ball State Teachers College UHF non-commercial allocation may be taken up by that time.

In summary, broadcasting activities entered New Castle high school in 1938 when the central sound system was installed. The speech teacher was given full responsibility for its use. There followed an experimental period of about two years which resulted in a change in the facilities and the beginning of what was to be a radio class.

"School of the Air" and Indiana University "School of the Sky" tapes cost \$85.46. No large item of equipment was purchased this year.

The year previous, a tape library was established with the purchase of 124 rolls of tape at a cost of \$403.71. Football games were broadcast in addition to the basketball games. The year's operating expenses were \$993.15.

The predicted cost of operation for the year 1955-56 was \$592.00.

By 1943, a class was established and a definite routine of broadcasting daily programs into the entire high school, in lieu of regular assembly programs, was established.

Between 1943 and 1947, there were few changes either in facilities or in routine of daily activities or in the class content.

After 1947, there were definite efforts made to improve and enrich the radio course content; and major changes were made in the facilities. By 1949, planning was begun for the addition of a ten-watt FM noncommercial station. This station went on the air in 1950 with non-broadcast equipment and in regular studio facilities. In 1952, regular broadcast equipment was purchased; the broadcast schedule went to five hours a day. This status continued until spring, 1955, when wind blew down the antenna, which was never replaced. However, the license was maintained until August, 1958.

Development of Objectives and the Course of Study

The development of the course of study and its objectives follows closely the development of the facilities. As facilities were expanded, new ideas presented themselves. These, in turn, required further changes in facilities. This chain of events was responsible for the development of the facilities and the course of study.

At first, there was no actual course of study followed; the work done in broadcasting was simply a program of activities planned to meet the needs of the sound system. This work was done by students selected from the advanced or second semester speech class. They operated as a

workshop group; several students doing different tasks but all working toward a common goal. They began as an unskilled group in broadcasting and learned "on the job."

This work became a part of and an addition to the regular work of the speech class. Usually speech classes are focused on projects planned in sequence to develop a range of skills; however, the demands of the sound system required that every project be so planned that it would go "on the air." In other words, there was no period for practice, no time for growth in skill, or for the establishment of good work and speech habits.

Consequently, the teacher became concerned that students might be performing before they were ready; the concern was that they might be learning too rapidly and that they might not be establishing good foundations or basic habits of writing, speaking, and broadcasting skills.

The sound system was installed during the school year, 1938-39, but very little use was made of it that year. Systematic broadcasting was begun in 1939; those programs continued to be developed and elaborated until 1942. By that time, the program reviewed earlier had a definite form and content pattern.

At first, students who prepared, produced and acted in this program were recruited mainly from the advanced speech classes. The first course to include radio broadcasting skills was offered in the school year 1941-42; it offered one full credit per semester. Its specific purpose was to prepare students to perform the duties demanded by the sound

system and to give the students practical writing and speaking experiences.

As the teacher became more skilled, the work became more instructive and less rehearsal-performance type of class work.

In 1942-43, there was another change of principals¹⁶ but the policy and philosophy established for the operation of the sound system and the offering of a radio class continued.

Between 1943 and 1947 there was little change in the procedures regarding either the sound system or the radio class. The principal became superintendent; a new principal¹⁷ took over the high school.

In 1947, the speech teacher returned to her former position as director of the speech department and radio activities.

By 1949, with the available textbook and reference materials¹⁸ and those from the Office of Education, plus suggestions from the local commercial station staff, the course of study began to include more substantial content and a more systematic organization was employed. Such subjects as "writing for the listener," "program format," "timing the broadcast program," and "the use of sound and music in dramatic sequences"

¹⁶The new principal was Mr. J. R. Crow, now deceased.

¹⁷This principal was Mr. E. S. Castor.

¹⁸The Handbook of Broadcasting, (1941 edition) by Waldo Abbot and Let's Broadcast, 1948, by Everett Braun were the textbooks used by the class. For reference and background information the teacher used such books as Max Wiley's Radio Writing; Judith Waller's Radio, the Fifth Estate; Albert Cross' Radio Production Directing and Professional Radio Writing; Ben Henneke's The Radio Announcer's Handbook; the Krulovitch brothers' Radio Drama Production; Baskett Mosse's Radio News Handbooks; Jennie Callahan's Radio Workshop for Children.

were included in the study. Some study of radio theory was also integrated into the course. This study was under the supervision of the principal, a man who was vitally interested in the radio class and the planning for the station.¹⁰ He saw the class, the daily news programs, the station (as had his predecessors) as opportunities for learning in the real situation and for practical purposes. Unlike the English student's theme which is read only by the teacher, these students' work was being heard and evaluated by the entire school, which included their friends and teachers.

With the advent of the station, major changes took place within the speech program. Instead of the basic course leading only to the public speaking course, the basic course was broadened to serve as a fundamentals course leading to public speaking, radio, and/or dramatics. Previously, the dramatics courses were separate entities. The dramatics and speech courses (along with the journalism classes) were elective courses within the framework of the English department and there was little coordination among them. This move resulted in the dramatics, speech, and radio work being coordinated; it was a developmental program which gave the student a wider experience in the general speech area, and an improved sequence of course content. A department of speech was established. The basic fundamentals course included voice and diction improvement, pantomime,

¹⁰Mr. Earl Lucas was the principal on duty at this time. He was formerly a science teacher and boys' counsellor, a navy-trained radio-
 radar man, and a member of the local "ham" radio club. He is now principal of the high school at Mt. Summit, Indiana.

story telling, simple speech making. One of three subsequent courses followed: Dramatics I and II, Radio I and II, or Public Speaking.

The fundamentals course might be substituted for the 1B English course; all the following courses were elective and gave only half credit. During registration with the deans, the students were urged to plan for a year's work if they elected to take the substitute fundamentals speech course for English 1B.

Radio I class was a fundamental class which included station operation, handling the news, writing continuity (for music, discussion, interview shows), and microphone techniques. It was designed to train for the station staff, to give an understanding of radio skills, and to develop some standards of appreciation and evaluation.

Students in Radio II were assigned to station work. Each student who planned to apply for this class spent the first semester becoming as proficient as he could at a number of tasks, such as board operation, announcing, writing simple continuity, program planning, and directing. As a staff member he would have to perform many of these tasks, but he could apply for a specific assignment. If he received a position on the staff, he was named to a specific job; however, he would be called on to perform other jobs too. The work of the traffic manager, program director, and music librarian had to be learned on the job. This class might be repeated as often as the student's schedule and grades would permit. All students had to carry a C or above average; only one "half credit" could count towards graduation.

The technical jobs of maintenance and engineering were under the supervision of the principal and a science teacher. The science teacher was a second-class engineer; the speech teacher became a third-class ticket holder. Usually one or two boys held third-class tickets.

Since 1955, the end of station operation, interest in radio classes has continued. Some students hope the station will return to the air. But with station operation no longer a goal, there have been changes in the course of study.

Radio I has become less oriented towards station staff work and has become a better foundations course. More emphasis upon writing and speaking techniques is given. More practice experience in short microphone projects in the news, interview, ad lib, discussion skills is permitted. Added to the course has been a unit on the economic and sociological importance of the industry, a unit on history of the industry, and a unit on television. Radio II, offered about every third semester when enrollment permits, includes dramatic production, acting, and creative writing.

Several experiences since 1952, plus the instructive help from members of the local commercial station staff and radio teachers in the Indianapolis high schools, have added to the teacher's skill and enriched the course content. In the summer of 1952, the teacher was a member of the NAEB School Broadcast Seminar. The Northwestern-IEC Radio-Television Workshop was attended in the summer of 1953; the Michigan State University Adult Workshop at WMAZ-TV was attended in 1954. During the summers of 1955-56-57, work in radio and television was taken at Michigan State

University in addition to teaching in the Radio-Television division of the High School Institute.

In summary, the development of the present course of study in radio in the New Castle High School began in 1939 with members of the speech classes performing extra duty and serving as a staff for the daily sound system announcements. As the announcements grew into a program which had some form and some reason for existing other than giving the announcements, the demands on the speech class warranted the creation of a special Radio class. This class was first offered in 1941 and gave one full credit. It has been offered every semester since then.

At first, this class served as a means to meet the special needs of the sound system. By 1949, a course of study was established and a text book adopted. This course of study included writing for the listener, program format, timing, and use of sound and music. When the school acquired a ten-watt FM noncommercial station, two courses were established. Radio I was definitely oriented towards station operations; it also attempted to give some basic fundamentals. Radio II provided for membership on the station staff.

When the station ceased to operate in 1955, after the wind blew down the antenna and tower, the courses underwent another basic change. Radio I was less station operation oriented; more emphasis on skills and techniques was given; units on the industry's history, economics, and sociological effects were added. Radio II became a production, acting, and writing course.

It is apparent that the course has developed along the lines of current school needs; the work of the course has been largely a service to the school. As those needs changed, the objectives changed; and in turn, the content of the course changed.²⁰

Objectives of the Course

This course of study takes cognizance of the fact that any subject matter in the school curriculum must meet the challenge of modern educational ideas, that it must undertake the development of the whole child using the subject matter as a tool, that it must train his intellect, and that it must fit him for citizenship in a democracy.

Before presenting the objectives of this course of study, it must be recalled that the Introduction to this investigation set forth some criteria which this course should meet. In addition, a review of the general objectives of secondary education should be presented here so that it may be seen that the objectives of this course of study are within the framework of the general objectives of secondary education.

After investigating the many sets of objectives--both general for all educational levels and specific for secondary schools, Crow and Crow draw four conclusions that are applicable to the high school. They are set forth here for general reference purposes:

²⁰The course is presented in outline form in the Appendix.

1. The formulation of educational objectives has progressed from a more or less vague statement of a broad all-encompassing general objective such as the development of certain personal and social competence to long lists of specific objectives aimed at covering the major areas of human activities and interrelationships.
2. The more recently stated objectives emphasize the need of an education that stresses both personal and social values. The individual should be provided with educational opportunities that will make it possible for him to achieve a personally satisfying mode of living. At the same time, he must be guided toward becoming a constructively contributing member of his society.
3. Modern educational objectives appear to include some recognition of the fact that individuals differ in their capacity to achieve as well as in their degree of interest in the things they wish to achieve. Consequently, statement of objectives stress: (1) those areas within youth's power to achieve (general education), and (2) those fields of differentiated activity that are in harmony with individual interests (specialized education).
4. The development of constructive citizenship has long been a major educational objective. The connotation of that term, citizenship, has gradually taken on broader significance until, at present, educational emphasis is placed upon the achievement of the ideal of world citizenship. Thereby, the individual will be led to recognize himself as an active member of the entire human family with personal obligations not only to this immediate social group, but also to those who live in remote concerns of the world.²¹

With a general frame of reference concerning the general objectives of secondary education, it seems advisable to proceed to the function of objectives; it seems advisable to relate the objectives of a course of study to the course content and organization.

Objectives are guides or points of destination. If they actually serve as objectives, they become guides to the learning situation.

²¹Lester D. Crow and Alice Crow, High School Education. (New York: Odyssey Press, 1951), pp. 63-64.

Usually objectives are conceived, says Goetting, in terms of two factors: the institutions which foster them and the general activities of life. Thus, according to Goetting, before the general aims of secondary education can function:

They must be stated in such patterns of learning, and the subjects offered in the secondary school. . . . While teachers in the classroom must be conscious of the institutions and general life activities, they must also understand what subjective changes in pupils in terms of knowledge, appreciation, and skills will contribute to the lives of pupils for their participation in the major institutions of life. They must also know the possibilities of each subject for making contributions toward each objective of secondary education. Decisions must be made as to what phases or aspects of each objective may reasonably be undertaken through activities considered appropriate for each subject.²²

Planning a course of study not only requires the selection of a set of objectives, but also the selection of content materials and activities.

Bent and Kronenberg define a course of study and then set forth nine points which they maintain are valid bases for selecting curricular content. First, they define a course of study as:

. . . an arrangement of detailed materials and activities selected from some broad field or fields of subject matter and arranged into topics, units, or lessons, for instructional purposes. To differentiate between a course of study and subject, mathematics is a subject, Algebra I is a course of study; science is a subject, but chemistry is a course of study.²³

The valid bases which Bent and Kronenberg offer for the selection of curricular content are these:

²²H. L. Goetting, Teaching in the Secondary School. (New York: Prentice-Hall, Inc., 1942), p. 119.

²³Adyard Kipling Bent and Henry H. Kronenberg, Principles of Secondary Education. (New York: McGraw-Hill Book Company, Inc., 1955), p. 184.

1. A philosophy of education
2. Social effectiveness and stability
3. Passing on cultural heritage
4. Fundamental needs of the students
5. Utility or quality within the subject to make it practical
6. Individual social efficiency
7. Pupil interests
8. Vocational efficiency
9. Major activities of life.²⁴

These points seem self-explanatory; but they offer three conditioning factors for point nine (Vocational efficiency). First, materials offered in the direction of vocational efficiency should have social and pre-vocational values; secondly, these materials should be selected on a basis of a survey of such opportunities in the local community; third, they should be congruous with the pupils' attitudes and interests at the time.

A course of study is designed for the purpose of instruction; instruction suggests that learning is a desirable result.

There are two points of view which may be taken concerning learning. One point of view holds that learning is a process or activity; the other believes learning to be a product or a result. These two points of view are not radically opposed; the second point of view merely labels the outcome of the first point of view. In other words, the product is a name for the outcome of the activity acquired. Goetting suggests that these two points of view must be kept in mind when planning and directing pupil-learning activities; they present two questions to be answered.

. . . what changes in pupils are desired, and second, what pupil activities may be considered the most appropriate affecting these changes.

.....

²⁴Dent and Kronenberg, *op. cit.*, pp. 189-193.

The outcomes of learning are usually designated by the activities which the individual is able to perform. For this reason emphasis is placed upon such concepts as behavior, responses, activities, conduct, adaptations, and adjustments. What seems to be learned is ways of behaving. Learning, then, results in the acquisition of responses. Some of these responses are relatively fixed; and some are flexible. It seems convenient to summarize learning outcomes in a threefold classification as follows: automatic responses, intellectual changes, and emotionalized conduct.²²

Thus far, in the chapter, an examination has been made of (1) the general objectives of secondary education, (2) the function of a set of objectives as related to a course of study, and (3) general statements concerning the learning process; attention is now turned to the objectives of the specific course of broadcasting presented in this study.

The relevant objectives in the area of broadcasting may be classified as general and specific. The general aims are those kept uppermost in mind during the entire course of study and which meet the general requirements of that level of education; the specific goals are those that meet the needs of the subject within any one unit, the needs of the schools, and the student body.

A statement of the general objectives of this particular course of study in broadcasting sets forth these aims:

1. To provide for the personal and social growth of the individual student.
2. To provide for the varying capacities and interests.
3. To develop a set of behavioral responses which will enable the student to become a member of society and accept the personal obligations to that society.

²²Gobett, op. cit., pp. 3-4.

The specific goals which provide for the personal and social growth, the development of desirable citizens, and which meet the needs of the subject, the school, and the students are these:

1. To provide the student with a set of experiences that will develop his personality and enhance his own personal worth to himself.
2. To continue his development of language skills.
3. To widen the horizon of his interests and understanding.
4. To provide an opportunity for him to survey the vocational opportunities and determine his fitness and his interests in a career in the broadcasting field.
5. To provide the student with an opportunity to acquire some broadcasting skills and to gain some comprehension of the industry.

Training in broadcasting skills and studying the industry is both personal and social; inherent within the nature of this study are the avenues for accomplishing both personal and social growth.

Probably most school administrators would agree that, of all the possible educational aims, the most elusive is that of developing the child's personality. What opportunities and guidance can schools provide by which children can learn to avoid or correct emotional maladjustments, and learn to live more happily with themselves and their fellows? How can we actually teach a child to become a more effective person. One step toward the accomplishment of this goal is the development of a well-conceived program in oral communication.²⁰

²⁰Milton Dickens, "Speech Education for Personality Development," The Bulletin of the National Association of Secondary-School Principals, XXVIII (January, 1954), p. 30.

Although the radio course is not a communications or speech course, it deals with the communication processes; therefore this statement is applicable.

This particular course of study in broadcasting is a study designed to start the student toward (1) acquiring some broadcasting skills, which include speaking and writing skills, and (2) some comprehension of the industry. In order to accomplish these goals, it aims to provide the student with a set of experiences that will develop his personality and enhance his own personal worth to himself.

First, the experience of working in the group where each individual performs a different task but where all are working together towards a common end-result, the affective broadcast program, provides each student an opportunity to evaluate himself. He learns to accept his limitations, to work within the range of his own abilities. He also recognizes his assets; and the circumstances surrounding the group-effort require that he utilize those assets in such a way that the group's performance produces satisfaction. Secondly, this group experience gives the student an opportunity to establish himself with his peers and with his own generation through the use of his abilities. Third, the group experience puts the student on his own, helps him to develop a feeling of independence; he is put in a situation where he must make decisions, take responsibility for his actions. It sharpens his powers of observation so that he can communicate effectively; it develops his understanding of people as he re-creates characters and situations through his work with drama. Another value that accrues from working in the group, which is

a goal, is the establishment of group attitudes and group responsibilities, which is a preparation for family and community life. A fifth avenue which this course in radio provides for developing and enhancing personal worth is to make the student responsible for what he writes, for what he says, and for what he does. This is a part of the broadcasting activity. As a communicator this sense of responsibility for what he says and does is important to him and his listeners; as a human being this sense of responsibility is important to him and for his community. These five provisions inherent within the broadcasting activity stimulate responses within the student and make it possible for him to develop his personal and social self.

The communicative process is a task which involves making sense out of symbols and utilizing their meaning for personal and social profit. Obviously this is an objective of all education, but in this course of study it is a primary goal. Work in broadcasting has inherent possibilities for continuing the student's development of language skills and the communication processes. The broadcasting media use language as a tool, both oral and written; language must be heard and must be read silently and orally. The communication of ideas for information and for entertainment is its basic commodity. By writing various kinds of broadcast copy, by reading his own copy and that written by others, the student learns to master the skills of writing, reading, and speaking. Working with broadcast copy, the student develops an appreciation for content; he develops a skill for critical analysis of content; he builds habits and tastes for selecting his own personal listening, viewing, and reading. The end-result is an integration of all the communication skills.

The third general objective for this course is the broadening of the student's interests and knowledge. The content of the broadcast program requires the synthesis of various subject matter areas; investigation, evaluation and coordination are followed by preparation and delivery of the copy. This process leads the student into new fields of knowledge where more than a mere acquaintance is required. The result is the discovery of new knowledge, and new interests are developed.

It is an accepted fact the high school years are those in which the student is making self-inventories of his own abilities and interests and searching for possible vocations and careers. Each course in the high school curriculum provides at least a minimum of vocational information in a particular subject area; some courses are designed to direct the student in a thorough vocations study. Broadcasting courses lend themselves to such study without being primarily oriented towards vocational study. This particular course attempts to provide opportunities and experiences so that the student may gain a concept of the work in the professional field of broadcasting; it allows him to survey the opportunities and evaluate his own capabilities. It attempts to build a foundation of skills and to give a general comprehension of the industry on which subsequent courses can be built should the student choose such a career.

The final general objective is less personal and social in its intent. This course attempts to present a comprehension of the industry and its place in our society. A study of its history reveals how the

mass media have gained a place in the lives of our people. An understanding of how the business of broadcasting operates brings to the student an awareness of its bigness, its power over people's lives; reasons for and ways to control this industry then become comprehensible studies for the high school student.

These general objectives of the course in radio are kept in mind during the study of each unit and in presenting the assignments and projects. The more specific goals are described in the presentation of each unit.

