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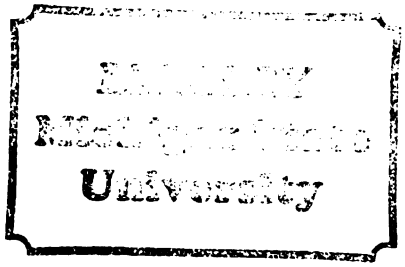

This is to certify that the

thesis entitled

A MODEL RADIO/TELEVISION PRODUCTION COURSE
FOR HIGH SCHOOL

presented by

Dean R. Smits

has been accepted towards fulfillment
of the requirements for

Masters degree in Telecommunication

Gary D. Peck
Major professor

Date 8/11/82

A MODEL RADIO/TELEVISION PRODUCTION COURSE FOR HIGH SCHOOL

By

Dean R. Smits

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

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1982

ABSTRACT

A MODEL RADIO/TELEVISION PRODUCTION COURSE
FOR HIGH SCHOOL

By

Dean R. Smits

This thesis consists of a twenty minute videotape program, and accompanying text, depicting the Radio/Television Production course offered by the Lansing, Michigan, school district.

Contained within this bound thesis is a detailed course description, with accompanying classroom materials, completed script, and a chapter describing the various television production procedures and artistic considerations addressed during the making of the videotape.

The author, who is also the instructor of the course, was responsible for all aspects of the production: planning, scripting, producing, directing, shooting, and editing. This study consists of his knowledge and experiences in these areas.

Accepted by the faculty of the Department of Telecommunication, College of Communication Arts, Michigan State University, in partial fulfillment of the requirements for the Master of Arts Degree.

Director of Thesis

DEDICATION

To my grandmother Auguste Smits

ACKNOWLEDGMENTS

I would like to thank Mr. Gary Reid, my thesis advisor for his guidance, patience, and understanding.

A very special appreciation is extended to Ms. Darlene Nicholas for her assistance, empathy, and encouragement.

Lastly, I would like to express my gratitude to my parents, Volfgangs and Zina Smits, whose enduring love and faith has been the catalyst for many of my life's achievements, including the completion of this thesis.

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CHAPTER I

INTRODUCTION

In 1972, Harry Hill High School was chosen as the location for a radio and television production course to be offered by the Lansing, Michigan school district. Due to changes in student populations and school board decisions, Harry Hill High School is currently known as the Hill Academic and Vocational Center. The center houses other vocational programs in disciplines such as: construction trades, small engine repair, physical plant services, commercial art, culinary arts, cosmetology, and child care.

Since its inception, the two year radio/television production course has been designed to prepare students with the skills necessary to secure entry-level positions in the broadcasting industry, industrial and educational media, advertising, and related fields such as cable television. The preparation and placement of graduates into a junior college or university program is a major goal of the course as well.

The Telecommunications Center is a fully equipped production facility containing two TV studios, two radio studios, portable and remote video equipment,

editing facilities for radio and television, and a vast array of related equipment. The facility also contains modulators, video tape recorders, etc., for the purposes of programming the two cable channels allocated to the school district by the local cable television franchise, and the one channel allocated to the Lansing Public Library.

In recent years, groups representing school districts from around the state have become frequent visitors to the Telecommunications Center, and Radio/Television Production classes. The groups usually consist of teachers and administrators whose school district has recently received cable television channel allocation by the community's cable franchise. It is apparent that a prototype for a high school vocational program in radio and television production is an immediate need. In addition, a video tape would provide a concise and informative complement to a general tour, as well as supply this information to school districts unable to personally visit the Lansing program.

A major objective of this thesis is to provide a video-tape for prospective students, parents, and counselors. The majority of students who initially enter the program have been minimally counseled and hold very vague ideas of the structure and requirements of the course. These students may have developed unrealistic

expectations and misconceptions. Every student is not necessarily suited to the radio/television production program. The availability of a comprehensive video-tape could alleviate a great amount of individual grief and misunderstanding.

Parents of prospective, as well as enrolled students, often express concerns regarding how the course will benefit their children. A phone conversation, a studio tour, and/or a limited question and answer session does not always resolve their anxiety. This thesis and video-tape program will allow parents to inclusively realize the many facets, demands, and possible rewards of the course. The tape will aid in any impending parental decision and calm or justify their fears.

Due to the fact that the radio/TV production class is comprised of students from three Lansing high schools, it is impossible to convey all the needed information to the several respective counselors. It is difficult for these counselors to be aware of the many facets of the class. Educating counselors with regard to the requirements placed upon the students, as well as the realities of the broadcasting industry, can enhance their decision making processes when selecting students for placement.

The video-tape portion of this "creative" thesis will address the purposes cited. Coupled with the

contained text, the tape will present a model radio/ television production course for a high school level program. The author's intent is to present a model program that guides others in helping to provide the best training possible for students entering the competitive, demanding, interesting, and rewarding realm of telecommunications.

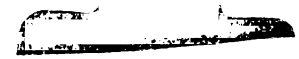
CHAPTER II

COURSE DESCRIPTION

Background Information

The Radio/Television Production course consists of a beginning class, which meets in the mornings, and an advanced class meeting in the afternoons. Each class meets for three hours each day of the week.

Maximum enrollment for each class is 24 students. The beginning class is generally filled to capacity each year. In fact, there's usually a waiting list for enrollment. The advanced class varies in size each year. This is due to several factors. Naturally a student must complete the course work of the beginning class before they're allowed to enroll in the advanced class, or second year of the program. Due to natural attrition some students don't return to the advanced class. Seniors are allowed to take the beginning course, and are a factor in determining class size for the following year's advanced class. Another factor is the realization of seniors that they need to take specific classes, other than television production, to be enrolled in a particular college or university. When this occurs the television production class is an expendable victim in their curriculum plans. The class size generally ranges from



9 to 14 students each year. This constitutes about 80% of those who qualify for the advanced class.

Students attending the class come from all three Lansing public high schools. Each school is allotted a maximum of eight student enrollment positions. If these positions aren't filled by a particular school, then they're made available to the schools where there is a demand for the class.

Counselors at the respective high schools decide which students are chosen for enrollment into the program. The school district administration has established an "open door" enrollment policy for vocational classes. This means that no pre-requisites for a vocational class can be established. The underlying principle behind this philosophy is that all students should be given an equal opportunity to either pass or fail the class.

The Lansing School District first offered Radio/ Television Production as a vocational course during the 1973-74 school year. Since its inception the course and its facility have evolved, and continue to do so, dramatically.

The radio and television industry is totally dependent upon technology which is expensive to purchase and maintain. In accordance, the expenditure of constructing television studios, supplying those facilities with adequate equipment, and maintaining that equipment was,

and remains, an expensive venture. Adding to this expense are replacement costs, repair costs, and new equipment purchase, as well as student supply costs. To date, approximately $225,000 has been invested in the purchase of equipment alone. This total does not include original installation, and an assortment of related necessities such as various cables to keep the facility and equipment functional.

Yearly budgets have fluctuated for the program with a high of $11,250 allocated in the 1975-76 school to a low of $2,574 in school year 1981-82. (See Appendix A) This variation is due primarily to the economic climate of the state and the prioritizing of monies by the school district.

The first year the course was offered it was lecture in nature. This was due primarily to the inadequate installation of the studio equipment by the company contracted for the job. Equipment malfunction was so great it prohibited any genuine attempts at realistic "hands-on" exercises and experiences for the students.

Ultimately the entire facility was rewired for audio and video. This was no small task when one considers the facility is wired with over 8000 feet of audio cable, and 5000 feet of video cable. The job was completed by the engineer and instructor of the class with aid from students.

That first year only a morning class was offered with afternoons allocated to the task of making the facility functional.

Radio studios weren't installed until the 1975-76 school year and radio production wasn't fully integrated into the program until the following year.