Elsewhere objectives and the values resulting from curricular work in broadcasting have been reviewed. Most of those statements were made by broadcasting educators. Crow and Crow are educators and administrators, but not broadcasters. They set forth a list of objectives for radio broadcasting activity in the curriculum. It is interesting to compare their list with the ones presented for the course of study in this investigation.

Crow and Crow indicate that "radio broadcasting in the curriculum should attempt to achieve at least five main objectives:

1. Broad fields of subject matter should be integrated for the learner.
2. Cultural values should be experienced by the learner.
3. Utilitarian values should be included for vocationally minded learners.
4. Teaching technique should be based on individual needs and capacities.
5. Effectiveness of radio as a medium of learning should be evaluated carefully."²⁷

²⁷Crow and Crow, op. cit., p. 273.

Attention is now turned to some of the conditioning factors operative upon the design of the course of study to be presented. It should be noted that many of these factors are characteristics peculiar to the local situation. This was pointed out earlier as being one of the reasons that courses now offered have few commonalities.

Several conditioning factors have guided this course into its present design. The development of facilities, described earlier in this study, have been a major influence. The development of these facilities and the course structure and objectives have been almost parallel. As facilities were added, alterations in the course followed which, in turn, fostered new ideas which necessitated changes in the facilities.

Another conditioning factor was the operation of the station. Station staff membership was a goal for most students in Radio I; the course was so oriented that it trained for staff membership.

Since the end of station operation, the course has become more academic. Content on radio theory, history of broadcasting, and a study of the sociological, political, and economic importance of the industry have been added. A second semester, replacing the station operation course, offered frequently, extends the student's experiences and appreciation of broadcasting skills and knowledge of the industry.

Another contributing influence on the design of the course has been the several principals who encouraged the enrichment of courses and who provided guidance and opportunities for the offering of such elective courses.

Another conditioning factor is the use of student help which this particular school permits, such as laboratory and library assistants. It is the policy to permit a boy who has taken Radio I to serve as a "laboratory assistant" with a subsequent Radio I class. The teacher makes the selection on the following basis: (1) the boy has a particular interest in the operational and maintenance phases of radio, (2) his grades warrant his taking a schedule which has no study hall period. He serves as "chief operator," is responsible for the equipment, assists the teacher with minor teaching duties, and serves without credit. Although he has no study hall period, there are many days when the class is not occupied with studio projects; these days offer study opportunities. His duties as chief operator are to keep equipment in condition, to spot trouble before it arises and causes delays, to keep the audio-visual director (who is responsible for the equipment) informed. He performs what maintenance he can; sometimes boys on duty have been very capable. Some have designed and built additional pieces of equipment that have facilitated the operations procedures. This assignment provides a boy an opportunity to learn, to create, to serve his school.

This course of study in radio broadcasting is designed for students in the upper levels, the eleventh and twelfth grades of high school who have had some course work in speech. Students may also be admitted to the course by recommendation of another teacher or the deans on the basis of writing or speaking ability, science or journalistic interest; or they may be admitted after an audition and a conference with the radio teacher.

Each unit of study has a logical relationship to the preceding and following units; but almost any unit can become an entity in itself or can be adapted to some other unit to meet current needs of the students and the school. However, as presented here, this is the usual sequence for the course.

The course is designed for a class enrollment of not over twenty-five students. An enrollment of eighteen to twenty-two is more desirable; but if necessary because of demands of current school populations, as many as twenty-eight or thirty students may be accommodated. The difference in sizes of the classes bear differences in results for the individual student; the smaller the class, the more performing experiences he has and less time is spent in auditioning another's work.

Since a prerequisite for this course in radio broadcasting is course work in speech, it is assumed that the students have a background of some public speaking, discussion, voice and diction improvement, conversational and telephone and business interview techniques, oral reading, and story telling. Obviously, if there has been only one semester, students will not be skilled in all these areas. A survey taken early in the semester will reveal the backgrounds of the class; on this basis, the course work in this study is newly tailored each semester.

Radio Is A Course of Study

The foregoing materials provide a detailed description of the various factors which have contributed to the creation and development of a radio course in the New Castle, Indiana High School. Following is a unit-by-unit

description of that one credit semester course as it was conducted during the 1957-1958 school year.

Unit I: Introduction

This first unit of study usually takes about two weeks. It is a period during which the student is oriented to the following factors:

1. The communication process
2. The broadcasting industry as "big business"
3. The workshop type of activity.

He is also introduced to:

1. The equipment
2. The studio procedures for handling this equipment.

The work is planned in this unit to condition the student:

1. To the kind of activity to be expected
2. To the responsibility placed on him for helping to produce a group product
3. To the opportunities for discovering his limitations and assets and to develop those assets
4. To the opportunity for surveying possible vocational fields
5. To the group process of setting standards and goals.

The student is immediately oriented to the communication processes. Because of his speech background, he is already aware of "... the four successive phases of any act of communications: In what channels do communications take place? Who communicates? What is communicated?

Who is affected by the communication and how?"²⁰ The radio broadcasting process is similar; but the transmission, the transportation, and the reception of the idea (audio and video) are electronically accomplished and the sender and the receiver do not see each other.

The next step is to trace with the students, step by step, the progress of the idea from its inception, probably in the mind of the writer, to the person receiving the idea, usually in his home. It is helpful if the student comprehends the overall broadcast process first; then each step can be studied in detail:

1. Idea conceived
2. Idea converted into broadcast script
3. Script produced in studio and broadcast process begins via microphones
4. Broadcast program passes through the control room: console to transmitter
5. Broadcast program transmitted from antenna (AM or FM)
6. Broadcast program received by console in home
7. Broadcast program received by person from console.²¹

Since this is basically a radio course, the television process is not introduced until the end of the course (Units VIII and IX) when a

²⁰Bruce L. Smith, Harold D. Lasswell, and Ralph D. Casey, Propaganda, Communication, and Public Opinion, (Princeton, Princeton University Press, 1946), p. 3.

²¹Giraud Chester and Garnet R. Garrison, Radio and Television, (New York: Appleton-Century-Crofts, Inc., 1950), pp. 188-204.

brief study of television is introduced.

This introduction to the broadcast process is not technical; it is presented briefly by means of pictures and sketches on the blackboard so that the student gets an overall view.

Then, primarily by means of discussion and some reference reading, the student is helped to organize the information that he has collected about broadcasting in particular and mass communications in general.

The history of communications and broadcasting seems to interest the students; they are usually willing and eager to do some research after this initial impetus. The average student tends to regard radio and television primarily as media of entertainment. This study then, is directed towards broadening that perspective. Once this is accomplished, the student begins to comprehend broadcasting as a business which has a product to sell, a product that must be advertised. Advertising by broadcasting and broadcasting channel assignments are factors which concern society; and therefore government regulation becomes necessary. Some statistics are given at this point as evidence of these facts. By now, the stage is set; the student's interest is aroused. Broadcasting is now something more than looking or sounding glamorous at a microphone, a console and its turntables, or before a camera.

At this point, a first assignment is made; it is a research project in this broad field of history and significance of the industry. The student is given a choice of subjects. The projects are presented in the form of "make talks" and group discussions later.

In order to orient the student to the workshop type of activity, the classroom becomes a studio when Radio Class meets. It is called "the studio"; and on project days, laboratory days, the class is called the staff. A brief discussion usually helps the student to become group conscious, to recognize what is involved in group effort. The student is directed towards developing five basic qualities which are essential to good studio work; they are:

1. Consideration of others
2. Punctuality
3. Accuracy
4. Acceptance of responsibility
5. Initiative

This is teaching cooperation and working together for a common goal. When this spirit is captured, students tend to work harder than usual; they demonstrate imagination and ingenuity.

Just as an attempt was made to give the overall picture of the broadcast process, an attempt is made to give a similar picture of the classroom as a station. The classroom is a "station." Formerly a large (approximately 24 feet by 33 feet) room, it is now partitioned into three rooms or studios which house the accoutrements of any station, such as typewriters, file cabinets, record shelves, console, transmitter, microphones, and tape recorders. The students are introduced to the station and its equipment.

This is done as though it were a tour of a real station. The technical and the vernacular name of each piece of equipment is given;

the cost and the general function are also given. The operation of the piece is also demonstrated. The reason for this is that the student must know the technical names of equipment in order to read about such equipment; but he needs to know the vernacular, if he is to understand the professionals in the field. The cost of the equipment is made known to the student as a kind of safety measure to impress the need for careful handling of equipment. The student is more cautious if he realizes that he holds a twenty dollar cartridge or a ninety dollar microphone in his hand, or if he is operating a console valued at two thousand dollars. On this tour, the student becomes acquainted with the smaller items of equipment, such as the clock with its sweep hand, and the various kinds of records; he sees tape recorders operated. This tour may take two days. It is done carefully and in some detail; the students are required to take notes.

Next the class is divided into small groups; each group is set to work manipulating a piece of equipment. This requires an assistant to supervise each group. Students, usually boys, are recruited from former radio classes to serve for about two days for this assignment. During this period, the members of the class, working in small groups, are given an opportunity to begin to master various pieces of equipment. They do not master it, but the awe of the task or of the equipment disappears. Groups are rotated about every fifteen or twenty minutes. Groups work at the console, at each of the tape recorders, at handling the various kinds of records and their catalogs, at managing the microphones and cables.

Sometimes, a tour of the local commercial station is taken at this point. Occasionally, a tour to nearby university studios is planned. If the tour is not taken at this point, it will be later. Before the tour, the students are alerted as to what to expect and what to look for, according to what station the class is visiting and at what point the class is in the semester's work. After the tour, there is a review and a question and answer period.

Sometimes the class is introduced to the equipment and studio procedures in one process.

Broadcasting is both a science and an art. It is a science because it demands exactness; it is an art because it requires imagination and talent and permits creativity. So science and creativity must work together. There is a way to do this, but it requires the mastery of certain routines or established studio procedures, such as studio signals, proper script and microphone techniques, proper handling of equipment. There is the right way to do a job and the careless way. Either will get the job done, but there is a difference in the quality of the final product. This concept is held before the students all the time. Practicing the simple task of handling several pages of a script, at first, seems to them a waste of time. But later when the class is doing a complicated show, the studio is crowded, there are many pages in the script, the director is throwing many cues, and timing is essential; the students then realize the importance of the simple, small tasks they once thought were a waste of time.

Recognising studio signals must become second nature. These are given to the students as they are needed in the day-by-day projects. Each time a new signal is used, time is taken for the student to put it into his notebook. About mid-semester, a little time is usually taken to collect and synthesize all the signals learned to date; a completed list is then made.

Keeping sight lines to the control room clear, keeping eye contact with the director, keeping traffic lanes clear to and from the microphones, reading the clocks are more of these small, simple tasks that must become second nature to the student. These are introduced on the tour; the student is urged to practice them wherever and whenever possible.

Six to eight days have passed. Only one assignment has been given; no grades have been taken. No grades are taken until after the first studio projects, which is about the third week.

The first studio projects are simple, five-minute, production team assignments. The script is very simple but it requires an operator at the console using one microphone and one record. It is a five-minute script which means that the personnel of the team must watch the clock. A five-minute script permits several teams to perform in one class period. The script is properly typed in regular broadcast script format; this is their first introduction to a script. A team varies in membership according to the size and needs of the class. An operator and an announcer are the two basic assignments. If the class is large, a director and a second announcer may be added.

In order to give the class some idea as to the pressures that traffic and time create in the broadcast situation, a schedule is posted; it shows rehearsal time and air time for each team. Before that schedule goes into effect, a day or two are permitted for team practice sessions, called "dry rehearsals." During this period, the chief operator or the teacher, takes small groups of assigned operators to the control room where individual instruction, supervision, and time are given for getting acquainted with the console operation.

If the class is small, positions are rotated so that students have the experience of being operators and announcers. If the class is rather weak in grasping the situation, the teacher will serve as director.

Students also acquire experience by serving on the staff for the daily news broadcast. This class is responsible for collecting and preparing a daily radio-type program of school news which is broadcast via the school's central sound system. This procedure was explained earlier in the review of the development of the facilities and the courses; when the school's station was in operation this same program was broadcast simultaneously by FM radio. The sequence of programs during the week have already been described. The personnel for these productions are taken from this class. An operator, an announcer, and an MC are assigned to duty each week. This duty rotates around the class. Additional duty assignments are made as each program's requirements are discovered. All this daily broadcast duty is in addition to the regular class work; no grades are given. However, a commentary is posted as to quality of work

done after each week's duty. Students frequently request special duty on this morning program, such as permission to plan special programs for approaching days or events. A few minutes at the beginning of each day's class are taken to evaluate the morning's broadcast.

This closes the first unit. About two weeks have been spent; no grades have been taken and the students are so informed. The student now has a broad, general concept of the industry, its size and importance, its operational procedures. The teacher has a view of the class; knows its potential; the future of the course can be charted.

Unit III Studio Techniques

Unit II is called "studio techniques" and includes a variety of activity. Listening projects followed by class discussion are directed towards setting standards for good speaking and reading over the microphone. Work must begin where the individual students are in their language development. This explains the range of one to three weeks in time allotted, but the aim is to spend only two weeks on this unit. Next, students are introduced to the various kinds of copy that are typical of the broadcast media. Marking their scripts for interpretation is a technique they should know. Voice and diction are recorded and analyzed; and improvement drills are planned. The sequence of these content items varies according to the make-up of the class.

The specific objectives during this unit are as follows:

1. To set standards for microphone speech (voice and diction)
2. To develop a facility of reading various kinds of copy

3. To improve voice and diction
4. To develop an audience awareness of an unseen audience
5. To develop a feeling of teamwork between announcer and operator.

Standards of acceptability of voice and diction are set before any attempt is made to analyze each student's speech. Each one must hear what is good in another's speech before he can hear the good and the poor in his own. Therefore, listening in class to good and poor oral performances by recordings and discussing what is heard comes first. Recordings of professional speakers and actors, excerpts from radio and television commercials, dramas, and general speech, mixed with recordings of student work kept from previous classes presents a wide range of listening. The students who do not detect the differences become more alert listeners when they discover, in the discussion period, what others in the class have heard.

Another reason for the wide range of types of oral performance, acting, speaking, and reading, is that this helps the student to discover the differences with which each listener receives each type. Discussion is then directed towards the differences in approach and technique by the performer. This way, the student becomes aware of the range of demands the microphone makes upon the performer. He discovers the differences between reading, speaking, acting, and ad libbing.

Examples of these various types of copy are then given to the students; a series of microphone projects follows. It is good to have the class, or at least a number of the members, read the same copy. This provides an opportunity for the listeners to compare work and to compare

their own preparations. But, for variety's sake and in order to insure that each student does his own work, it is necessary to give different pieces of copy within each category. Samples of many kinds of broadcast copy may be found in many college radio and speech texts. A list of some of those is included in the "Reference Readings" included in the Appendix. Some of those possible categories of types of broadcast copy are:

1. Straight commercial
2. Short news items
3. Short sports and women's items
4. Tell a children's short story
5. Dialog copy of two people, either a commercial or excerpts from novels and plays
6. "Mood copy" and "change of pace copy" (dramatic narratives and humorous essays)
7. Station breaks or identifications coordinated with operators and the blocks
8. Mike talks and group discussion (assigned in previous unit)
9. Ad libbing

The important fact to remember in this section of the work is to get everyone "on mike" every day, in a series of different types of reading. Discussion is held after several have performed and not after each one. Discussion is pointed towards the big errors, and towards the fact that a student did stumble. These errors are called "fluffs" or "goofs." The fact that an attempt is made to get many students to perform each

day requires that each piece of copy be short. The first ones should be very short, such as thirty-second commercials. As the class progresses through the types, each piece becomes somewhat longer; this develops sustained control.

Grades are not taken on each round; grades are taken on the first and the last one and are given on the basis of quality. This shows the student the amount of growth, which is what each is striving for. In order to separate in the student's mind, the psychological response to the usual letter grades, figures are used. A range of from one to six (number one indicates outstanding quality and six, not acceptable) is used. This type of scoring seems to satisfy the student more than the usual letters and actually gives him more information about his work. No failing grades are given if the student makes an attempt.

On the first or second round and again on one of the last rounds, each student is recorded. After all the microphone performances are completed, a play-back session is held. Each takes notes on his own performance and on one other student. He writes two critiques, evaluating the quality of voice and diction, the microphone performance, and suggesting methods for improvement. A conference is held with each student and plans are made charting his improvement program. Members of the class are urged to come to the studio on their own time and record whenever they wish. A traffic schedule for the use of the studio and equipment is kept; each one may sign whenever the studios are vacant. This also gives each student extra experience with the equipment; but it also means that the chief operator has extended duty.

Another recording and evaluation session is scheduled sometimes later in the semester, when time permits.

At this time, it is determined whether this unit must be expanded and additional emphasis put on oral work; if this is to be done, adjustments must be made in the latter part of the course.

During the series of mike performances, a different student operates; this gives a number of students the experience. They are urged to become familiar with the console, to anticipate a performer's actions, to note differences between performers. Performers take their directions from the operator who always starts with a closed or "dead" mike; then at five seconds before the sweep hand reaches either the twelve, called "taking it on the up," or five seconds before the sweep hand reaches the six, called "taking it on the down," the operator opens the mike and cues the performer who begins on the "up" or the "down." This teaches the students to be clock conscious.

During this period of mike performances, after a round or two have elapsed, time is taken for instructing the class how to mark their scripts for interpretation. They may have had some of this instruction from their speech classes. Various sets of symbols, taken from phonetics, music, broadcasting, and other fields are given so that once they have studied their copy and have determined points of emphasis, places for speeding up or slowing down, locations for upward or downward inflections, and other voice maneuvers, they can mark it. At the time of reading, their interpretation is aided by these symbols.

Unit III: Writing Techniques of Single Continuity

This unit and the next two (the commercial and the news) are not complete entities; after finishing these three units, writing and production assignments can be made. The objectives of these three units are to give the student an understanding of, and some experience in, those specific skills related to the writing and delivery of the commercial and the news program. To train him to prepare a script in the proper form, and finally to integrate those skills in the preparation and delivery of a total broadcast program. About a week is usually spent on this unit.

First, the basic elements in the broadcast program are identified and their various possible uses described. The student is made aware of these elements of voice, sound, and music for radio by class listening and identification. Television has the additional elements in the visual characteristics.

Next, the basic parts of the program, its format, and the types are studied. The program, whether radio or television, has basically the same composition: theme, introduction, body, close, and theme. There is great flexibility in this scheme of parts and sequence. Radio disk jockeys (DJ's) with their long record shows and TV's dramatic shows seem not to follow this scheme; so an attempt is made to teach the student the standard scheme of parts, then to show the flexibility possible where there is imagination. But the student must begin with the standard form first. An attempt is made to point out industry's need for imagination and willingness to experiment with new ideas. Listening-viewing assignments usually help students to become aware of the scheme and varieties

possible. They also learn, by these listening-viewing projects, how each part fulfills its function.

With the same listening-viewing projects, the basic types of shows can be identified and then discussed in class. Shows are classified as the music, the speech, the dramatic, the variety, and the quiz or audience-participation show. The popular or "top ten" shows are classified; their general purposes and values are discussed in class.

At this point, a study of the broadcast day's schedule is made. Schedules are taken from the newspapers or TV Guide. Patterns for the local station's planning and for the more powerful stations in this listening area are studied. Similarities and differences are analyzed; the relationship and the influence of the audience and range of coverage are analyzed.

Radio and television exist because there is a profit in what they sell; sponsors buy time and programs because there is an audience which listens to their programs and buys their product. This chain of cause-and-effect circumstances is made significant and an emphasis is continued during the study of the commercial and the news in the next units.

Reference reading for this section is difficult to find for the high school student, but some are listed in the "Reference Readings" included in this study. It is hoped that the student grasps the significance of the impact of the media upon the audience and, in turn, the effect the audience response to the broadcast program has upon the broadcaster's program planning. It is here that the public does have control of what is broadcast. If the few listeners in this course, semester after

semester, plus those in similar courses over the nation, remember this lesson when they become adults and parents, perhaps there will not be the criticism of these media that is heard today.

In this manner, another effort is made to attain one of these general goals, discriminating listening and viewing.

Script techniques are considered in the next section of this unit. Broadcasting requires a team of people working together. Each person is a specialist in his job; each job is different. All are working for the same result; all are working with the same elements and facilities. The whole operation centers around a script which holds the idea which the workers are trying to project to a listener or a viewer who voluntarily either receives or refuses the program.

Since so many persons work with the script which instructs them to do so many different tasks and which coordinates all their work, there must be a common understanding of the make-up of that script.

For instance, the actress in a dramatic show may wonder why her script has to be cluttered with information for the audio-engineer or the sound man; the operator may question why his script must show instruction to the talent. But all will recognize the reasons for this once they work together in a complicated program. A brief discussion such as the foregoing explanation serves to introduce the necessity for learning proper script techniques. Script techniques are merely rules for putting their ideas on paper so that someone else may follow their instructions easily and correctly. Then the class is given sample

scripts to see. These are found in various books on radio and television production; stations frequently are willing to give away such scripts.

All following writing assignments must now be put in proper script format.

Unit IV: Handling the News

The content for this unit falls into seven categories:

1. The kinds of news programs
2. The regulation of commercials in news programs
3. Scheduling the news programs in the broadcast day and the effect of the time of day upon the treatment of the news
4. Straight news programs
 - a. Writing the original story
 - b. Editing the wire news
 - c. Building the news show
5. The commentary news show
6. The documentary news show
7. The television news show.

The books on the "Reference Reading" list for this unit have good information for the student.

A number of specific objectives, in addition to those stated in the preceding unit, are set up for this unit. Working with the news of the day, collecting, evaluating, considering the audience and time of day, writing the broadcast copy, and delivering it offer many opportunities to achieve a number of desired goals. The work is tailored each

semester to the needs of the current class, but generally the goals for this unit are these:

1. To arouse an interest (if it has not already been aroused) in current affairs
2. To develop an ability to read from several sources and then evaluate the sources and synthesize the details into a logical story
3. To develop some skill in detecting what is news
4. To give training in writing copy for a listener that is informational, listenable, and logical
5. To increase the vocabulary, make it more vigorous and colorful, and more specific
6. To acquaint the student with the processes of handling wire news
7. To begin a development of a sense of showmanship or putting elements together to make a show
8. To give opportunities for discovering one's personal opinions and then presenting them in some defensible manner
9. To continue the development of the student's skill in microphone reading
10. To establish regular habits of reading, listening, viewing the news.

This unit of study usually is given three weeks of time. But, like the preceding and following units, it is not a discrete entity.

Since most teen agers do not listen to news programs regularly, to do so becomes a permanent assignment during this unit. The class is requested to listen daily to one specific news program, radio or television. While doing this, each one is urged to note differences, if any, in the show from day to day, differences in the newsmen's style or personality. They are urged to hear other shows, to hear as many different types as possible. This is where a discussion of types of news programs is introduced. As soon as the students can distinguish between the three basic types, the class moves on.

While listening to these news shows, students are requested to note how and when the commercials are handled. Then referring to the work of the first unit and the Mike talks on the FCC, this section is built on that foundation. The student is led to discover how the FCC functions in this matter of commercials on the news programs. The FCC regulations are noted and then applied to the programs which they are listening to and viewing.

In addition to the FCC as a regulatory body, the National Association of Broadcasters (NAB) is investigated as to its history, power and function.

The problem and the danger in this unit is taking too much time with various sections of the unit. This is one section that should have much more time spent on it.

This study of the relationship of the FCC and the NAB to the production of news programs for radio and television must be kept brief and

careers. It is to be hoped that an awareness of these organizations and the need for them is given the student and that a social studies class may delve into the study deeper. It is also hoped that, if the student does choose broadcasting as a college subject or a career, this career study gives him a solid base on which to build, gives him perspective for his later experiences.

Referring to the earlier study of the broadcast daily schedule, and the awareness of the industry as to who is listening when, discussion is now pointed towards the news programs. The patterns of time, length and treatment of the news for each period are analyzed. The differences between radio and television and the reasons for their differences are investigated.

The purpose of this phase of study is to point up when news programs are scheduled, why a specific treatment is paired with each broadcast period. The student's reference reading and his daily listening plus class discussion should synthesize the details.

A glance at the course outline reveals that the emphasis in this unit is on straight news.

This course justifies itself primarily because of its emphasis on the language skills. This particular section is most practical because most of the students will never choose broadcasting as a career; but all will be in need of language facility; will be consumers of the broadcast program, especially the news; and will be in need of the skills of evaluation and synthesis.

First, a journalistic approach to the study of news is taken. What is news? Reading and discussing this question in class leads to a study of the news which involves identifying the elements of the news, and how to write it for a listener, or how to present it with the aid of pictures for a viewer. Reference reading in any of the recommended high school journalism texts gives the student a foundation for this class discussion.

Usually there are some students in class who have had or are taking journalism; they become the class discussion leaders. After this discussion, students then begin a series of assignments designed to take them through the process of gathering, selecting, evaluating, writing a news story and then delivering it on mike.

Following this experience, repeated as many times as time permits according to the size and ability of the class, the class works on wire news.

Whereas the emphasis in the previous section was upon writing, the emphasis is now upon delivery. In both cases, the students are collecting "do's and don'ts" for their notebooks. There is some writing in this section, but it consists mostly of the transitions needed between items.

The history of the wire services and how they operate today is covered either by lecture or by reference reading and discussion.

Next, a collection of the wire news is obtained from the local station. How to handle this copy, interpret it and edit it is demonstrated before the whole class.

Then for several days, a student picks up the throwaway collection which the station offers to the class. A few members of the class are

assigned each day to come in after school and go through the process of "stripping the machines and posting." They identify each item and post it on special books, labeled "sports," "weather," "five minute," "spot summary," "fifteen minutes," etc.

In the meantime, students have been practicing with this copy. Then a series of microphone projects is assigned. They begin with short, single items and graduate to longer, single items, to two items with transitions, to three and four items. They begin with thirty-second time assignments and graduate to sixty seconds, ninety seconds, two minutes, three minutes and finally five minutes.

Now that the student has a foundation knowledge about news--what it is, how to present it, attitudes towards it--some experience is needed with the "on-the-spot" news. The ability to discuss or describe what is being seen at the moment is important to the news person, man or woman. A few specific devices, such as proceeding from the general to the specific and back to the general again, and class listening to recordings of on-the-spot news is given before actual experiences.

First, the student is asked to write out and read such a report. Sometimes they are given their choice of ideas; sometimes they are assigned topics, such as the school parade celebrating the team's state victory, the fire in the local business section, or (for the boys) some championship exhibition of an athletic feat or (for the girls) a new high fashion being exhibited or a champion cake baker receiving her award. The class proceeds from these commonplace experiences to those, not usually

experienced by teenagers, which will require some reading and imagination. Topics used here are the last moment before a musician or musical group begin to perform, such as Van Cliburn coming on stage and taking his bows in a well-known auditorium in Indianapolis, or on the Indiana University or Purdue campus.

After writing and reading the first one, the following assignments may be planned, thought through, but no notes are permitted at the mike. Eventually the assignments reach the point where they are actually ad libbed. The student picks up a topic after he reaches the studio. This work is not completed here; more experience is given in Unit VI.

A respite from daily microphone projects is given and discussions are next centered around building the news show.

The departments or categories of news items are identified. From their listening-viewing, students report how certain news programs arranged their items and whether the program they heard regularly was consistent with this pattern.

Sometimes several different news shows are recorded earlier in this unit for identification of types of news shows. Now those shows are heard again; this time their patterns of arrangement of categories or departments is analyzed. Attempts to determine which arrangements are more effective are made. The effect of arrangement upon various audiences at various times of the day is discussed.

Now a show is put together. The frames which were written earlier are now used.

Having studied a number of facets of this broadcasting business, the student is now ready to put them together into a unit. The class is nearing the mid semester. Sometimes at this point, the student feels that his progress has been slow and his learning fragmentary; but the class moves rapidly from now on. The work assignments are heavier too; but students are acclimated. They can move faster; they need to get the feeling of the pressure of the daily grind in broadcasting. The old adage, "the show must go on," is put to work. When assignments are made, a producer or director in the team carries the responsibility. The show does go on. Someone must fill in for the absentee. This policy is announced in advance; it eliminates the problem of slow-downs in case of absences.

Students have been working in teams prior to this time. The framework for their news shows is written. They have had several experiences with the news, both original and wire copy, and with writing transitions. They have done a considerable amount of listening. Now the complete news show is planned. No commercial is permitted.

The class is arranged in teams of operator, announcer, newscaster. All get a grade; but the news grade is the major one on this round. Everyone serves as a newscaster; as many as possible are given the other assignments. The newscaster becomes the producer and uses his own framework for his show. This producer writes all the continuity, plans the format, prepares three copies of his show. According to the size of the class, these programs vary from five to ten minutes. The framework must

include the use of one record. This means the operator now has a record and two voices to manage. A laboratory day is scheduled on which the groups can work together, select and audition records; operators may get some practice time at the console or may confer with the chief operator; producers may have brief "dry runs."

A schedule of each team's air time is posted; two minutes for changes in and out of the studio are permitted between shows.

On the air day, the rest of the class listens and also watches for studio techniques and procedures. Notes are made for later discussion. About the last ten minutes of each class are taken for class evaluation, questions and answers.

This same procedure will be repeated after the commentary and the commercial are studied; and again after the semi-scripted shows are studied. It should be noted that these team projects become longer and more complicated. It is at this point that the members of the smaller class derive more benefits individually because more than one round of these projects can be scheduled.

Actual experiences with television news are delayed until after Unit IX, the Television Unit.

The study of the commentary follows this complete news show project. Sometimes it becomes necessary to eliminate this section if progress has been slow up to this date.

The primary value to be gained from the work with the commentary news comes from the writing experiences. This is writing in a personal

manner, such as the editorial or the essay. Sometimes the other classes, English or journalism, have given the student sufficient experiences in this area for the time being; this is another reason for not including it here.

In order to be a commentator, one must be first a news reporter, a writer, and a radio newscaster. In addition, he must possess the ability to recognize that a story has a debatable quality, that there are various opinions about it. He must also possess some skill in determining his own position, be capable of arriving at his own conclusions logically and honestly, and be able to present and defend them. This is a section which the debaters usually enjoy very much.

Class discussions on differences between fact and opinion, on how one arrives at a conclusion, how one prepares an argument are planned. Just as in the earlier Mike talk assignments, if time must be taken to teach oral speech composition and if time must now be taken to teach some basic principals of debate and argument, then some items in the course must be deleted. This is the reason for the prerequisite of a basic speech course.

Experiences in writing and in giving their own commentaries are planned. Current problems in school, community, state, nation, and the current high school debate topics provide ideas for subjects.

Listening projects concerning commentators accompany this section also.

The concentration in this unit is put upon the straight news program; some attention is given to the commentary. The documentary is put in the

second semester, even though it appears in the course outline at this point. It is included in the outline here because this is the logical place for it according to the subject-matter; but students are not ready for it. So it is introduced to them; they are requested to do some viewing of this type of show; some class discussion about its characteristics and values is planned. Actual work with the documentary is promised for the next semester.

Unit V: Commercial Continuity

One or two weeks are usually spent on studying the techniques of writing and delivering commercial continuity for the broadcast program. The television delivery is delayed until Unit IX, the television unit. The commercials are prepared now; the adaptations take place later.

In addition to the objectives and content relative to commercials that were indirectly involved in the two preceding units, the content now becomes quite specialized. A study of the business phases of the industry, which was begun in a general way in Unit I, is continued now in detail. The various kinds of commercial copy, their purposes and styles, are analyzed. The student is given experiences in writing and delivering these various kinds. He also makes a survey of the work of the commercial announcer, his training, the daily routine, and other characteristics of his job.

During this study, the aim is:

1. To give the student a broad picture of the commercial side of broadcasting

2. To indicate possible vocations in writing, selling, and announcing in these areas of broadcasting
3. To provide actual experiences in writing and announcing this kind of copy
4. To train his listening skills so that he can become a more discriminate buyer
5. To alert him to the propaganda devices used in selling.

It is necessary that the student have some comprehension of the radio-television industry as a business that exists on profits. In order to write and deliver commercial continuity, students need to know who buys what from whom and why. This kind of information can, in part, be obtained from the magazines in the trade. By sending them to these periodicals, they not only get the information but they become acquainted with magazines that otherwise they would probably never know. Included in the "Reference Readings" are other sources. Special reports in the form of make talks and group discussions bring a wealth of information to the class. Topics are listed in the class and members volunteer for their choice. Topics, such as "the top ten advertisers," "the cost of certain productions and why," "the increase in business of certain firms" are elicited from the class. A previously made list helps to get from the class the items most desirable. Broadcasting and Telecasting's table of contents provide adequate ideas.

Occasionally the make-up of the class is such that a cursory introduction to the study of the function of the agency is integrated at this point.

Regulation by the Federal Communications Commission and the National Association of Broadcasters is also integrated and correlated with earlier studies of such regulation in broadcasting.

The student is also alerted to the possible vocations in this area. He is reminded of the chart that he is supposed to be keeping.

With this general background of the business of the broadcasting industry and the reason for and the importance of the commercial, the student is now ready to begin a study of the commercial itself. He is taught to think of the commercial as a salesman, just like the sales clerk in the local department store. Of course, back of the commercial is a writer and an announcer who give it personality and content and who project it to the listener and viewer.

Before the student can write or deliver a commercial, he needs to make a study of the commercial from three points of view: (1) its general content, (2) its production requirements, and (3) the times when commercials are scheduled. When this is done, the student will then realize that the writer needs to know all this information before he can write. In addition, he needs to know thoroughly the product and the firm selling the product.

Having studied the composition and scheduling of the commercial, the student is reminded of the mechanics of scripting and studio work that he learned earlier. He is given a few specific pointers concerning style and general mechanics of short commercial copy.

The student is not ready to write yet; he needs an acquaintance with professional copy and the experience of trying to deliver that copy.

While he spends time on listening-viewing projects, some reference reading, and investigating some local business or product (so he can write their commercials), class time is spent in delivering the various styles of copy. He is accomplishing two tasks now: (1) becoming acquainted with the different styles and purposes of written copy, and (2) getting experience in various kinds of delivery styles.

A study of the work and training required for the commercial writer and announcer is sometimes introduced here; sometimes it is combined with the vocational study for news work in the previous unit. Both are frequently combined and placed in either unit. The decision as to where and how this is done is made in terms of the class personnel.

Now, having made a study of how to write the commercial and how to deliver it, having done some listening-viewing, and understanding the necessary regulations and reasons why commercials are important, the student is ready to write and perform.

Like assignments of professional copy are given first. Students work in teams of announcer and operator, and with a clock. The operator usually works with ID's. These projects are short and everyone in the class can be heard.

This professional copy is obtained from several sources; some are indicated in the "Reference Readings."

Having worked with professionally written copy, the student next writes and delivers his own, delivers the copy of other members in the class. Actual places of business and products, local and national, are

used. The assignments vary in purpose and time length. Since these are short, a number are written and heard each day.

There are specific differences in the writing of the radio and television commercial. The student already has some idea as to those differences but this thinking has never been crystallized. Class discussion and reading lead him to this process now.

Television script techniques are not introduced until Unit IX, but it becomes necessary here to explain that because the TV script must give both audio and video information, the page is divided vertically, thus allowing one column for each kind of information. The student analyzes several television commercials, determines the proportion of time between speech and pantomime, notes how the camera causes the viewer to see different pictures. Then the student writes a commercial. Instead of camera commands in the video column, he writes out a description of what he plans for the camera to do. These are collected and evaluated, returned to the student to keep until Unit IX.

Now in order to bring a feeling of completion to this and the two preceding units, the students are arranged in production teams. This time there is a producer-director who is not a performer, unless there is an absence on his air date. Fifteen minute programs which include various kinds of news and commercials are planned. One operator works each day; the programs are "back-to-back." Two or three may be planned each day. The producer is responsible for script copies, all assignments, and, with the operator, for the selection of the music and/or sound that is used. Sometimes the use of a popular record or other music is permitted if the

team presents a valid reason and method for using it. This project usually proves to be practical and interesting.

Checking or grading of this project is usually scaled on these points. For the director, a total grade includes his planning and giving of instructions, his behavior during air time, the preparation of the script, the planning of the program. For the performers, their quality of work done at their assigned job, their individual contribution to the total planning, their cooperation with their director are points noted. For the group, a grade is given which seems to be more important than the individual grade. This is based upon quality, originality, and listenability, and accuracy of fact and mechanical details. A written report of individual performance and of the program as a whole is given by the teacher. Class members write a critique of the program as a unit; those who are appearing in the immediately following program are excused. One of these critiques, chosen at random, is graded as a listening project.

This same team project and grading system will be utilized again at the end of the next two units.

Unit VI: The Semi-scripted Show

This unit of study is the most flexible unit in the course of study. One of two approaches is taken in planning this unit each semester. If the class is mostly seniors who have had several semesters of speech, the work in this unit becomes very practical. Many studio projects are planned and the students receive a considerable amount of writing and production experience. On the other hand, if the class is composed largely

of juniors who have had only one, or perhaps two, semesters of speech, this unit must be planned very differently. Fewer production projects and more emphasis upon the skills and techniques of group discussion, demonstration, and interview must be planned.

About two weeks are usually allotted for this unit and the work covers the on-the-spot report, the interview, the discussion type program, the demonstration, and the public address. These types of programs are semi-scripted, sometimes called unscripted shows. There is always a script, but some types of programs are such that a complete script is impossible. In such case, a "frame" is written and the body has "running copy." A "frame" is sign-on and sign-off copy; the "running copy" is merely an outline which shows time segments and word or line cues. These details are usually described in Unit III, but the student has no actual need for the information until this unit. So it needs to be repeated here, unless it is not introduced until this point. The needs of the class determine at which time it is introduced into the course.

The goals, since this is a broadcasting course and not a speech course, are primarily those goals associated with broadcasting. The study and the projects are so planned that they will give the student the techniques and actual experience in planning, writing, producing, and performing in these various types of shows.

The study begins with the on-the-spot or ad lib type of show because some work has already been done on this particular type of performance during the news unit. But there are many variations; there are, in addition to the news reports, the several kinds of sports programs, the

shows which primarily appeal to women (fashion and food demonstrations), and special events, such as parades, fires, concerts, and similar affairs.

Continuing from the point where the work was left in the news unit, students write their first on-the-spot reports; then they think through their assigned topics; next they take them "cold" or as they enter the studio. Topics cover all the possible range of areas that time permits.

Some reading references are listed in this study, but actual experience is the best teacher. Since the mike appearances are for short periods of time, each member of the class can have several mike experiences. The students are directed to aim towards facility of words, selecting words that arouse pictures in the mind of the listener, towards acquiring the ability to keep words flowing smoothly, and to gain skills in using words correctly without being formal or overly precise.

Next to the general skills of ad libbing, perhaps skill in interviewing is second in importance in this whole range of special types of semi-scripted shows.

In working with the interviewer type show, the ad lib skills are important plus the know-how of procedure. A detailed outline for this procedure is presented in the outline. The steps of planning, preparing, and the actual interview are discussed in class. Next, actual interview experiences are planned.