During the first four years of the course, it was called Television Production and Technician. A television engineering training program ran concurrently with the radio and television production skills taught. The engineering aspect was designed to train students for employment in technical positions within the broadcasting industry and related communication fields. The engineering element of the program ultimately evolved into a separate class known as Electronics.

The most dramatic year of growth and change occurred during the 1975-76 school year. Major improvements included: studio lighting controls for both television studios, a completely redesigned and rewired audio system for the television studios, a sound treated audio-production studio. Equipment improvements resulting in a better learning laboratory for students included a Canon FTB 35 MM camera and lenses, stereo radio production console, and associated recorders, and a vast improvement in the videotape equipment with Instructional Media Center supplied portable videorecorder, camera, editing

videocassette recorders, and videocassette players. An editing interface unit was purchased for use with these recorders allowing for more exact control over the video editing process. In addition, three videocassette player-only units were purchased for the eventual playback of produced tapes over cable channels or in the classroom.

Until these major improvements occurred students' practical exercises were limited to simple two camera television studio productions. With the growth and development students were now able to prepare slides for television production assignments, learn radio production and operation, become involved with on-location videotape recording, and begin learning the principles of videotape editing. In short, the changes made during the third year of operation resulted in a facility equipped to train students in areas of radio and television production that realistically reflected skills demanded and expected by the industry.

Since that year major equipment replacement and addition has occurred in the form of a new video switcher for the studio, portable video switcher, two additional portable television cameras, two new studio cameras, and assorted other equipment. These purchases have allowed for greater professional standards to be met and flexiblity in location productions, but no year in the history of the program has had greater impact or

positive repercussions than the one just described.

It should be mentioned that most major equipment replacement costs have not come out of the yearly budgets. Until recently, amortization moneys for all vocational programs were distributed on a yearly basis to those programs whose needs were prioritized. This process was administered by the Vocation Advisor of each building housing vocational classes, and decisions were made as to which vocational program's needs were greatest with input from the teachers of the respective programs. The original control room video switcher was replaced in 1979 at a cost of $7,650 with these amortization funds. Another funding source has been matching funds from the state with certain criteria guidelines. Hill Academic and Vocational Center is in its first year of existence as an academic and vocational center. Prior to this school year it was a high school, which also housed most of the vocational programs in the school district. During its conversion, which won't be fully completed for several years, state matching funds became available for vocational programs involved in the transition process. There were alterations made in the Television Production area namely the remodeling of the physical layout to include a classroom. When the need for new studio cameras occurred this past year, creative financing by the Director of Vocational Education in the district allowed for the

purchase of the needed cameras with the matching funds just described. The result has allowed the program to purchase two broadcast quality cameras, which have greatly enhanced the quality of productions at the center, and benefitted the students immensely.

Cable Television Interaction

Since the fifth year of the Radio/Television Production program (1977-78) cable television has played a vital and integral part in providing students with practical on-the-job training in the form of work experiences on a variety of cablecast television productions.

Continental Cablevision of Lansing allocated two cable television channels (channels 34 and 35) to the Lansing School District as part of their franchise contractual agreement.

After many meetings discussing the utilization and potential of cable, the district created an Office of Cable Television and named a director in the fall of 1977. It was surmised the district, with the cooperation of the television production class, could become a model in its use of CATV. Since its inception the Office of Cable Television has provided the community with original, taped, and purchased programming for six hours a day during the school year. This programming schedule is to expand to twelve hours daily during the 1982-83

school year.

All original cable productions, both studio and remote (location), have been, and will continue to be produced using television production students as production personnel. The program content range has been extensive and includes the televising of school board meetings, athletic events, teacher inservice workshops, music concerts, elementary school plays, instructional programs, and a variety of other types of programs. Many of these productions are video-taped, while a considerable amount are cablecast live.

With the creation of this new department came an influx of additional equipment to be used by the class, the previously mentioned portable video switcher, and two portable cameras being the most noteworthy.