Planning these interview experiences sometimes becomes difficult. To make them interesting and practical at the same time presents a dual hazard, but several suggestions for projects and procedures for handling them are presented in the Appendix.

In presenting the discussion and other similar forms of group performance techniques for broadcasting, the background in speech training of the class is very definitely important to the planning. If the class members have had work in public speaking, discussion, debate, and argumentation, the work in this section aims to adapt that learning to the medium of radio and television. But if the students had no experience in discussion, then a foundation of discussion techniques must be given; this results in less time spent on make projects. No description of the methods used in presenting the speech techniques is given here; these can be found in most high school speech texts.²⁰

Listening-viewing of discussion type shows are assigned; these are followed by class discussion. There are probably more discussion programs on radio than on television; there are some interesting varieties of the panel show on television. These audition experiences are synthesized in class discussion. The discussion period is directed into two channels, the planning and the on-the-air procedures.

Subjects for the make assignments are taken from the current school and community problems, from the current high school debate question.

²⁰For example, such texts are W. G. Hedde and W. M. Brigance, New American Speech, J. B. Lippencott, Publisher, Chicago, 1957.

A. T. Weaver, Gladys Borchers, and D. K. Smith, Speaking and Listening, Prentice-Hall, Englewood Cliffs, N. J., 1956.

Francis Griffith, C. Nelson, and Edward Steinhoff, Your Speech, Harcourt, Brace and Company, New York, 1955.

Law Saret, W. T. Foster, and James H. McDermey, Speech, Houghton Mifflin Company, 1956.

It was suggested earlier that topics concerning the history, the economic and sociological significance of the industry might be used here in discussion or panel topics.

Each show follows all the techniques and procedures learned to date. This unit becomes a period when integration of skills is most important. Operators, announcers, and directors, in addition to the group performing, serve on the production team. Either the director or the announcer becomes individually or jointly responsible for the portion of the script that must be written; the leader of the group or panel assumes responsibility for the remainder. These two chairmen work together in the planning period.

Plans for these shows include the station which is broadcasting the program, the time of broadcast, and the audience for whom the show is designed. Sometimes the students are permitted to choose these details; sometimes these details are part of the assignment. In either case, the grade depends upon the decisions made by the students in terms of these details. The length of the show is determined by the size of the class. The planning and preparation of the demonstration show are usually discussed; then plans are made for a demonstration show, but these experiences are not actually assigned until the television unit.

In the very first unit of study, it is usually announced that much of the information gained in this course must be obtained through research and presented or shared with the class; this means that the class would obtain much of its information by listening to others report in the form of Mike talks, interviews, and group discussions.

A review of the procedures for planning the formal public address or talk is held first. Discussion, then, is pointed towards analyzing the difference in audience relations between the live audience situation and studio talk for the unseen audience. This analysis leads to the next point in discussion, how these differences affect the planning and delivery of the speech. Then, what is the difference between radio and television speaking? When all this is comprehended and synthesized, actual talks are made. Topics from the field of broadcasting are usually used; topics from each student's major interest area also provide interesting talks. Listeners are held responsible for what is said.

Listening-viewing projects for this unit provide no problems since this is a day in which our local and national leaders are acutely aware of the power of these media and frequently use these media to further their own particular campaigns.

Unit VIII: Creative Projects

This unit is not one which gives substantive content to the course; instead, it provides an opportunity for the student to integrate the various broadcasting skills acquired and an opportunity to create and experiment with ideas in the broadcasting media. It is a flexible unit. It can be, and is sometimes, placed at the end of the semester; there it serves as a final examination project. When it is placed here at the twelfth week, it serves as a change in pace from the routine of study and then small projects for experience; it avoids the psychological reactions of urgency and tension that accompany the end of a semester;

and it also provides some momentum for the finishing of the semester, particularly the next unit. The next unit of study covers the technical or physical aspects of broadcasting, which is more content-based, and offers less studio practice projects.

If the individual speech and language arts backgrounds of the class are such that the progress of the class has been smooth and moved forward in this study of broadcasting, and the schedule of time per unit has been kept, this unit usually receives about three weeks. But in order to get into it without loss of time while students are planning, it needs to be anticipated during the early part of the course. Students must be urged to be thinking, planning, listening, observing in order to create a program.

This unit, if it can be called "content," deals with the task of creating a show and then seeing it through to its fruition. Several types of shows are suggested and students are directed into the various channels of activity which lead to music shows, shows for special audiences, adaptations, and original dramatic writing. Students are urged to create shows out of their own special interests and hobbies, and out of research.

Music shows that are suggested are the popular music or DJ show; then more serious music shows are required. Band, religious, concert, and various types of foreign music are tackled. A number of scripts are prepared; some of the continuity is read in class for analysis. One or two of the better scripts may be produced for demonstration.

In the area of shows for special audiences, assignments are more individual. A discussion of special audiences, their needs and interests,

precedes any decisions. Some of these special types of audience are children, teenagers, daytime women's audience, sports-minded men, the rural group, various foreign groups in larger cities, and others. An attempt is made to show the class just how wide the range of variety of audiences is, which in turn provides many opportunities for creativity.

Perhaps a listing here will graphically illustrate the range of ideas uncovered in class discussion; after which, in individual consultation, each student's writing assignments are planned. The number of scripts and the number of shows to be required is determined by the time element and the student's ability.

Some possible types of shows for special audiences are:

1. For children

- a. Story telling, straight and semi-acted
- b. Crafts
- c. Music
- d. Poetry
- e. History
- f. Animal tales which teach

2. For women

- a. Food preparation
- b. Meal planning
- c. Home care
- d. Home decoration
- e. Child care, infancy through adolescence
- f. Music, art, poetry, literature for relaxation
- g. Music, art, poetry, literature for information
- h. Mass commentaries for interpretation

3. For men

- a. Sports reviews and previews
- b. Sports, general news
- c. Sports stories and personalities
- d. "How to do it" (crafts and household jobs)
- e. Camping, fishing, hunting, etc. tips
- f. Business, farming, banking, etc.

4. Teenagers

- a. Music
- b. Crafts
- c. Vocations and careers
- d. Discussion of personal problems

A list like this is usually set up in class from their suggestions. This spontaneous suggestion process reveals what they like and do not like, what they think about these various groups and their characteristics. It is helpful to the teacher to have this reaction before the personal conferences and it operates on the individual members of the class as a stimulus which results in a chain reaction of ideas. Sometimes some very practical ideas come forth.

Suggested at this time is the possibility of adaptations and original dramatic writing projects. It is explained that these will not be studied until the next semester. The reason for this is that they must have experience in creating ideas first; clothing those ideas in dramatic form is more complicated and comes later. However, frequently the more superior students, or those with more theater or writing backgrounds, are capable of a minimum amount of such writing now. If they are and wish to tackle such, they are permitted to do so. Special reference reading is sometimes assigned or advised. This is another reason for spending time at this point in personal conferences planning these projects to fit each student's abilities and needs.

In each case, the students are urged to think of their shows in a series. Although they write only one, they are asked to plan the series,

to give it a title, to suggest details for the other shows in the series.

About a week of individual work in class is permitted; the teacher is on call for personal consultation to help solve problems and for assistance with scripting. The better scripts are selected; the writer becomes a producer; production schedules are made. Finally, the last few days are spent in "logged" broadcasting.

Unit VIII: Simple Engineering Aspects of Radio and Television

The technical aspects of broadcasting are highly specialized and have a broad scope. In order to present this material to a high school group in a manner in which the material may be comprehended, it is necessary that an evaluation of the scientific background of each student be made known. A knowledge of this background allows the teacher to determine the level and extent of the technical materials which may be developed in the classroom.

Approximately two to three weeks are spent on this unit of study. The general purpose of this study is to acquaint the student with the physical process of broadcasting so that he will have a greater appreciation for the work and the workers in these areas. It is not designed to make a technician nor an engineer out of the student. It is believed that the student as a writer, director, or a performer will be more effective and cooperative, and able to communicate more efficiently with his technical staff if he has some comprehension of these areas. A brief survey of vocational opportunities in this field is also presented.

First, a review of the path which the sound takes during the broadcast process; each major step is not studied in detail. From this overview, the class is ready to proceed to the more advanced ideas which follow.

In order to orient the students to commercial broadcasting, the various classifications of broadcasting as set forth by the Federal Communications Commission are investigated. The purpose of this identification is to clarify in the student's mind the fact that there are several forms of broadcasting other than the radio and television services provided for home receivers which they tend to accept as the only means of broadcasting.

Having established the understanding that there are several forms of broadcasting which the FCC recognizes, the student's attention is directed to the engineering details of the radio form of broadcasting.

The first step in the broadcast path takes place in the studio with the talent performing before a microphone. A discussion about functions and characteristics is presented. The general principles of acoustics and sound control are discussed and specific reading references are assigned. The advantages of a career in the field of acoustical engineering is developed. The importance of the arrangement of equipment and furniture in the studio is demonstrated. The relation of studio performers and technicians to the control room personnel is also demonstrated and described.

After this brief study of the studio, the students are introduced to microphones. A knowledge of the basic principles and purposes of microphones is required of all students. While lectures contribute the

majority of the information about microphones, classroom demonstrations graphically supplement this material; students then are given reading assignments concerning microphones. Pictures taken from magazines and catalogs add visualization when available textbooks do not include pictures showing the various microphones. With the help of interested science students, sometimes a display of the basic principles of microphones is offered the class.

The next step, transmission from broadcast console to antenna is best done by showing mounted pictures and explaining the work of the console, the systems of patching, the broadcast transmitter, and the tower and antenna. This is followed by actual visitation to the school's control room and then to the local commercial studio. Science students especially interested in electronics and amateur radio operators frequently contribute valuable assistance during this study.

Definitions of several key words are next required in order to introduce the study of transmission. The student is asked to locate definitions of such words as cycle, frequency, sound wave, radio wave, etc. The class members pool their findings; in this way the entire class arrives at accepted definitions. A knowledge of these key words leads to a discussion of the Federal Communications Commission and the need for regulation of broadcasting.

The need for regulation introduces another key word to the class; namely, the electro-magnetic spectrum. Reading and discussion plus diagrams and the use of the magnetic spectrum charts available in

textbooks, which have been enlarged for classroom use, lead to frequency assignments. Explanation of the radio dial, the television channel, the very high and ultra high frequency telecasting are followed by a study of the kinds of modulation, amplitude and frequency. Class time for reading from various materials is then permitted. "Bus sessions" are also permitted; this allows students to question and discuss with each other. It permits the teacher to spend time with small groups in discussion and thereby aid individual students, thus bringing the class to a more general level of understanding.⁵¹

Following this study of frequency regulation, modulation, AM and FM broadcasting, films are shown if they are available. These films are listed in the Appendix. The best way to present films which cover specific information seems to be to present them before any study of the subject has been made and then to show them a second time after the study has been completed. This is not always possible. If a choice must be made, in most cases, the preference is to show the film after the study has been completed.

The technical or engineering aspects of broadcasting are now covered and examinations are presented. A glance at the outline, however, will indicate that the unit is not completed. The remainder of the work in this unit is related to television and is pointed towards the next unit.

⁵¹For the slow students, a pamphlet, titled "Radio, USA," is recommended. It is easy reading and cleverly illustrated. One copy may be obtained free and others purchased at a nominal fee from the National Association of Radio and Television Broadcasters, 1771 M Street, N. W., Washington, D. C.

Therefore, this break between the engineering study and the study of the television camera seems to be the logical place for examination. The reason for not including the remainder of this unit in the next unit is that the study of the television camera is somewhat physical or technical in aspect. The next unit is an activity unit; whereas, this unit is a study or content unit. Therefore it seems more logical to place the study of the television camera in this unit on the engineering aspects of broadcasting.

The nearest television station to this class is fifty miles distant. Because it is not always possible to arrange a visit at this time, this section of study must be presented with pictures and descriptions.

To introduce the camera to the class, sketches on the blackboard serve to show its function—that of taking and receiving its picture. There are reference materials available which explain this process, but many of them are quite technical; some students have difficulty reading such material. Therefore, the pictures, the sketches, and the "buzz sessions"²² aid the student when actual cameras are not available.

Two projects have been found to make the presentation of the camera lenses more vivid to the class when actual cameras are not available. One project is the Breta Box.²³ This is a small cardboard box with

²²A simple explanation of the function of the camera may be found in Television Techniques (revised edition) by Hoyland Bettinger and Sol Cornberg, New York: Harper Brothers, 1955, Chapter I. In the same book is an equally simple explanation of camera techniques, pages 61-71.

²³See Techniques of Television, by Rudy Breta, (New York: McGraw-Hill Book Company, 1953), pages 75-76 for instructions as to how to make a Breta Box. Some suggestions that are helpful in following the instructions may be found in Handbook of Broadcasting, Waldo Abbot and Richard L. Rider, (New York: McGraw-Hill Book Company, 1957), p. 493.

apertures cut on each of the four sides to simulate the proportionate size of the four television lenses. For a small fee, usually ten or fifteen cents per student, masking tape and the cardboard is purchased and cut to uniform size. Class time is taken to cut the apertures and tape the pieces into a Brets box. Some students wish to keep theirs; others leave them for other classes. So it becomes necessary about every fourth semester to make a new set.

When each student has a Brets box in his hands, he has a device that will give him a framed picture. By directing the students to "shoot at" specific objects with certain lenses, the student will be able to see the different pictures and "shots" that the television camera is capable of taking.³⁴

The camera's moves and commands are studied in this manner also; each student becomes a cameraman.

The second project which helps make lens characteristics more graphic is a teaching aid which needs to be prepared only once and can be used for several semesters. This aid is made as follows: from each of four large pieces of cardboard, apertures are cut in proportion to the four lenses. Magazine pictures are put behind these frames; these pictures suggest a stage setting such as an office desk with a chair behind it or

³⁴A dummy or mock-up camera can be made for use in class also. Since it is a model, it has the qualities of reality; but its disadvantage is that only one student can actually use it at any one time. References for making the dummy or mock-up camera may be found in the following books: Television Scripts, Rudy Brets and Edward Stasheff, (New York: A. A. Wyn, Inc., 1951), in the foreword and the Appendix; and Edward Stasheff and Rudy Brets, The Television Program, (New York: A. A. Wyn, Inc., 1951) Appendix II.

two chairs with a small table and lamp between them, a home setting.

By moving these pictures around, behind the apertures, the student gets an impression which suggests a picture viewed on a television set.

A series of pictures give a variety of scenes and also the effect of the various lenses at various distances from the object.²⁵

Reference to the assisting technical aspects of television production, such as lighting, costuming, and others are made by lecture. Sometimes there are students with specific interests in these areas; they are given extra projects for extra credit. These projects are either special research about possible careers or projects related to building or designing a model related to their major interest area.

The unit is closed by reading and class discussion, sometimes in the form of radio group discussion, comparing radio and television, and evaluating the importance of broadcasting to society.

Unit IV: Television Productions

By this time, Beta boxes are made;²⁶ the student knows the camera's moves and commands; he has written the audio portion of a commercial script. This unit provides an opportunity for a minimum number of experiences in television. About a week is scheduled for these activities.

²⁵This same device can be used to create ideas for dramatic sequences. Presenting a series of such scenes to the class, with or without music and sound, stirs the imagination. Creative writing projects spring from this activity.

²⁶See the previous unit for information on how to make and use the Beta box.

No grades are taken during this week. The lack of television studio and equipment and the minimum amount of time given to this unit do not warrant grades; however, the work in this unit is valid because this is an age of television and the student can benefit by even this brief introduction to it.

The aims, then, for this brief study are to provide a continuation of the previous study of television's physical aspects, to give the student a cursory experience in television production techniques so that he may become a more appreciative, understanding listener and intelligent consumer of the television broadcast.

The commercial scripts which were prepared earlier are not completed. The video portion is changed from the prose write-up to the symbols for camera moves and shots. A studio team is rehearsed and demonstrates the production of a commercial. If the class has visited a television studio, members of the class take over direction of several commercials. If no visit has been possible, the teacher does the directing.

A wide range of possible activities is available if the capabilities of the class permit and if the television studio visit has been included. When this background is favorable, it is possible to plan demonstration projects and experiences with either the news or an interview.

Two students become camera men and work with Breta boxes. A floor director works with ear phones from the control room, where a director, instead of switching, is working from a Breta box, calling directions over the talkback system.

These classroom experiences plus group viewing of a television show, followed by discussion, provide some impetus for students to continue a study of television. They usually ask for more. Some can be included in the second semester.

Unit X: Vocations and Significance of Industry to Society

In essence, this unit is a concluding unit. It brings together all the loose ends and attempts to give a feeling of completion to the study. It tries to avoid the feeling, however, that each study has been all-inclusive. It does attempt to point up the various areas of continued study possible in high school and college.

No new content is introduced in this unit, but the emphasis is upon study, not activity; the study areas are (1) vocational aspects of broadcasting, and (2) the general significance of the broadcasting industry to society.

In the first unit a project was begun on vocations which must now be finished. Each student was assigned to make a general survey of the opportunities that became apparent in each unit of study. Now he is required to concentrate on one; a thorough investigation and report is made on this one job for which he feels he has some potential and would enjoy doing. These reports and the general survey are written. General class discussion, after the completion of this work, tends to bring much of the individual findings to all the members of the class.

The study of the significance of the industry to society is done by committee projects. Small groups volunteer to investigate various phases

of the topic, such as the political implications, the economic aspects, the educational possibilities, and others. Bibliographies are made; research is done; then panels discuss their section of the study. Members of the class not on the panel ask questions which are answered on the following day. Each panel performs twice. After all the panels have been in action twice, one member of the panel and one member of the class not on the panel are paired together to summarize each panel's contribution. At the end, these pairs of students present a final panel on the general subject of the significance of the broadcasting industry to society. The student who was not a member of the panel makes the formal presentation; the panel member is there to answer questions and make sure that the speaker does not misrepresent the panel.

Sometimes this final panel becomes so interested and concerned that another class, perhaps a social studies or English class, will be invited in to participate in the discussion.

As a final project, students are asked to evaluate briefly what this course has contributed to their general knowledge and skills, or to plan five general questions over the field of broadcasting that members of the class should be able to answer after having completed this course.

Summary

This is the one semester, one credit course in Radio I as presented in New Castle, Indiana High School during the school year, 1957-1958. It is the result of a combination of conditioning factors. It has developed over a period of years, since 1938, when the central sound

system was installed. Major changes in the facilities since that time have caused major changes in the course. The operation of a ten-watt FM, noncommercial station between 1950 and 1955 resulted in the establishment of a second course. Producing programs for broadcast over the local station since its establishment in 1947 has provided students in the radio classes with opportunities for actual broadcast experiences and has provided content and direction for the courses. Since the end of station operation, the two courses continue to be offered. The major change resulting from this suspension of activity has been an increase in the amount of content about broadcasting and less orientation towards station operation.

These, then, were the conditioning factors within the school. Other conditioning factors which influenced the design of this course were the workshop and study experiences of the teacher. Primary among those studies has been the historical investigation concerning broadcasting in education which has been presented in this thesis and which has served to set in broad perspective this curricular offering for a high school.

An evaluation in terms of the objectives of this course, its merits and weaknesses, is presented in the following chapter. Possible adaptations for use in various types of other schools are also offered.

In the Appendix, a detailed outline of this course of study is presented, unit-by-unit, followed by suggested reading references and projects. Included with this course outline is an outline for the second semester study of broadcasting (Radio II) as presented in New Castle High School about every third or fourth semester, when enrollment warrants.

The bibliography includes some recommended films for inclusion in this course of study and a classified reference bibliography for the high school teacher of a course in Radio or Radio and Television.