A job responsibility guideline was agreed upon. The Director of Cable Television was to assume responsibility for such tasks as:

1) Working with steering committees and curriculum consultants to develop program concepts

2) Oversee production

3) Develop scheduling patterns

4) Organize efforts to inform staff and community of upcoming programs

5) Locate, arrange previews of, and schedule programs from outside sources

6) Coordinate activities with Continental Cable

It was assumed the instructor of the class would direct the productions using students, primarily from the advanced class as production personnel. The productions would be engineered by the 1st Class F.C.C. licensed engineer from the class, and secretarial support would be funded.

From the onset of cable it was stated by the District's Cable TV Committee that:

1) Primary purpose of cable was instructional

2) Pressure on the Broadcasting class was to be minimal

3) Additional staffing would be sought

4) Realistic experiences for students would be sought

When the Office of Cable Television was created the development of Cable TV was listed as one of the school district's top five priorities. Since that time, due primarily to the economic climate, it no longer holds that position. The initial genuine enthusiasm and financial support has dwindled along with its once lofty standing.

Although cable television in the Lansing School District continues to make strides toward becoming a national model, and in many people's estimation has already achieved that goal, it has done so primarily

through the efforts and dedication of an overworked staff and enthusiastic group of students. The district has been most supportive in providing the necessary hardware, but the proposed additional staff has never materialized. With state wide cutbacks in personnel, future staff support seems highly unlikely.

There's no question the students have received a wealth of practical experiences, and benefitted greatly from their involvement in cable productions. The question remaining is how long can the existing staff push themselves at their present pace before they burn themselves out.

Some relief seems forthcoming next year (1982-83). The Lansing Public Library, which is part of the school district, also has a cable channel allocated to it. Their staff consists of a full time employee responsible for producing and directing programs and programming the channel as well. Several part time CETA funded employees are on staff also. The transferance of this staff, and all library cable television equipment to the Hill location was completed in June of 1982. The library cable channel and staff will now be under the supervision of the Director of Media Services. The Office of Cable Television was recently put under his direction also. This new full time staff member has been made available to direct nightly cable productions,

thus giving relief to the instructor of the class. However, with the addition of the library's equipment come additional maintenance responsibilities for the engineer, so it's a mixed blessing. Also, the staff person from the library is now assuming additional responsibilities with this move. The funding of the part time CETA employees is questionable for the future, and their responsibilities might eventually need to be assumed by existing staff.

This scenario leads to the deduction that very little needed staff support can be expected in the near future.

Advisory Committee

The Michigan State plan for Vocational Education requires that all Vocational-Technical programs be developed and operated in consultation with an occupational advisory committee.

An advisory committee is defined as a group of persons chosen for the purpose of assisting local educational agencies and planning districts in program development and upgrading.

Recommended membership includes:

1) Experts knowledgeable in the specialized occupational area

2) Educators knowledgeable in the specialized occupational area

3) High school student(s) and former students

4) One vocational education counselor, if possible

5) Representatives of community interests, including persons familiar with the special needs of the population to be served.

Functions of advisory committees include:

1) Course content. Another concern is the establishment of practices which keep instruction practical and functional. Committees take an active part in helping to develop goal statements and assist in determining performance objectives, since members have the essential, specialized knowledge of the work.

2) Placement of students. Committee members sometimes assist in the placement of students by employing graduates, or recommending the employment of graduates to other firms in the industry.

3) Equipment selection. Committee members offer professional advice concerning the selection of industrial equipment. Their experience in their area of specialization is extremely valuable when equipment specifications are being prepared.

4) Evaluation of program. The committee's suggestions for improvement represent the opinion of the industry and community and enable the district to maintain a curriculum at a level of instruction practical for the needs of the industry.

The Radio/Television Production class has been fortunate regarding the involvement of local professionals from industry and education. At various times committee members have included professionals from the local CBS, NBC, and Public Television affiliates, local radio personalities, faculty from Michigan State University's Telecommunication Department, and Lansing Community College's Media Technology Department, local cable public access coordinators, and owners of private production and comunications companies.

Their significant contributions in the previously mentioned areas have helped maintain a program that is viewed as a model by educators state-wide. Furthermore, their recommendations have played a direct role in the purchase of needed replacement equipment for the class, such as the control room video switcher, the new studio cameras, and a studio ladder for lighting purposes.