CHAPTER IV

SUMMARY AND RECOMMENDATIONS

The course of broadcasting instruction described in this study has been examined in its contextual setting. The design of the study is based on the assumption that such a course is the product of many national trends and factors, as well as the peculiar characteristics of a local situation. It is further assumed that such a course of instruction can best be evaluated and understood when accompanied by an analysis of the multitude of shaping factors. An attempt is made in this final chapter to review the foregoing materials, to evaluate the course in terms of its shaping factors, and to suggest possible variations.

Historical Development of Broadcasting in Higher Education Summary and Conclusions

Although the necessary technological developments came on the scene around the turn of the century and some attempts had been made in radio programming, radio did not begin to emerge as a program service until 1920.

Almost immediately educators began to utilize the new medium of communication. They began operating their own stations as early as 1922 and some continue to operate them today.

Institutions of higher education operated most of the early educational stations. Of the 202 educational radio station licenses issued before 1938, 124 were held by colleges and universities.

Instrumental in this development of station ownership by educational institutions were a number of educational and federal agencies. They made their influence felt by pressures on the federal government; they fought for protection of educators' rights to broadcast; they lent their support and encouragement to educational institutions to enter into broadcasting.

Between 1920 and 1938, the Federal Communications Commission had issued 202 broadcast licenses to educational institutions; but only 38 were in operation in 1938. Not only was there this sharp decline in station operation; statistics reveal that individual stations were short-lived. Most stations operated one to three years; very few existed longer than five years.

Causes of the apparent failure of these early attempts by educators to operate their own stations were similar. Many of the causes were inherent within education.

By the end of the forties, FM and ETV had emerged. The FCC had reserved radio channels in the FM band for educational radio and had established the low-power, ten-watt licenses for purposes of introduction to, experimentation with, and training in broadcasting procedures and techniques.

Since 1950, there has been a slow, steady increase in noncommercial radio station operation. As of August 1958, FM noncommercial operations

represent about one-fifth (153 stations) of the total (534 stations) Fd stations in the United States.

The ETV movement was marked in the beginning by difficulties; significant evidences of growth are not noted until after 1952. By 1954, the FCC had reserved channels for education. Since then, a slow increase is noted in the ETV movement. As of March, 1959, there were thirty-nine noncommercial television stations on the air.

Evidences of curricular interest in broadcasting by colleges and universities are noted as early as 1933. The first courses in broadcasting were studies of the skills used in radio performance and production. Usually these courses were offered by English, speech, journalism, or music departments; but by 1938, most colleges and universities had placed the responsibility for radio training in the speech and drama departments.

Continued interest in broadcasting curricula at both the graduate and undergraduate levels is noted because in the 1957-58 school year, 515 institutions reported their offerings of course work; of these, 87 offered advanced degree work; 10 offered doctoral programs.

During the nineteen-forties, a trend was apparent to determine the place and function of broadcasting curricula in the educational system. In spite of these uncertainties and in spite of the wide disparity in course content and multiplicity in course credit and titles current at that time, institutions continued to add courses in broadcasting to their curricula.

When television emerged at the end of the forties, content pertaining to television was absorbed into the already existing curricular framework;

by treating television as a separate subject or by adding television work to the radio courses. The pattern that is most prevalent today is a combination of these two methods.

Separate television and radio departments on the college level are relatively new, but there seems to be a trend in that direction. As of August 1958, twenty-eight institutions have separate radio-television departments.

During this period of curricular development, course content was undergoing an evolution. At first, courses were practical; they met the current needs primarily for announcers, writers, and actors. Then as the industry expanded, educators incorporated the larger aspects of broadcasting in their courses; they added studies of the history and ethics of the industry. Today, this course evolution seems to be entering a third phase, that of research and evaluation.

Graduate programs in broadcasting have been developed relatively recently. Fewer than fifty graduate theses and dissertations in this field were written before 1935. Many schools and departments produced research before speech schools and departments were given the responsibility for offering the course work in broadcasting. In spite of the fact that such responsibility was eventually assigned to speech schools and departments, they did not, until recently, foster the graduate programs in broadcasting. Since the late nineteen-forties, a steady flow of research has come from various departments and schools in institutions of higher education.

Because of this increased amount of graduate research and because of the intersecting nature of broadcasting with other subject areas, courses in radio and television are now designed with a much broader concept, which includes evaluation and research on the effects of the media. It is this factor which has brought the curricular development of broadcasting into its third phase. Curricular offerings and graduate research today are pointed toward the broad concept of mass communications, and training is directed toward making the broadcaster a professional.

A contributing factor to this new curricular development has been the work and influence of the Association for Professional Broadcasting Education. Its influence, its relations with the National Association of Broadcasters, and its service to its member institutions--helping them to upgrade their curricula, their facilities, and their faculties--have been significant factors in attaining academic status for broadcasting in recent years.

In conclusion, then, it is apparent that institutions of higher education have been concerned with and active in broadcasting since the advent of radio. The development to the present status has been marked by sporadic spurts of enthusiasm and activity; but on looking backward, it would seem that there has been a slow, forward progress to the present curricular concept.

Historical Development of Broadcasting in Secondary Education Summary and Conclusions

The first public school-owned radio station went on the air in 1922, shortly after the first university-owned stations began operations.

The development followed the same pattern that the university activity did. It was marked by a rapid, early growth of school-owned stations; this was followed by a quick demise of most stations. Of the 202 broadcast licenses issued to educational institutions before 1937 by the FCC, 22 were held by public schools; by 1937, however, all but two had ceased to operate.

The same causal factors that operated to bring about the rapid decline in collegiate ownership of radio stations brought about the decline in public school-owned stations.

Thus, a parallelism between the university and the public school-owned stations is found in the development, in the decline, and in the causes which brought about the demise of such stations.

This parallelism continued through the nineteen-forties, which was a period of little activity.

During the late forties, FM and TV made their appearance. Both the low-power license and the reserved channels for education by FCC were contributing factors toward a renewed interest in broadcasting at both levels, higher education and public school education. By 1951, it was obvious that the use of radio and radio techniques for educational purposes was an accepted academic procedure.

The noncommercial FM operation in 1958 (153 stations) represents approximately one-fifth of the total FM operations (534 stations); of this one-fifth, the public schools own about one-third (15 stations).

In addition to some agencies previously named as influential in behalf of educational broadcasting, several state departments of instruction contributed to the public school development; their influence was largely in the use of the programs in the classroom and for public relations purposes.

By 1930, the Office of Education had appointed a Radio Specialist to promote and aid radio education. The many services of this Specialist, previously cited (Chapter III) especially in the early years, have been partly responsible for the public school development of curricular radio.

The most important conclusion concerning the history of the public schools' attempt to operate broadcast stations is that this attempt parallels the history of broadcasting activities in higher education. The same characteristic is noted concerning the development of a curricular interest.

Radio first entered the classrooms of public schools as a tool of instruction; radio lessons were broadcast in New York City as early as 1924. This in-school use of radio reached national proportions by 1928 when the Columbia Broadcasting System inaugurated the Danroech Music Appreciation series.

The extent of in-school use of radio and the number of organizations active in promoting such use was impressive as early as 1928; and by

1930, three-fourths of all public school systems were found to be participating in such activity.

Another way in which the public schools were generally involved in broadcasting was their use of the medium to promote better relations between civil and school communities. This usage has widespread acceptance today in both radio and television.

As a result of this dual use of radio, in-school broadcasting and programs for public relations, two factors are obvious:

1. The larger the city the more its educational institutions became involved in broadcasting,
2. The concentration of interest and activity was in the Middle West.

These early attempts by public schools to operate stations, to use the broadcast program either in their classrooms or as public relations vehicles were often amateurish and ineffective. However, this activity aroused interest, and learning took place.

The club or extracurricular activity appeared first within the framework of the high school program. This was a logical sequence to the broadcast activity which had been undertaken by schools.

Thus, like some other subjects in today's curriculum, radio began as an extracurricular activity. Then, on the basis of demonstrated student interest, the extracurricular activity became a regular part of the curriculum. The radio class and the radio club, working together, have developed a content and a procedure directed toward the fulfillment

of a somewhat general body of objectives, which were outlined and discussed in Chapter III.

The emphasis in these first high school courses in broadcasting was primarily on the technical aspects, such as the use of sound effects and music, and the operating of equipment. Later courses included the performance skills of speaking and writing, and program production.

Titles of courses, academic credit received, and objectives varied greatly from school to school.

Motivation for the existence of these courses often seemed to come from the possible use of the class as a production center for public relations programs, and for the exhibition of student talent.

By 1939, the curricular use of radio was a vital question among some public school educators. Reports from these educators of their attempts to include and to upgrade radio instruction in high schools came from various points over the nation. Also, evidences of interest in the high school broadcasting courses were found in outside groups with interests in the public schools. These outside groups, such as the Speech Association of America, colleges and universities, the radio industry, and even some state speech associations, displayed an active interest in fostering and aiding the curricular use of radio in the secondary schools.

High school courses concentrated less on the technical and vocal aspects during the nineteen-forties. Content was broadened, as it was in college courses, to include the history and some study of the importance of the industry.

One of the earliest courses to be reviewed in detail was presented by the Michigan Association of Teachers of Speech in 1938. The course presented five units of study. The psychological aspects of radio were covered in one unit and the other four units concentrated on the speaking, acting, writing, and producing skills. Its title was "Radio Speech."

The hyphenation of radio courses with another subject was quite frequent. English and speech were the most commonly shared areas.

By the mid-forties, the New York City schools were offering six courses in broadcasting; all carried credit. They, too, included a wide range of subject matter. The Cleveland system's offerings were broadened during the forties to include the history and significance of the industry, as well as a study of broadcasting as a vocation.

It may be concluded, then, that after the initial "trial and error period," between 1922 and 1938, there was a period of slow development; experimentation with procedures and content was followed by evaluation. This broadening of content was centered in classes for credit and in the extracurricular activity.

In 1950, there was an increase in radio class and workshop activity and it was noted that there was a slight trend toward the introduction of television workshops into the high school.

Because of the attraction of the microphone for students, radio projects were frequently inserted into other courses of study, such as history, music, or English. This practice makes it difficult for investigations to determine the amount of actual instruction being offered today.

In the beginning, public school broadcasting was ineffective. This was due to the lack of school policy in placing the responsibility for the broadcasting activity on a definite department or persons within its jurisdiction. The same problem exists today in some schools.

Unlike the colleges, there is no indication of any trend toward locating this activity in separate radio-television departments in the high schools.

Objectives and values for courses in broadcasting in high schools show a wide range of philosophy, but some commonalities do appear. There is evident agreement:

1. That broadcasting at the high school level does further the language development of the student,
2. That it provides a motivation for self improvement,
3. That such study provides a basis for understanding the industry,
4. That there is some transfer of learning to vocational efficiency, and
5. That discriminatory listening is developed.

Summary

In conclusion, the development of broadcasting operations in the secondary school paralleled the development in higher education. The rapid growth, the usual quick demise, and the causes for the failure to operate noncommercial stations successfully summarizes the development of station operation for both levels of education.

The reservation of FM channels for education in 1945 provided a renewal of interest at both levels. The FCC announcement authorizing a low-power transmitter license seems to have created more enthusiasm and activity among the public schools than it did among institutions of higher education.

The total of forty-five public school systems which operate stations today, representing about one-tenth of the total FM operation, is fairly impressive; but this number of schools among the total number of public schools in America is relatively small. Most of the stations which are now operating began before 1952. This indicates that there may be more stability among schools in maintaining their licenses today than in the early years of station operation.

Of the existing patterns of broadcast activity in the public schools, these two are noted:

1. Larger city school systems tend to sponsor more broadcast activity than those in smaller cities, and
2. Much of the activity is located in the Middle West.

It is also noted that those school systems which became active in the early years of broadcasting are the leaders today, e.g., Chicago, Detroit, Cleveland, and St. Louis.

Finally, broadcasting courses of study in high schools are apparently receiving academic recognition today.

Evaluation of the Course

As a result of this investigation into the history of broadcasting in secondary schools and after having taken a perspective aimed at evaluation of this course, its merits and its weaknesses may be assayed.

General Objectives of Secondary Education

The first requirement of any course design is that it meet the general requirements of that level of education. In terms of the general objectives of secondary education, this course stresses the personal and social values which may be gained from experiences in broadcasting and the study of broadcasting. It recognizes that individuals have varying capacities and interests; provision for adequately serving these individual variations is built into the course. Lastly, it takes cognizance of "citizenship" as a goal for education at this level; through this study and the accompanying experiences, the student is led to recognize himself as an active member of society with personal obligations to that society.

The content of this course is so organized that study and activity are directed toward the acquisition of certain behavioral patterns or responses which are automatic, and which result in intellectual changes and emotionalized conduct. Inherent within the subject of broadcasting and broadcasting activities are the possibilities for obtaining automatic responses, intellectual changes in the individual student, and emotionalized conduct. The wide range of subject matter that must be integrated into a radio program, the fusion of intellectual content, and the artistic

uses of language, music, and sound effects call for an emotional response in the student which directs his eventual conduct.

Specific Objectives for this Course of Study

Another requirement of any course design is that it meet specific objectives which have been set forth to meet the needs of the subject matter, the school system, and the student body. Such a set of objectives was established in the design of this course:

1. The course was designed to provide the student with a set of experiences that would develop his personality and enhance his own personal worth to himself. Through the many proposed studio projects, the student has an opportunity to work in the group and thereby gain an evaluation of his own assets and weaknesses. By these group activities, he has an opportunity to develop those assets and utilize them for the welfare of the group. Through observation and personal conference, he can make provision for his own personal growth in terms of needs.
2. The course was designed to continue the student's development of language skills. The listening projects, the many experiences provided for writing and speaking performances, and analysis are opportunities for the student to continue his development of language skills. The majority of the work is performed in groups which include various tasks. This enables the teacher to make assignments according to the abilities of the students. Satisfaction, not frustration, is achieved by the student who

is willing, even desirous, of continuing his study. He progresses at his own speed, not at a fixed speed for the whole class.

3. The course was designed to widen the horizon of his interests and understanding. The student's interests and knowledge are widened and enriched through his preparation and participation in broadcasting projects that deal with various subject matter areas.
4. The course was designed to provide an opportunity for the student to survey some of the vocational opportunities and determine his fitness and his interests in a career in the broadcasting field. In each unit, opportunities are available for the student to learn about possible vocations and careers in the field of broadcasting. In each studio experience and its subsequent critique, the student has ample opportunity to assay his own interests and special abilities for certain tasks in this field. In this way, he can survey the vocational opportunities and his interests and capacities for the work.
5. The course of study was designed to furnish the student with an opportunity to acquire some broadcasting skills and to gain some comprehension of the industry. The student is and will continue to be a consumer of the broadcast product; he may or may not choose a career in the field. In either case, the principle that the more he knows about a tool, the better he can handle it, operates here. Through projects, the student gains a set of techniques; through his study of the content, he gains an understanding of the theory and philosophy. Then, as his techniques

becomes extended, his comprehension of the theory will enable him to adjust to new conditions and new techniques. This course provides for a study of content and the acquisition of certain skills; and thus meets its fifth objective.

Additional Benefits

In addition to meeting its general and specific objectives, the course seems to possess some additional strong points. One of these assets is to be found in its flexibility. It can be changed to meet the needs of individual students without affecting the course content in a negative way. It can also be adjusted to meet the needs of the school. In the presentation of the course (Chapter III) the various points at which adjustment was possible were pointed out. In the modern high school class, a variety of abilities and needs are displayed; adjustment of the course content and procedure becomes necessary in order to serve each class. Thus, flexibility is a basic necessity for any high school course; it is believed that this course has that potential.

The integration of skills and the study of vocations and the importance of broadcasting to society seem well balanced. In this respect, the course meets the criteria for high school curricula, namely, that secondary education should provide an opportunity for the student to think critically and to use knowledge effectively. In this course, the student learns skills and knowledge; he acquires a set of responses and behavioral patterns concerning broadcasting which he will use as an adult consumer of broadcasting whether he becomes a professional broadcaster or not.

All students deserve training in specific skills and instruction which will help them to become more efficient individuals. The more capable students should have the opportunity to develop their special abilities for leadership in society, e.g., program directing and planning. The talented student deserves specialized training to develop those talents for service to society, e.g., writing, acting, operation of equipment. This course of study makes provision for serving all students.

Weaknesses

Although the course of study described herein seems to be well-suited to its purposes, there are some obvious defects which deserve consideration.

First, there is too much planned for this course to accomplish. The time element allotted to each unit is necessarily brief; it is believed to be too brief to provide for adequate study. It might be better to treat fewer facets of the broadcasting field and be more thorough in each segment. This might serve the student more adequately.

Secondly, the lack of dramatic writing and production experiences in this course might be considered a serious weakness. There are so many opportunities for developing writing skills and interpretative speech skills inherent in the dramatic areas of broadcasting.

A third weakness of this course is that it provides only two weeks for a study of television. The course should either give greater emphasis to television or delete the unit. Too little is worse than none.

SUMMARY

In summary, then, it may be concluded that this course does provide for meeting its objectives but that it does have certain weaknesses.

In evaluating any course of study, it is recognized that the proficiency with which the course is taught should be considered. This course, as it is presented here, brings the teacher into close contact with the personalities of the students. Knowledge of the subject and teaching skills are of utmost importance. If the teacher is well trained in the subject matter and in teaching methods, any course of study automatically becomes more effective. No attempt is made here to evaluate the proficiency of the teacher of this course.

Another factor that must be considered in evaluating broadcasting courses is the availability of facilities. The facilities provided at New Castle High School are described in detail elsewhere in this study. They are adequate for high school use and for this course and they are superior to the facilities available in the average community.

Consideration of another factor which contributes to the effectiveness of a course is the provision made for evaluating student performance and growth. This factor is closely related to the teacher's proficiency. It is not the grade evaluation but the critique that is offered to the student which enables him to understand the real worth of his activity, and what he can do to overcome the weakness of a particular aspect of that activity.

This course of study in broadcasting as offered to the eleventh and twelfth grade students in New Castle High School is recommended to

other high schools with similar facilities and needs.

This study has, in accordance with its stated purposes, set out to offer one small means available to man to sharpen his ability to comprehend and assimilate the product of the communication media into modern thinking and living. That "one small means" was a course of study in broadcasting recommended for high school juniors and seniors. Noted among the possible merits of such a study were the acquisition of skills and understanding of these new mass media of communication. By providing such training at the secondary level, a large percentage of future citizens may:

1. Gain a broad, general comprehension of radio and television,
2. Discover their uses and methods of control,
3. Investigate the skills they demand vocationally,
4. Become aware of their significance for society in general.

Possible Adaptations for Other Schools

While it is unlikely that any two school systems would be endowed with an identical set of characteristics, it is probable that the course of study as herein described, with minor variations, would match the needs of a great number of secondary schools. In addition, the course is so designed that it could prove useful for an even greater number of school systems with a few major variations.

Some specific variations may be suggested for school systems with these characteristics:

1. The school that finds itself attempting to meet similar goals with a minimal equipment budget,
2. The school that expects its radio course to serve the function of a total speech program, and
3. The school that maintains a speech program and, in addition, wishes to take advantage of its commercial or noncommercial television studios and personnel by offering a broadcasting course with television emphasis.

The Minimal Equipment School

The minimum equipment requirements for a course in broadcasting in a high school situation would be met by the possession of a tape recorder with microphone and amplifier attachments, a record player, and a room with moveable chairs. With this minimum amount of equipment, a course in broadcasting could be offered. It is suggested that the following elements may be deleted from the course of study:

1. The assignments which place emphasis upon operating radio equipment,
2. The activities which require a studio set-up and techniques, and
3. The radio complete team assignments for special projects.