Beginning Class

Beginning students are given reading and workbook assignments on a regular basis throughout the first year, especially during the first twelve weeks of the course. Reading assignments, coupled with lectures, video tape instruction, and practical hands-on production exercises allow the students to learn the basics of radio and TV production, and have that knowledge

reinforced in a variety of ways. Skills taught in the first year include studio and control room equipment operation, television lighting, audio and video editing, portable camera operation, electronic field production, graphics design, script writing, radio console operation, on-air talent considerations, and beginning directing skills.

> To learn television production is not an easy task. The major problem is that you should know everything at once, since the various production elements and activities interact and depend on one another. Since nobody can learn everything at once, we are more or less forced to take up the production elements step by step. (Zettl, 1976, p. 2)

This step by step process is a laborious and sometimes tedious responsibility for the high school juniors and seniors who constitute the beginning production class.

The text used for class is the same one used for many college courses in video production, Television Production Handbook by Herbert Zettl. This is complemented occasionally by Television Production: A Vocational Approach written by Richard L. Williams.

The choice of a text for a high school production course poses a bit of a problem. Most texts of any substance require a proficient reading level on the part of the student. This is due to the complexity of the subject matter. Texts which cater to a simplistic approach generally lack this substance, and are too

superficial. Due to the seriousness of the subject matter, the length of the class, and the thoroughness of the text, Zettl's book was chosen as the primary text for the class.

It is important from the onset, for the beginning students to be given parameters regarding class guidelines and studio rules. The general information handout given to all students accomplishes that purpose. Contained within this handout is a course description, grading policy, and detailed studio rules. Generally, if a person knows what is expected of him/her, and given valid reasons why certain rules must be followed, most respond favorably.

To insure the smooth operation of any production facility, studios must be kept clean, orderly, and ready for use. Therefore, after every production, the studios need to be struck (i.e., all cables re-coiled, cameras placed back properly, all set pieces returned to storage locations, all equipment placed back in its proper storage locations, and whatever additional cleanup is needed to put the studio in good order).

This procedure is the same as in industry, and if stressed to students from the beginning, helps create a good working environment. These students will be working in a million dollar facility, with equipment that is very expensive to replace and repair. That is

a tremendous responsibility on everyone's part. The instructor needs to instill in each student a respect of the equipment they will be working with, so that the chance of careless accidents are lessened.

After the general information sheet is discussed, a handout called "Terms You Can Expect To Hear From Your Director" is given to the students. (Appendix B) This important handout contains a definition of all the camera movements a student will be responsible for learning, as well as detiled responsibilities of all television production crew members. Criteria for grading assigned crew positions once students become involved in pre-formated television production exercises is also included.

Television production, among other things, is teamwork. It takes the cooperation and coordination of a group of skilled people to create a television program. One or two people can not do a studio production by themselves. It takes a director, audio operator, engineer, floor director, camera operator, on-camera talent, and depending upon the complexity of the production, numerous other individuals to create the final product. This concept of teamwork needs to be firmly impressed upon beginning students, and reinforced often.

It is difficult for anyone to be "talked at" for three hours and maintain interest. Therefore, as soon as the forementioned handouts are passed out and

discussed, the class is broken into two groups and given a tour of the facility. One group accompanies the teacher's aide for a tour of the radio production facilities, while the other group accompanies the instructor for a tour of the television control room and studios. After a sufficient amount of time, the two groups switch places.

The tours consist of more than just the instructor and his/her aide identifying equipment in the respective areas. Students receive their all important initial hands-on experience with equipment in the respective areas. In the radio studios, they become acquainted with the audio console, and are given the opportunity to record themselves on reel to reel audio tape. For many, this is their first experience in such a venture. Very often, students hearing their recorded voice for the first time find the result difficult to believe, and some even seem embarrassed.

This situation is always accompanied by one or two students who feel they are "God's gift to radio," and express their pleasure at hearing themselves accordingly. The two extremes are complimented by many students found somewhere in between these reactions. Students become comfortable with one another during this initial venture.