Otherwise, the course can be presented from the detailed outline in the Appendix. There would need to be some change in objectives. There would be, under this plan, less opportunity for the operation of equipment. The emphasis would then be on the language skills of writing,

speaking, and acting, and on the content aspects of the course, such as theory and history. The listening projects should be included. The study of the various techniques of handling the news, the script format, the interview, and discussion types of programs, even the creating of some special formats should also be included. The major portion of this course could be taught with a minimum amount of equipment. The true success of the course would depend upon the teacher's industry, skill in teaching, and knowledge of broadcasting.

The Radio Course as a Substitute Speech Program

For the school with no speech program and an interest in a radio course with a speech emphasis, it is recommended that the school possess at least the minimum amount of equipment described earlier.

The adaptation of the course to meet the desired speech emphasis would require the expansion of the second unit on studio techniques.

The voice and diction work in this second unit could be expanded from the recommended two weeks to as much as six weeks. This would involve the addition of a study of voice production, exercises for the improvement of vocal quality, a study of articulation, and exercises for more careful articulation. This could be followed by a study of the techniques of oral interpretation, and the development of platform poise. Exercises in oral reading might also be included here, but considerable oral reading experiences are provided in several of the subsequent units, including those on news and commercials.

The unit on semi-scripted shows calls for two weeks; this could be expanded to four weeks, if desired. This would make provision for the introduction of the techniques, of interviewing, of discussion, and of some very simple speech making.

Under this plan, the following units would be deleted:

VII. Shows for Special Audiences

VIII. Simple Physical Aspects of Broadcasting

IX. Simple Television Projects

X. Vocations and Importance of Industry

It is believed that this arrangement of the course would provide a satisfactory design for the school which desired a speech emphasis but which preferred to offer a radio course.¹

The School with Access to Television Facilities

For the school with access to television studios and a desire to offer a course in broadcasting with a television emphasis, two suggestions might be in order:

1. That the students should have some prior speech training, and
2. That the radio-television course offering might be a four-semester program.

In such a case, the first semester could introduce the student to the broadcasting media and provide training in specific skills; the second

¹Radio English, by Florence Felton French, William B. Levenson, and Vera Coker Rockwell, published by McGraw-Hill Book Company, New York, is suggested as an available text for such a course.

semester could emphasize the television skills; the third could be a production course with emphasis upon television; and the fourth could be a content course studying the physical aspects, and the significance of the industry. The third and fourth semesters might be reversed, if desired.

If this four-semester program were not possible, then a one or two-semester program could be arranged from the materials presented in the Appendix. The proposed course outline could be followed and radio could be introduced only in Unit IX, with television techniques used in other units in place of radio. Unit VIII could be divided; the television portion on camera, their lenses, moves, shots, and sounds could be expanded and incorporated into the first and second units where the student first meets studio equipment and procedures. The third unit on writing could have a television emphasis. Projects for the prescribed course would remain much as they are presented in the Appendix. Any teacher with a knowledge of the media should be able to adapt the course and make it purposeful and meaningful for the student.²

These are some possible adaptations of the course of study in broadcasting which would meet specific demands in three different school situations. It is felt that this two-semester program possesses considerable flexibility and potentiality for use in many school situations.

²The books are recommended for more detailed help and with some adaptation they may even be used with high school classes. *Radio and Television Handbook Manual*, Sidney Diamond and Donald M. Anderson, published by Prentice-Hall, Inc., New York; and *Television: Techniques and Planning and Performing*, Samuel L. Becker and H. Clay Kershner, published by Henry Holt and Company, New York.

Recommendations

During the process of research and writing this study and during the period of years in which this course of study was taking shape, several problems were noted. It is the purpose now to state those problems in the form of "recommendations for further study" in the area of courses of study in broadcasting at the secondary level of education.

First, a textbook for high school use is needed. As has been previously pointed out, the available books are these:

1. College textbooks are too difficult for high school use.
2. High school speech texts have been revised to include one or two chapters on radio and television; these are not adequate for a semester's study of broadcasting; they put the total emphasis on the speech phases.
3. Some English texts which include one or two chapters on broadcasting are inadequate; the total emphasis is on the language skills.

To meet the needs of the high school class in broadcasting, a textbook should include the history of broadcasting and governmental regulation. The business of broadcasting should be explained in terms the high school student can comprehend. It should have a comprehensible discussion of the sociological importance of the industry and have ample information and references for vocational study. The various skills, typical of broadcasting, such as announcing, acting, writing dramatic and non-dramatic copy, handling the news, directing, etc., should be

thoroughly described and explained and accompanied by sample scripts, suggested assignments, and practice materials and scripts. There should be many pictures of studio procedures and equipment.

Another need noted during this preparation period is that of illustrative materials to use in the radio class. Films of actual studio procedures and equipment in use could bring the broadcasting studio into the classroom. This would eliminate the need for trips to studios. Most communities have small radio stations, but few have large radio operations or television studios.

Another form of illustrative material that could be used effectively would be strip film showing the physical aspects of broadcasting. Large wall charts would be as effective.

Recordings by tape or disk would be most helpful to the teacher. Recordings could be used as demonstrations of how to do various, specific types of broadcast copy; or recordings of some of the better broadcasts could be made available. These would demonstrate acting techniques, news and interview skills, use of music and sound, and several styles of commercial announcing.

The recommendation for these recordings stems from the fact that projects assigned for out-of-class listening and viewing are seldom successful. The high school students of today are so busy with regularly scheduled activities during these hours that specific programs can not be assigned to a whole class for analysis. Also, programs of merit seldom occur on the networks at the most opportune time to be utilized in class. If recordings were available, they could be introduced into the class

period at the point in the course where they could be best utilized.

Another recommendation for further research was noted during the research period for this study. There is a need for a survey to determine the present status of radio and television in the secondary school. Such a survey should include course content, objectives, kind and amount of activity, and the educational philosophy under which they operate.

A fifth need in this area is for an agency to provide specific services and motivation for high school courses in broadcasting. Such an agency should do more than the Office of Education Radio Specialist can now do for the teacher of broadcasting in high schools. It might operate along the lines of the now defunct Scholastic Radio Guild, but it should provide more services. Some of those services that such an agency might provide would be these:

1. Scripts relative to current affairs and scripts adapted from the literature found in high school English texts.

- a. Scripts should be printed in correct script form and ready for production.

- b. Scripts might be issued on a regular subscription basis, on three-ringed paper ready for a notebook binder which classes could collect into series.

- c. Scripts should be made available in quantities, eliminating the problem of duplication by the classroom teacher.

2. Information concerning equipment

- a. Purchase

b. Maintenance

c. Operation

3. A regular publication which might be a combination of

Broadcasting-Telecasting and T.V. Guide. It should include

a. Advance listings of worth-while radio and T.V. programs

b. Vocational needs and trends in the industry

c. Personality sketches of leaders in the industry other than talent

d. Study guides for network programs

e. Follow-up reviews and critiques of network programs

4. An exchange service of classroom recorded programs and original writing projects.

These recommendations are the results of needs noted during the preparation period for this study and during the past several years as a teacher of broadcasting at the high school level.

Conclusion

In fulfilling the stated objectives of this study, some attention has been given to the historical development of radio station operation in educational institutions of higher learning and in the secondary school. The general observations that may be made from this study are that the two developments were almost parallel through the radio period, but with the advent of television and the ETV movement the universities moved ahead of the public schools.

The historical development of curricular interest and activity in broadcasting was traced as it evolved at both the collegiate and the secondary levels. One general observation noted was that both levels of education moved in the same direction, but the collegiate level moved ahead more quickly and extensively.

Several trends were noted at the collegiate level. One was a move toward a philosophy of professionalism in academic training in broadcasting. A broader concept toward broadcasting seems to be occurring. The move is toward a concept of mass communications which includes all the mass media. This is evidenced in the trend toward separate departments of radio and television or in departments dealing with mass communication. This trend was not noted in the high schools.

From this historical study and from experience, a course of study in broadcasting for eleventh and twelfth grade students in New Castle high school was presented, reviewed, and evaluated.

A detailed outline of the course is presented in the Appendix; a report of the content, the specific objectives of each unit, and the methods for achieving these objectives are described in the body of the study.

Evaluation of the course of study, as presented, offered merits and weaknesses of the course in terms of its objectives.

Finally, possible uses of this course in three different school situations were presented, including the prescribed rearrangement of certain content units and degree of emphasis.

Several important facts have emerged from this study. One is the variety in content, procedures, and goals that are current in present-day curricula. Another fact is that educators and investigators agree that certain values of considerable importance are derived from both the study of and the activity in broadcasting.

The influence of local facilities and needs upon the design of the course of study has been noted in the discussion of curricular interest in broadcasting. Inasmuch as the secondary school must serve the needs of the students, it is perhaps good that broadcasting as a course of study evolved in this manner.

Evolving out of this study were several problems which have been framed into recommendations for research, study, and actions by those interested in these areas of activity at the high school level. Most urgent among these recommendations is the need for a text book for use at this level.

One final observation: broadcasting as a course of study has attained academic recognition in some secondary school systems and many institutions of higher education. It would seem likely that more high schools will be adding broadcasting courses or extracurricular activities until the field enjoys a status similar to that of journalism, broadcasting's ally in the communication field.

APPENDIX I

**A COURSE OF STUDY IN BROADCASTING FOR HIGH SCHOOLS AS TAUGHT AT
NEW CASTLE HIGH SCHOOL, 1957-58, DESIGNED FOR ELEVENTH AND TWELFTH
GRADE STUDENTS WITH A SPEECH BACKGROUND**

<u>UNIT</u>	<u>TITLE</u>
--------------------	---------------------

- | | |
|-------|---|
| I. | Introduction |
| II. | Studio Techniques |
| III. | Scripting Techniques |
| IV. | Handling the News |
| V. | Commercial Continuity |
| VI. | The Semi-Scripted Show |
| VII. | Shows for Special Audiences |
| VIII. | Simple Physical Aspects of Broadcasting |
| IX. | Simple Television Projects |
| X. | Vocations and Importance of Industry |

Objectives

General:

1. To provide for the general development of the personal and social qualities of the student
2. To meet the needs, interests, and capacities of the individual student
3. To motivate towards and build habits of citizenship, namely standards for conduct and speech and acceptance of one's personal responsibility to society

Specific:

1. To provide the student with a set of experiences that will develop his personality and enhance his own personal worth to himself
2. To continue his development of language skills
3. To widen the horizon of his interests and knowledge
4. To provide an opportunity for him to survey the vocational aspects of broadcasting and to determine his fitness and his interest in the field
5. To create an awareness of the sociological implications of the industry
6. To provide an understanding of the industry, its operation, and its economics.

UNIT I: INTRODUCTION (two weeks)

A. Orientation to idea of communication between two people who can not see each other but must depend upon the oral and visual symbols received electronically

1. A review of the fundamental concept of communication
2. The broadcast program from talent to consumer
 - a. Make charts
 - b. See films

B. Orientation to one of the "big industries" in our nation

1. The story of mass communications
 - a. Its history
 - b. Governmental regulation
 - c. Size and importance today (economics)
 - d. Its significance for society
 - e. The networks
2. Survey of vocational opportunities begun

C. Orientation to a workshop type of class requires

1. Consideration of others
2. Punctuality
3. Accuracy
4. Acceptance of responsibility
5. Initiative
6. Imagination
7. Each contributes, much or little, to an end product commonly shared by all

D. Introduction to equipment

1. Give proper name, vernacular, cost and function of
 - a. Console, mikes, turntables, cables, clocks
 - b. Records, cueing, and types
 - c. Recorders, kinds and operation
 - d. Master control room, antenna, transmitter, patching system
2. Learning to manage the equipment

E. Introduction to studio procedures

1. Studio signals
2. Handling the script
3. Eye contact with control room
4. Traffic in the studio
5. Reading the clock

F. First simple productions (5 minutes) in teams, rotate positions

G. A radio station observed

1. Preview
2. Review

H. Set goals for the course

1. General experience for all in every phase
2. Each must specialize
3. Each must grow in breadth of knowledge and interests
4. Each must improve language skills
5. Each must assist others
6. Each must look for vocational opportunities

I. Listening project

UNIT II: STUDIO TECHNIQUES (one to three weeks)
(Reading, voice and diction unit)

A. Listening projects and class discussion to set standards for good speaking and reading

1. What are the qualities of a good announcer
2. What does it take to become one
3. What is the difference between speaking and reading
4. What is required to be an effective ad libber
5. When does the studio performer speak, read, and ad lib

B. Studio exercises

1. Objectives
 - a. To develop skill and facility with various kinds of copy
 - b. To develop proper microphone techniques
 - c. To develop an audience awareness of an unseen audience
 - d. To develop team work feeling between announcer and operator
2. Kinds of copy typical of radio and television demands
 - a. Straight commercial
 - b. Short news items
 - c. Sports reports and women's copy
 - d. Read and tell a children's short story
 - e. Dramatic commercials in dialog or dialog from novels or plays
 - f. Mood copy and change of pace copy (dramatic narratives and humorous essays)
 - g. Ide-work with operators cueing and the clock
 - h. Mike talks (from previous units if not already given)
 - i. Ad libs
3. Marking script

2C. Voice and diction improvement

1. Record and playback for analysis of the first reading above
 - a. Each analyzes his own problems and sets his goal and plans his procedures with teacher's assistance
 - b. General review and exercises for voice and diction and pronunciation improvement
2. Expansion of unit (if needed)

This unit may be expanded in any one of several directions. If necessary emphasis may be given to general voice and diction improvement. Or special emphasis may be wanted in oral reading and interpretation. In either case,

If it is desired to expand the course during this unit, see the next page for outline of procedures.

most recognized speech texts for high school use will outline procedures and present exercises and practice materials. Several recommended at the end of this unit. Here is a brief outline of the study.

VOICE AND DICTION IMPROVEMENT

A. Voice production

1. Film by Britannica, **YOUR VOICE**
2. Discussion
 - a. Respiration for power
 - b. Phonation for tone
 - c. Resonance for quality
 - d. Articulation for intelligibility
3. Vocal exercises

B. Diction improvement

1. Families of English sounds
 - a. Consonants (voiced and voiceless)
 - (1) Give meaning to words
 - (2) Identify production of each with sets of articulators
 - b. Vowels and diphthongs
 - (1) Give emotional coloring to speech
 - (2) Identify with position of lips, jaw, and tongue only
2. Exercises for each family group

C. Oral reading or interpreting the printed page

1. What is interpretation: it involves understanding and responding with one's intellect and emotions to the stimuli presented by the word and ideas on the printed page and then re-creating these responses in visual and oral symbols which a listener will receive and respond to.
2. How to interpret
 - a. Preparing for oral interpretation is study procedure
 - (1) Getting the author's
 - (a) Background and attitudes towards his subject matter
 - (b) Finding his main point
 - (c) Find the related sub points
 - (d) Understanding his vocabulary
 - (e) Mood or feeling
 - b. Sharing with a listener the discovered facts and mood
 - (1) Each time he reads, the reader must re-create what he originally discovered. All the facts and the variations in mood, all the stimuli that originally motivated him to an understanding must be called up

- (2) In order to share with a listener, the reader must project what he thinks and feels through his
- (a) Voice, quality and changes
 - (b) Face
 - (c) Body
 - (d) Diction, clarity

UNIT III: WRITING TECHNIQUES (one week) (simple continuity)

A. Basic elements in broadcasting

1. In radio
 - a. Voice
 - b. Music
 - c. Sound
2. In television
 - a. Voice
 - b. Music
 - c. Sound
 - d. Visual which moves and sometimes is in color
3. Listening, viewing projects

B. The broadcast program

1. Parts and functions of each
 - a. Opening theme
 - b. Introduction
 - c. Body
 - d. Close
 - e. Closing theme
2. General types of programs
 - a. Music show
 - b. Dramatic show
 - c. Speech show
 - d. Variety show
 - e. Quiz show or audience participation show
3. Listening projects

C. Script techniques

1. Format, color code, and symbols
2. Reasons for such rules

D. Writing assignments

1. Continuity (definitions and kinds)
2. Introductions for
 - a. Popular song
 - b. Guest at convention
3. "Sign on" copy for a news show, music show, a discussion
4. "Sign off" copy

Note: This unit is not an entity in itself. After the commercial and the news (next two units) complete writing and microphone assignments can be made.

UNIT IV: HANDLING THE NEWS (three weeks)

A. Types of news programs

1. Straight
2. Commentary
3. Documentary or dramatic

B. Regulation of commercials in news programs

1. By FCC
2. By NAB
3. NABTND

C. Schedule of News programs in the broadcast day

1. Radio
2. Television

D. Straight news programs for radio

1. Writing techniques
 - a. Elements that determine newsworthiness
 - b. Hints for writing
2. Wire services
 - a. History
 - b. Editing wire copy and preparing for use
3. Building the news show
 - a. Opening
 - b. Closing
 - c. Arrangement of categories
 - d. Use of transitions
4. Techniques of delivery

E. The commentary

1. Getting the news
2. Taking an attitude towards it and developing a defensible presentation
3. Writing copy for unseen audience
4. Delivery

F. The documentary or dramatic news show

1. Listening projects to determine method of building
2. Writing the script
3. Producing it

G. Television news programs

UNIT V: COMMERCIAL CONTINUITY (one to two weeks)

A. A study of the business of radio and television

1. Business involves
 - a. Profits
 - b. Advertising a product
 - (1) Prepared by writers
 - (2) Artists, etc.
 - c. Selling that product
 - (1) By salesman
 - (2) Announcers
 - d. Buyers subject to
 - (1) Human drives
 - (2) Propaganda
2. Regulation and self regulation
 - a. FCC
 - b. NAB

B. The commercial or the script

1. Classified by
 - a. Types of content or style or writing
 - (1) Action copy
 - (2) Reminder copy or goodwill copy
 - (3) Educational or informational copy
 - b. Types of format or production method
 - (1) One voice
 - (2) Multiple voice or voice contrast (not dialog)
 - (3) Dialog, usually dramatic or serious
 - (4) Novelty and comedy, usually cartoon
 - (5) Singing
 - c. Types according to time scheduled
 - (1) Station break commercial (:10-:20)
 - (2) Spot (between programs) (:30)
 - (3) Hitch hiker or trailer, comes after program sponsored by company that sells more than one product
 - (4) Participation spots (:30), several sponsors for one program

C. Writing the commercial

1. Elements of style
2. Some mechanics
3. Projects in listening
4. Assignments for writing

D. Delivering the commercial

- 1. Styles of delivering the commercial**
 - a. Punch
 - b. Semi-punch
 - c. Straight
- 2. Mike and camera assignments**
 - a. With commercial copy
 - b. With their own copy
- 3. The job of the announcer**
 - a. The daily routine
 - b. Qualifications and training required
- 4. Projects in listening**

**UNIT VI: THE UNWRITTEN OR UNSCRIPTED SHOW (two weeks)
(or semi-scripted)**

A. The on-the-spot program

1. Sports
2. Other special events
3. News

B. Interviews

1. Planning
2. Preparing
3. Producing

C. Discussion and other similar forms

D. The contest and audience-participation show

E. The demonstration

F. The talk

UNIT VII: CREATIVE PROJECTS OF SPECIAL SHOWS (one week)**A. Special shows for special audiences originated**

1. Disc jockey or music shows
 - a. Popular music
 - b. Serious music of various kinds
2. Shows for children
 - a. Story telling
 - b. Crafts
 - c. Music or poetry
3. Shows for women
 - a. Foods
 - b. Fashions
 - c. Home care
 - d. Child care
 - e. Music, art, poetry, literature
 - f. News commentary
4. Shows for men
 - a. Sports
 - b. Commentaries
5. Shows for teenagers
 - a. Music
 - b. Discussions
 - c. Careers

B. Adaptations of literature to radio and television**C. Original writing of the dramatic show**

UNIT VIII: SIMPLE TECHNICAL ASPECTS (two to three weeks)**A. The path of the radio program from talent to listener****B. Radio broadcasting**

1. The studio
2. The microphone
 - a. Types
 - b. Function of each
3. The related equipment
 - a. Console
 - b. Transmitter
 - c. Antenna
4. Transmission and the electro-magnetic spectrum
 - a. Cycle and frequency: new words
 - b. Amplitude and frequency modulation
 - c. The FCC and assignments
5. Some films
6. The radio station staff and organization

C. The path of the television program from talent to listener**D. Television broadcasting**

1. The magnetic spectrum
 - a. UHF
 - b. VHF
 - c. FCC assignments
2. The camera chain
 - a. The camera
 - (1) Its lenses
 - (2) Its movement and commands
 - (3) The Breta box
 - b. The related equipment
3. The other technical aspects
 - a. Lighting, costume, and make up
 - b. Visuals, graphics, and art
 - c. Audio, music, and sound
 - d. Use of film
4. The television team
 - a. Members
 - b. Jobs
5. The television script
 - a. Format
 - b. Marking techniques

E. Radio and television

1. Comparison of what they can and can not do
2. Their contributions and effects upon society
3. Conclusion projects about careers

UNIT IX: TELEVISION PRODUCTIONS (one week)**A. Scripts**

1. Prepared in earlier units
2. Video portion added now

B. Equipment

1. Use Bretz boxes
2. Use dummy camera
3. Use visual materials

C. Programs

1. The one-minute commercial
 - a. To become accustomed to talking to a camera
 - b. To become accustomed to taking cues from floor director
2. Dramatic commercial
 - a. To utilize the two previously acquired skills
 - b. To add the dramatic element
 - c. To develop awareness of the camera but not talking to it
3. The news show
 - a. To coordinate radio skills, pictures, and music
 - b. To become free of copy
 - c. To integrate skills acquired in first productions
 - d. To develop awareness of contribution of pictures to the story
4. The three-minute interview
 - a. To use skill of being aware of camera but not talking to it
 - b. To develop skill of keeping guest in the picture
5. A demonstration of a simple appliance, tool, etc.
 - a. To provide opportunity for talent to time his movements and plan shots of object
 - b. To become accustomed to thinking about how an object appears on camera
6. A dramatic scene by pantomime with music and/or voice in background
 - a. To develop acting technique
 - b. To develop sense of timing and awareness of camera's dramatic possibilities

D. Production staff assigned

1. Two cameramen with Bretz boxes
2. Floor director with earphones from control room if there is radio set-up
3. Director who works with Bretz box instead of a switching panel. He calls over the earphones
4. Audio operator
5. Art director who doubles as stage hand

UNIT I: VOCATIONS AND SIGNIFICANCE OF INDUSTRY TO SOCIETY (one week)**A. Vocations**

1. Listed during study of each unit
2. Each student chooses one to investigate
3. Prepares report in written form which is now due
 - a. Bibliography due
 - b. Takes part in radio or television panel discussion about vocations

B. Sociological significance of industry

1. Students work in committees during semester
 - a. Prepare bibliographies and do research
2. They report to the class their findings in the form of a panel
 - a. First panel performs and class asks questions
 - b. Second time questions are answered
 - c. One panel member and one not on panel pair together to prepare summary of findings
 - d. Several pairs present final summaries as to sociological significance
 - (1) The non-panel member reads the report and the panel member answers questions
 - e. Pairs then prepare one final summary in written form and sometimes may visit other classes with their final, oral presentation

This concludes the basic course in radio offered in New Castle High School to eleventh and twelfth grade students who have had some speech training. The course was presented in the three-studio arrangement as described earlier. A second semester is offered irregularly, when enrollment warrants the offering. For the second semester an outline is presented here. It is not described in Chapter III because this study proposed to examine only a basic course in broadcasting.

Here are the time segments for each unit as followed at New Castle High School.

FIRST SEMESTER

<u>Unit</u>	<u>Title</u>	<u>Weeks Required</u>
I.	Introduction	2
II.	Studio techniques	2
III.	Writing techniques	1
IV.	The news	3
V.	Commercial continuity	1
VI.	The semi-scripted show	2
VII.	Shows for special audiences	3
VIII.	Simple physical aspects	2
IX.	Simple television productions	1
X.	Vocations and importance of industry	1

SECOND SEMESTER

XI.	Listening-viewing projects	2
XII.	Dramatic production	8
XIII.	Creative dramatic writing and adaptations	8

SECOND SEMESTER**UNIT XI: LISTENING-VIEWING PROJECTS****A. Procedures and purpose**

1. Assignments not concentrated into one unit but scattered throughout both semesters with special emphasis at this point
2. To synthesize perspective and standards of appreciation and evaluation

B. Evaluations

1. Based on these points:
 - a. Basic idea behind the program
 - b. Writing techniques
 - c. Production and performance quality
 - d. Significance of program to audience
2. Reported for these types of shows
 - a. News
 - b. Commentary
 - c. Serious drama (single program, not one in a series)
 - d. Comedy drama
 - e. Variety
 - f. Music show
 - g. One special program for a special audience such as a children's show, a sports analysis show, etc.

UNIT XII: PLAY PRODUCTION

A. Kinds of programming

1. Straight shows
2. Unscripted shows
3. Dramatic shows
 - a. Drama
 - (1) Serious
 - (2) Humorous
 - (3) Tragedy
 - b. The documentary

B. Requirements of the drama

1. Plot which includes a conflict and a climax
2. Characters, a protagonist and an antagonist
3. Setting
4. Montage

C. Elements of radio dramatic production

1. Voice
 - a. Narrating
 - b. Acting
2. Music
3. Sound

D. Uses of music and sound in the play

1. To establish place, time, and mood
2. To suggest action and passing of time
3. To create unrealistic effects
4. For transition from scene to scene
5. As a trade mark
6. A montage
7. For comic effect

E. Procedure through rehearsals

1. Auditions
 - a. Director hears auditions, casts, and announces first rehearsal
2. First rehearsal (a reading rehearsal) director either
 - a. Reviews the play and analyses the characters, then gives cast assignments
 - b. Asks for cold reading of the play or he assigns parts, briefly analyses characters and divides cast to prepare parts

3. Before the next meeting of the cast, director meets his technical staff, music and sound
 - a. Reviews the story
 - b. Lists his needs
4. Second meeting of the cast
 - a. Total reading of the play for fluency and timing and to set characterisations
 - b. Director plans cuts and fills to meet time requirements
5. Director auditions and times
 - a. Music
 - b. Sound
 - c. Technical scripts properly marked
6. Third meeting of cast
 - a. Director reads script changes to cast
 - b. Cast has first studio rehearsal without sound and music
7. First dress rehearsal
 - a. With cast, sound, music
 - b. Director works for continuity, timing, and sharpness of aural picture
8. Final dress rehearsal
 - a. Polishes
 - b. Permits short break
 - c. Records or is on the air

F. Responsibilities of the director

1. Timing the show
2. Planning the overall production
3. Giving directions that are clear
4. Refining characterisations
5. Providing adequate scripts

G. Responsibilities of the performers

1. Cooperating with others in cast and crew
2. Following of director instructions
3. Paying attention and keeping quiet in studio
4. Keeping his own sight-line to the studio clear

UNIT XIII: WRITING AND ADAPTING FOR RADIO AND TELEVISION

A. Kinds of dramatic scripts

1. By length of time
2. By style of treatment
 - a. The dramatic play
 - b. The comedy
 - c. The serial
 - d. The documentary

B. Writing the original drama

1. Getting the idea
 - a. Should express a belief portrayed through characters' behavior
 - b. Can be obtained from a title, a person, an experience, an observation
2. Think through the idea
 - a. Who does what to whom and why, and under what circumstances?
 - b. Become acquainted with these people by writing character sketch
3. Outline the plot, scene by scene
 - a. Establish problem early
 - b. Be sure each scene advances the conflict
 - c. Make sure each scene is justified and logical
 - d. Be sure that the climax is relatively important as the conflict warrants
4. Write each scene as a unit
 - a. Make first one move fast, give all specifics
 - b. Plan so that characters have time to change costumes if writing for television
 - c. Be sure, if writing for radio, that either music, sound, or dialog keeps listener informed as to who is speaking and where action takes place
 - d. Keep dialog natural
 - e. Don't overdo the directions for director and performers, allow some interpretation
 - f. Don't stray from story line
5. Plan transitions by narration, music, or sound
6. Produce it

C. Comedy treatment

1. Kinds of comedy
 - a. Comedy based on gags
 - b. Comedy based on characters
 - c. Comedy based on situations
 - d. Comedy based on ideas

2. Treatment should be decided when idea is conceived
(Can idea best be portrayed to viewer-listener by a serious or comic treatment?)

D. The documentary or dramatic news show

1. Collecting the various news items or historical events
2. Arranging in sequence
3. Writing each scene as a dramatic unit
4. Planning transitions in copy, music, sound, or pictures
5. Production

E. The adaptation

1. Factors to be decided early in any sequence
 - a. Time length
 - b. Media: radio or television
 - c. Literary selection
 - d. Production capabilities
2. Find the selection that meets above requirements
3. Follow procedure as though the story idea were your original idea
 - a. Get the main idea
 - b. Write character sketches
 - c. Outline by scenes
 - d. Write dialog
 - e. Plan transitions

APPENDIX II

SUGGESTED STUDENT PROJECTS FOR EACH UNIT OF STUDY IN THE COURSE

Unit I

1. Make it a habit each week to read an article about the broadcasting industry. Select your article from newspapers and magazines. Keep a record of your reading and a brief note about the article. Comment about it in class.
2. There will be some assigned listening-viewing projects. When there are none, make it a habit to see and hear something daily that is not on your regular schedule. Get acquainted with as many different types of programs and stations as possible. Try to evaluate them in terms of your work in radio class.
3. Make sketches or collect pictures showing the broadcast process, step by step. Put in your notebook.
4. Keep a list of studio signals and their meanings as they are introduced in class projects.
5. Choose a topic for research that is related to the history, economic, political, or sociological importance of the broadcasting industry. Plan a short microphone talk or group discussion on this topic. Here are some suggestions; others may be put on the board in class:

For mike talks:

The invention of the wireless
Edgar Lee DeForest
The first radio station
The invention of the microphone
The networks' operation
History of NBC or CBS
Technical achievements which
made radio possible
Moving, sound pictures, a history
Color television
Radio critics: John Crosby and
Jack Gould.

For discussion:

Why was FCC necessary?
History of NBC or CBS
Are networks dangerous?
Does TV influence voting? and buying?
Careers in acoustical engineering
Why is broadcasting expensive?
Does radio-TV advertising pay?
How have radio, TV affected family
life?
How can people listen and view
more effectively?
What's ahead for broadcasting?

6. Begin a chart of possible vocations in the fields of radio and television. Make page one for radio; page two for television. Draw several vertical lines, making columns on each page. Column one: name of job; two, brief description of work required; three, training required; four, possible salary; five, availability of jobs for men and women; six, brief note as to your fitness and interest. This project will not be completed until the end of the semester, but keep filling it in as you progress through the semester.
7. Make a survey of the listening-viewing habits of your friends at school and your neighbors or your community. Block it out so that there is no wasted motion nor overlapping of information. A well organized survey can be beneficial in several ways. If it covers a sufficient area of your community or number of people to be representative, your school or community newspaper might be interested in your results.

Plan your survey in an orderly manner. Use the whole class, but a planning or steering committee will have to be appointed or made up of volunteers.

First, plan your basic structure of the survey; then plan your questionnaire.

Your structure can be designed on the basis of geographical areas or by telephone. If by geographical area, assign each surveyor a specific block or two in his neighborhood. If by telephone, someone should call at the local office and make necessary arrangements. This is usually a courtesy call on your part; but the telephone company can give you advice on how to proceed and they will appreciate your consideration. Assign each student a number of pages in the directory for which he is to be responsible. On a pre-set plan, give the same instructions to all. This is an example. Suppose you decide that sixteen calls per student is the maximum load for one evening during a two hour period. Require each one to call the numbers that appear on lines seven, fourteen, and twenty-one in each column of the pages for which he is responsible. Your steering committee will work out other details, such as how many times a caller should try a number before quitting and what to do if the number is a business phone.

Next, work out the questions and the introductions to be used. This must be done systematically and all alike. Be business-like but be courteous. Give sufficient information to the person being called or called upon that he will cooperate with your project, but don't waste his time.

Finally, a committee will have to do the analysis work. All results will be carefully prepared and presented to the committee; then the committee should tabulate and make conclusions. These will have to be presented in written form to the class.

This project will involve a number of skills you have acquired in other classes, such as conversational skills and telephone usage. If you plan carefully, your results and findings can be of value also.

Unit II

1. Frequently record and analyze your voice and diction, your microphone reading and speech. Keep a record of your reactions to each performance. If you can get a friend to add their reactions, this will help.
2. Make it a habit to read orally everyday. Set up a drinking glass on a table in front of you. Pretend that it is the microphone. Read or talk to it, but keep in mind the unseen audience to whom you are talking. Imagine their actions while listening to you; imagine their mental responses to your message.
3. If you have had little work in story telling or public speaking, get a textbook and read those pertinent chapters. Find out how to plan your short story and your speech before you perform.

Unit III: Writing Simple Continuity

1. Listen to a radio program. Keep a running time on the sequence of the parts of the program. Can you identify each part? Did the program follow the standard sequence? If it did not, in what sequence were the parts arranged?
2. Do the same project for television.
3. Collect and put in your notebook, a schedule of programs for a small local station and a large, metropolitan, network station. What differences do you discover in the programs?
4. Select two stations, one small, local station, and the other a large metropolitan, network station. On a map draw an area which represents the coverage of each station. Then write an analysis of the audience make-up for each station and indicate the type of programming you would schedule if you were program director of each station.
5. To practice your ability at writing scripts properly, write the followings:
 - a. A twenty-second piece of continuity to introduce a currently popular tune
 - b. A thirty-second introduction of a recent convocation guest who is now appearing as a guest on the local radio station
 - c. A frame for the following types of shows: a news show, A DJ show, a panel show. Your opening and closing should not take more than a total of two minutes; it should include your theme song, the show's title, today's feature, a sponsor's name, product, and tag line but no commercial. Write the continuity for yourself as the announcer. Keep these frames in your notebook. They will be used during the next several units of study.

Unit IV

1. Plan to hear one radio (or television, if approved) show for at least five consecutive days. Keep a record about the program pertaining to those items. Were there any differences in the personality or style of approach on any specific days or in dealing with any segment of the news? Did he seem to be more at ease in any one segment of the news than any other? Did he keep the same arrangement of categories of news each day?
2. Plan to hear or see examples of the basic three types of news shows. In what ways do they differ in purpose and value? What are the writing and production problems inherent in each?
3. Read the FCC regulations concerning commercials in the radio and television program. Discuss in class why the FCC made these regulations. What changes would you recommend? After reading these regulations, hear or see a news show; pay particular attention to the placement of the commercials and their content.
4. Look up the history and the function of the National Association of Broadcasters. Pay a visit to your local station and find out what their relationship is to the NAB.
5. If possible, plan to hear as many news broadcasts as you can in one day from a chosen station. Note what items of the news are repeated. Is the same copy or a rewrite? Do you detect any other differences? If so, can you explain why? Perhaps a group or committee in the class will volunteer to record a series of broadcasts on a pre-determined day from one station; then the whole class can hear and analyze these programs.
6. Form a committee of several members to record a number of news shows from different stations on the same day and at the same general news period. An evening news program is recommended. Bring these to class and analyze. What seem to be the differences in the treatment of the day's news? Explain.
7. Write and deliver a major news item from your school or community in a sixty-second story. Rewrite it to fit other time segments.
8. Bring a six to eight inch long news story from your local paper to class. In a pre-fixed time element, such as ten minutes, rewrite this story for broadcast. Set yourself an air-time length, such as forty-five seconds.

9. In some communities, a radio or television station is owned by the newspaper. If this is true of your community, study for several evenings the dinner hour news broadcast. Compare it with the evening newspaper. On a specific day, the teacher or some one student may record the show, but other members of the class should not listen to it. Instead they should study the newspaper; then plan a broadcast from that day's news. If possible, assign someone to obtain from the station a copy of that evening's script. Now compare your script, the newscaster's script, and the recorded show.
10. If arrangements can be made with the local station to obtain some wire news copy for several days, practice "stripping the machines." See how rapidly you can identify each segment that comes over the wires and put on the proper hook. Practice reading all these types of copy. Begin with the spot summary. Edit the five minute copy to three minutes. Edit the five minute copy and plan as a show that has a sign-on and sign-off.
11. Working as a committee, several should work with the fifteen minute news. One newscaster can specialize in the local news; another in state; another in national and international; one in sports, weather, or women's copy. As many as are desired can work in this team. Each one will introduce the next one. Plan your frame for a regular show. Make a copy for your operator; then try running the show several times. Add a commentator if this seems desirable.
12. Hear a commentary program. Plan to build an answer to this show or build a show that supports the other side of this question.
13. Study several commentators who are heard in your area. Can you identify their points of view and their differences of opinion? Two students may be assigned to plan commentaries that disagree about some local problem, school or community. The class can hear and decide which one made the more valid presentation. Which one would your community be more likely to accept? Would either one be accepted by a local station?
14. Study the biographies of several noted commentators. What experiences led them from straight news work to commentaries? What would you say is the most important aspect of a commentator's training and abilities?

Unit V

1. Make a cursory study of as many magazines in the broadcasting industry as you can. Write a brief review of what phase of the industry it especially covers. Compare notes in class.
2. Make a collection of as many commercials as you can. Practice them daily.
3. Collect as many commercials as you can. Make a study of these. How many times was the sponsor's name given? If a local firm, how many times his address or phone number were given? How many times was the product mentioned? Can you discover any patterns as to where these items are placed?
4. Listen and view several commercial programs. What proportion of time was given to commercials and to the program? Were these commercials separated from the program or were they integrated into the program? Which do you prefer? Why? Do you think your preference is the popular preference of people or not? Can you determine why a sponsor or producer will decide on either method of inserting commercials into a program?
5. Write and practice delivering the following commercials:
 - a. Thirty second, action copy for a single voice for a local business and for a national firm.
 - b. Thirty second, good-will copy for a local firm and a national firm or product.
 - c. Thirty second, educational copy for a local and national firm.
 - d. Repeat the above projects in sixty second copy.
 - e. Write sixty second, education, two voice copy for a national product.
6. Practice timing commercials and working with an operator who gives the ID. Get copy from your local station. Begin your practice session with the sign-off of a program, the spot before the ID, the ID, the sign-on of a new program. Work in teams of operator, announcer for the program and commercial operator.

Unit VI

1. Listen and hear special programs in which there is a special report given that is ad libbed. Sports programs, news events, special community or church affairs, events of particular interest to women are some ideas for such programs. Keep a record of what you hear. Do you note any similarities in such programs? Observe the vocabulary used. Note how the speaker is able to make you think you are there. How does he achieve this illusion? Can you determine how it is done?
2. Record several of these programs and bring to class for class analysis.
3. Practice reporting events in your school or community in this fashion. Hold an article in your hand as though it were a microphone. A pencil, a small glass, the sawed-off end of a broom handle are suggestions for an imitation mike. Talk to it. Remember your microphone techniques learned earlier. Talk to your audience; be sure you have an audience in mind. Some ideas for these practice sessions are:
 - a. An honor award being given to your star athlete at a convocation is being recorded for broadcast over a local station. You are the announcer.
 - b. Any major event in your community.
 - c. Try an event you have never seen, but perhaps have read about, have seen on television or in the movies: the launching of an atomic submarine, a missile launching or a moon-shoot which you are privileged to observe, a fashion show, the laying of a cornerstone for a new public building in your community or state.
 - d. Try reporting on a situation which needs some kind of community action. Can you make such a report, keep it factual, unbiased, unemotional? From a vantage point, describe the situation in front of your high school building which calls for additional traffic police or traffic lights.
4. For the boys who are interested in sports announcing, first be sure you know the rules and the vocabulary for the game you want to announce. The more games you know, the more in demand you will be. For practice, here are several suggestions.
 - a. Turn the sound off on your television set when there is a game being broadcast. Try to follow and announce it.
 - b. Your teacher can obtain a film of some game for you. Turn the sound off and announce the game. Record yourself. Then play back the recording and the sound track of the film. Compare and then plan your own training program.

- c. Try to read every referee signal when you are at a game. In your mind, follow every play, describe it for a listener. Perhaps your teacher will let several of you take the tape recorder to a football or basketball game. Four of you can record; each one announce a quarter of the game. Perhaps your coach, your teacher, a local sports announcer will audition the playback of your announcing and make suggestions for your training program.
5. If you are interested in sports announcing, read several of the references on sports announcing. Make a collection of articles from magazines and newspapers by and about successful sports announcers.
6. For the girls who are interested in this type of announcing, here are some suggestions. First, become an expert in some area: art, home decoration, food preparation, fashions, music, child care. Read from the reference list in the Appendix. Make a collection of articles from magazines and newspapers by and about successful women on radio and television in these areas. Study their techniques. You should practice on topics you can handle. Record yourself. Ask some adult, a specialist in that area, if possible, to audition your work and advise you on a program of self improvement.
7. Imagine that you have an interview program on a local station each week. Your guest is some high school student who has distinguished himself. Plan your interview. Remember your adult audience does not know this student and your school situation as you do. Can you sustain an interview for ten minutes and keep it interesting and informative?
8. Each student in the class should adopt the name of a rather well-known person living today, some one about whom it will be possible to gather information. Put your name and that adopted name on a card. Place your own name at the top and your adopted name at the bottom of the card. Your teacher will collect and record the pairs of names. She will detach the top half, which has your own name on it. Then each member of the class will draw a name. That name is the person who will be their guest on a series of interview shows. After research is done, you will turn in your outline. Then your teacher will identify each of you. Conferences may be held. Interviews will follow.
9. Listen to some interview programs. Note how the interviewer keeps the interviewee doing most of the talking. Note how the interviewer keeps the conversation moving along some planned outline. Can you follow his plan? Note his techniques or methods in asking questions. What does he do with the answer to the question?

10. For planning public address experiences over the microphone, see any high school speech text. Or, try giving instructions or announcements in class.
11. For demonstration practice, see the suggested activities in Unit IX.

Unit VII

There are no suggested activities for this unit presented here because the unit is an activity, not a study, unit. These activities were described in the presentation of the content, procedures, and goals for each unit in Chapter III.

Unit VIII

1. Make a Breta box. (See footnote, this unit, Chapter III).
2. Make a dummy television camera or a mock-up camera. (See footnote, this unit, Chapter III).
3. Visit a radio or television control room and have an interview with the engineering staff. Prepare your questions before you go.
4. If you have access to a movie camera, try some television camera techniques with it.
5. Read the rules and regulations of the Federal Communications Commission pertaining to allocation of channel assignments.
6. Study a chart of the electro-magnetic spectrum and the location of the various kinds of broadcasting.
7. Visit an amateur radio operator when he is broadcasting.
8. For plotting station coverage maps, for ideas about Fd station opportunities for your school see Handbook of Broadcasting, Waldo Abbot and Richard L. Rider, New York: McGraw-Hill Book Company, Inc., pages 496-497.
9. Obtain copies of the following publications for your class available from the Government Printing Office, Washington, D. C.:

The Communications Act, 1934
Public Service Responsibilities of Broadcast Licensees
Study Guide and Reference Manual for Commercial Radio Operators
Examination

Available from National Association of Broadcasters, 1771 N Street, N. W., Washington, D. C.

Radio, USA
The Television Code
The Radio Code

Unit II

1. Plan to visit a television station. Pay close attention to the equipment. Find out if you can talk with the staff personnel. If you can, go prepared to ask questions. Make arrangements to sit in the control room during a production. Pay attention to the commands of the director. If possible, go into the studio and watch a crew setup for a production. After you return, discuss in class. Your teacher may plan some report projects.
2. Write a report on the individual jobs in the television team.
3. Watch a television show with a group. Analyze its picture composition and use of camera lenses.
4. Select a short dramatic sequence from a play which you know well. Try to chart the use of the camera as though you were a director. Can you discover the dramatic possibilities of the camera?
5. Write a one minute commercial for television in which you make a talk for a product. This is a talk and not a demonstration. Using only one camera, plan how you would use various shots and lenses to make the talk more interesting.
6. Write a one minute commercial showing a product's usefulness. Demonstrate the product. Plan the production of this commercial with two cameras. You produce it as though you were the floor director and another student is the talent. Then change positions. Can you concentrate on the "take" lens?
7. Plan for a three minute interview on television. Choose a member of your class and interview him about the tour to the television studio or about your work in this class in television. Use your parents as a possible audience.
8. Plan a pantomime of a children's story. Using musical background, or music and sound, integrate these elements for a television production. Use only two cameras. Plan your camera work. Use only one person as talent. Keep your story simple.
9. Plan an original dramatic idea for similar pantomime production.
10. Plan a two-voice or dramatic sequence for a two-camera show. Keep the scene very short and simple.

Unit X

1. Go to a commercial station and take an audition for a position on that staff. Report your experience to the class.
2. Have a professional from the field of broadcasting come to class and talk about the work and training requirements necessary.
3. Find out what the FCC meant by using in its regulations, these words, "public interest," "convenience," and "necessity."
4. Can you identify what types of programs or what popular programs would come under each category?
5. Read and report to class on some study that has been made about the effects of television upon the American people? Find out what effect radio and television have had upon newspapers and library circulation, the movies, travel, education.
6. Discuss in class why the broadcasting media influence people.
7. Investigate the history of other communication media, such as the printing press, the movies, the camera, the magazine, the telephone, etc.

APPENDIX III

READING REFERENCES FOR THE STUDENT FOR EACH UNIT OF STUDY

Unit I and II

HISTORY OF RADIO AND TELEVISION

1. Abbot, Waldo and Rider, Richard L. Handbook of Broadcasting. (New York: McGraw-Hill, Inc., 1957, 4th ed.), Chapter 28.
2. Barnouw, Eric. Mass Communications. (New York: Rinehart and Company, 1956), pp. 1-47.
3. Chester, Girard and Garrison, Garnet R. Radio and Television--An Introduction. (New York: Appleton-Century-Crofts, 1950), Chapters 2 and 3.
4. Head, Sydney. Broadcasting in America. (Boston: Houghton Mifflin Company, 1956), pp. 91-124 and 135-161.
5. Kingdon, Walter K., Corgill, Rome and Levy, Ralph. Broadcasting Television and Radio. (New York: Prentice-Hall, Inc., 1955), Chapter 11.
6. Phillips, David C., Grogan, John M., and Ryan, Earl H. Introduction to Radio and Television. (New York: Ronald Press Company, 1954), Chapter 1.
7. Waller, Judith C. Radio--The Fifth Estate. (New York: Houghton Mifflin Company, 1950), Chapter I.
8. Willis, Edgar E. Foundations in Broadcasting. (New York: Oxford University Press, 1951), Chapters 3 and 16.

STATIONS AND NETWORKS AND THE AGENCY

1. Chester, Oswald and Garrison, Garnet R. Radio and Television--
An Introduction. (New York: Appleton-Century-Crofts, 1950),
Chapters 7, 8 and 14.
2. Neal, Sydney. Broadcasting in America. (Boston: Houghton Mifflin
Company, 1956), Chapter 17.
3. Kingdon, Walter K., Cowgill, Rame and Levy, Ralph. Broadcasting
Television and Radio. (New York: Prentice-Hall, Inc., 1955),
Chapter 13.
4. Phillips, David C., Grogan, John H., and Ryan, Earl H.
Introduction to Radio and Television. (New York: Ronald Press
Company, 1954), Chapters 2 and 3.

THE BUSINESS OF BROADCASTING

1. Abbot, Waldo and Rider, Richard L. Handbook of Broadcasting, 4th ed. (New York: McGraw-Hill, Inc., 1957), Chapter 25.
2. Embark, H. L., and Lawton, Sherman P. Broadcasting: Radio and Television. (New York: Harper and Brothers, 1952), Chapter 4.
3. Hoed, Sydney. Broadcasting in America. (Boston: Houghton Mifflin Company, 1956), Chapter 13.

AUDIENCE MEASUREMENTS

1. Debank, H. L. and Lorton, Sherman P. Broadcasting: Radio and Television. (New York: Harper and Brothers, 1952), pp. 457-474.
2. Kingson, Walter K., Coghill, James and Levy, Ralph. Broadcasting Television and Radio. (New York: Prentice-Hall, Inc., 1956), Chapter 15.
3. Phillips, David C., Grogan, John M. and Ryan, Earl H. Introduction to Radio and Television. (New York: Ronald Press Company, 1954), Chapter 12.
4. Waller, Judith C. Radio--The Fifth Estate. (New York: Houghton Mifflin Company, 1956), Chapter 19.
5. Willis, Edgar E. Foundations in Broadcasting. (New York: Oxford University Press, 1951), pp. 77-88.

THE CONTROL OF BROADCASTING (FCC AND NABCB)

1. Chester, Giraud and Garrison, Garnet E. Radio and Television--An Introduction. (New York: Appleton-Century-Crofts, 1950), Chapters 6, 10 and 11.
2. Eberk, H. L., and Lawton, Sherman P. Broadcasting: Radio and Television. (New York: Harper and Brothers, 1952), Chapter 6.
3. Head, Sydney. Broadcasting in America. (Boston: Houghton Mifflin Company, 1956), Chapters 21, 22 and 25.
4. Kingson, Walter K., Cogill, Ross and Levy, Ralph. Broadcasting Television and Radio. (New York: Prentice-Hall, Inc., 1955), Chapter 12.
5. Phillips, David C., Grogan, John H., and Ryan, Earl H. Introduction to Radio and Television. (New York: Ronald Press Company, 1954), Chapter 9.
6. Siepmann, Charles A. Radio, Television, and Society. (New York: Oxford University Press, 1959).
7. Willis, Edgar E. Foundations in Broadcasting. (New York: Oxford University Press, 1951), pp. 64-76.

MASS COMMUNICATIONS AND SOCIETY

1. Brigrance, William Horwood, Speech Communication. (New York: Appleton-Century-Crofts, Inc., 1955), pp. 1-10.
2. Chase, Stuart, The Power of Words. (New York: Harcourt, Brace, and Company, 1954), pp. 13-17 and 236-248.
3. Chester, Giraud and Garrison, Garnet E., Radio and Television--An Introduction. (New York: Appleton-Century-Crofts, 1950), Chapter 1.
4. Head, Sydney W., Broadcasting in America. (Boston: Houghton Mifflin Company, 1956), Chapters 5 to 11 inclusive.
5. Heath, Eric, Writing for Television. (Los Angeles: Research Publishing Company, 1953), Chapter 1.
6. Hubball, Richard W., Television Programming and Production. (New York: Murray Hill Books, Inc., 1945), Chapters 1 to 3, inclusive.
7. Staehaff, Edward and Bruts, Rudy, The Television Program. (New York: A. A. Wyn and Company, 1951), Chapter 1.

Unit II

RADIO PRACTICE COPY

1. Limond, S. A. and Anderson, D. M. Radio and Television Workshop Manual. (New York: Prentice-Hall, Inc., 1952).
2. Barnhart, L. D. Problems in Announcing for Radio and Television. (Evanston: Student Book Exchange, 1950).
3. Boardman, Gail. Oral Communication of Literature. (New York: Prentice-Hall, Inc., 1952).
4. Compere, Moires. Living Literature for Oral Interpretation. (New York: Appleton-Century-Crofts, 1949).
5. Darr, Edwin. Radio and Television Acting. (New York: Rinehart and Company, Inc., 1950).
6. Henneke, Ben G. Radio Announcer's Handbook. (New York: Rinehart and Company, Inc., 1948).
7. Hyde, Stuart W. Television and Radio Announcing. (Cambridge, Riverside Press: Houghton Mifflin Company, 1959).
8. Kaplan, Milton Allen. Radio and Poetry. (New York: Columbia University Press, 1949).
9. Lee, Charlotte I. Oral Interpretation. (Boston: Houghton Mifflin Company, 1952).
10. Lowery, Sara and Johnson, Gertrude E. Interpretative Reading. (New York: D. Appleton-Century Company, 1942).

REFERENCES FOR SPEECH UNIT: VOICE, DICTION, INTERPRETATION

1. Abbot, Waldo and Rider, Richard L. Handbook of Broadcasting. (New York: McGraw-Hill, Inc., 1957), Chapters 6, 7 and 8.
2. Borchers, Gladys L. and Wise, Claude M. Modern Speech. (New York: Harcourt, Brace and Company, 1948).
3. Griffith, Francis, Nelson, Catherine and Stasheff, Edward. Your Speech. (New York: Harcourt, Brace and Company, 1955).
4. Hedde, Wilhelmina G., and Briggance, William Norwood. The New American Speech. (New York: J. B. Lippincott Company, 1957).
5. Hyde, Stuart W. Television and Radio Announcing. (Cambridge, Riverside Press: Houghton Mifflin Company, 1959).
6. Saret, Low, Foster, T., and McBurney, James H. Speech. (Boston: Houghton Mifflin Company, 1947).
7. Weaver, Andrew T., Borchers, Gladys L., and Smith, Donald E. Speaking and Listening. (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1956).

Unit III

FOR SCRIPT WRITING

1. Becker, Samuel and Hershberger, H. Clay. Television: Techniques for Planning and Performing. (New York: Henry Holt and Company, Inc., 1958), pp. 95-110 (television).
2. Brets, Rudy and Stasheff, Edward. Television Scripts. (New York: A. A. Wyn and Company, 1953), Chapter 4 (television).
3. Diamond, S. A. and Anderson, D. M. Radio and Television Workshop Manual. (New York: Prentice-Hall, Inc., 1952), Chapter 4.
4. Hesse, Baskett. Radio News Handbook. (Evanston: Northwestern University Press, 1947).
5. Hesse, Baskett and Whiting, Fred. (eds.) Television News Handbook. (Evanston: Northwestern University Press, 1953).
6. Skornia, H. J., Lee, Robert H. and Brewer, Fred A. Creative Broadcasting. (New York: Prentice-Hall, Inc., 1950), Chapter 7 (radio scripts).
7. Stasheff, Edward and Brets, Rudy. Television Program. (New York: A. A. Wyn, 1951), Chapters 10 and 12 (television).

Unit IV

WRITING, EDITING, AND ANNOUNCING THE NEWS

1. Abbot, Waldo and Elder, Richard L. Handbook of Broadcasting, 4th ed. (New York: McGraw-Hill Book Company, 1957), Chapter 9.
2. Chester, Giraud and Garrison, Garnet R. Television and Radio. (New York: Appleton-Century-Crofts, Inc., 1956), pp. 394-413.
3. Diamond, S. A. and Andersen, D. M. Radio and Television Workshop Manual. (New York: Prentice-Hall, Inc., 1952), Chapter 7.
4. Eshark, H. L., and Lorton, Sherman P. Broadcasting: Radio and Television. (New York: Harper and Brothers, 1952), pp. 308-322.
5. Hyde, Stuart W. Television and Radio Announcing. (Cambridge, Riverside Press: Houghton Mifflin Company, 1959), Chapter 8.
6. Yosse, Baskett. Radio News Handbook. (Evanston: Northwestern University Press, 1947).
7. Yosse, Baskett and Whiting, Fred A. Television News Handbook. (Evanston: Northwestern University Press, 1953), pp. 5-15, 32-36 and 93-98.
8. Phillips, David C., Grogan, John M., and Ryan, Earl H. Introduction to Radio and Television. (New York: Ronald Press Company, 1954), Chapter 8.

Unit V

THE COMMERCIAL

A. WRITING

1. Oliver, Robert T. Psychology of Persuasive Speech. (New York: Longmans, Green and Company, 1957), pp. 37-61 (composition).
2. Phillips, David C., Grogan, Joan M. and Ryan, Karl H. Introduction to Radio and Television. (New York: Ronald Press Company, 1954), pp. 122-141 (writing).
3. Sechafer, E. F., and Lassar, J. W. Successful Radio and Television Advertising. (New York: McGraw-Hill Book Company, Inc., 1951), pp. 109-24 (writing).
4. Steinhoff, Edward and Bretz, Rudy. The Television Program. (New York: A. A. Wyn, Inc., 1951), pp. 76-115 (writing and staging).

B. ANNOUNCING

1. Barnhart, L. D. Problems in Announcing for Radio and Television. (Evansville: Student Book Exchange, 1950).
2. Kington, Walter J., Congill, Rose and Levy, Ralph. Broadcasting Television and Radio. (New York: Prentice-Hall, Inc., 1955), Chapter 5 (announcing).
3. Henneke, Ben G. Radio Announcer's Handbook. (New York: Rinehart and Company, Inc., 1948), (announcing).
4. Hyde, Stuart W. Television and Radio Announcing. (Cambridge, Riverside Press: Houghton Mifflin Company, 1959).

C. GENERAL REFERENCES

1. Abbot, Waldo and Rider, Richard L. Handbook of Broadcasting. (New York: McGraw-Hill, Inc., 1957), Chapter 27 (general).
2. Ruben, H. L., and Lorton, Sherman P. Broadcasting: Radio and Television. (New York: Harper and Brothers, 1952), Chapter 19 (general).
3. Chester, Girard and Garrison, Garnet R. Radio and Television--An Introduction. (New York: Appleton-Century-Crofts, 1953), Chapters 18 and 19.

Unit VI

SEMI-SCRIPTED SHOWS

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Unit VII

SOURCE FOR SPECIAL AUDIENCES

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Unit XIIPRODUCTION TECHNIQUESA. GENERAL

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4. Eshenik, E. L. and Lawton, Sherman P. Broadcasting: Radio and Television. (New York: Harper and Brothers, 1952), pp. 225-237.
5. Wylie, Max. Radio and Television Writing. (New York: Rinehart and Company, 1950), pp. 363-397.

APPENDIX IV

READING REFERENCES FOR THE TEACHER

SUPPLEMENTARY BIBLIOGRAPHY

This bibliography is included here for any possible use it might have for the person interested in planning course work in broadcasting for a high school class. It contains books which the teacher may find useful as background information and books to which the high school student can be sent for reference reading. To make this bibliography more useful and specific, the following legend is used. The letters which appear at the right margin identify that book as to its primary usefulness.

- T Recommended for teacher's reference only
- X Primarily a textbook
- F Production aid materials and instruction
- M Practice materials and exercises for classroom use
- V Has vocational approach and materials
- A Art and music on radio and television
- E Engineering and technical in approach

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Finally to the reader--

The teacher of a radio course or unit in high school will need a working acquaintance with play anthologies, periodicals and articles on the subject, and speech texts which include chapters on the teaching of radio and/or television in high school either in the formal course of study or through an activities program.

The teacher should include these materials in his research and study in preparing to teach such a course. There is a wealth of such materials which have not been collected, adapted and arranged for use in high school.

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