The television studio and control room tour present

a similar situation with similar results, only in another medium. After instructions in proper camera locking, unlocking, and various adjustments, the students are allowed hands-on experience with the studio television cameras. They perform all the camera moves defined on the "Terms You Can Expect To Hear From Your Director" handout, as well as compose the various camera shots used most in a television studio interview. They use each other as subjects. For most this will be the first time they see themselves on television.

This initial hands-on exposure to the equipment serves a valuable purpose other than a logical beginning point. Most high school students dread lectures and reading assignments, but opportunities allowing them to work with such sophisticated electronic equipment is alluring. Lectures and reading assignments are an integral part of the class structure, and play a dominant role during the first twelve weeks of the course. After this initial exposure to the equipment and facilities, it will be nearly three weeks before the students are given as extensive a use of the equipment as this venture affords. A positive initial disclosure helps to provide student stimulus to persevere through the lectures and reading assignments that lie directly ahead.

A major emphasis of the class is the teaching of how and why a piece of equipment works, not only how to

operate it. For example, it is not sufficient for a student to demonstrate he or she can operate a camera correctly when given commands by a director in the context of an actual television production. That same student must pass a written test demonstrating knowledge of the basic principles of how a television camera works. When learning audio production, students are taught not only proper microphone placement and use, but the difference between sound generating elements, pick-up patterns, and the physics of sound and its reproduction.

As noted earlier, lectures, reading assignments, and video-tape instruction complement the production exercises the students are ultimately involved with and prefer.

It is the instructor's responsibility to blend these instructional elements and present them in such a manner as to maintain student interest, while creating a continuous learning environment. The size of the class and the duration of the class are two important variables which have a direct bearing on this challenge.

Reading assignments the first three weeks include Zettl's chapters entitled "Learning Television Production," "The Camera", "Lenses", and "Mounting Equipment and Camera Operations." "The Production Crew" chapter from Richard Williams' text is also included in these

assignments.

Lectures clarifying the reading materials and expounding upon the information are general format, as well as assignments from Zettl's accompanying workbook for the text. The workbook assignments are generally rather simple, so they present little difficulty for the students, but serve several purposes. The workbook's simplicity reinforces the basic important elements in a way that is comprehensible to almost all high school students. Also, the workbook assignments assure the instructor which students are applying themselves and which ones are not.

Occasional reading quizzes are a good practice to incorporate into lesson plans. When utilized, it is amazing how more attentive most students become regarding their in-class reading assignments. Some reading assignments are given as homework, but most are given in class. The reason is, once again, because of the length of the class, and more importantly, because when reading assignments are given in class, there is greater control and assurance that most students will actually read the assignment.

The principle points covered during these lectures and reading assignments include: 1) the importance of teamwork in TV production; 2) the production crew and their responsibilities; 3) parts of the TV camera;

4) how the camera works; 5) types of cameras; 6) optical and performance characteristics of lenses; 7) camera movements; 8) picture composition; and 9) how to work a camera.

Of the above mentioned information, camera operation seems to be the easiest for the students to comprehend, although consistent composition presents difficulty for many. The most difficult to grasp seems to be optical and performance characteristics of lenses. This includes focal length, focus, depth of field, and their interrelations regarding camera lenses. It is suggested that slides be shown to students to help them understand the lens concepts. Because of their relationship to television aspect ratio, 35 millimeter slides are preferable.

The reasons why students find it easier to understand camera operation are apparant. Complementing the lectures and reading assignments for this area of instruction are several trips into the studio, in addition to a hands-on reacquaintance with this important production element. Where F-stops, depth of field, etc., are merely concepts at this point, camera operation is an element under their control. All of this material culminates with a written test on the television camera and lenses. (See Appendix C)

The final three weeks of the first marking period are devoted to two television studio production exercises

and two audio production exercises sandwiched between the lectures and workbook material, reading assignments, and a test on audio.

Prior to the start of the production exercises, several reacquaintive sessions take place allowing students to review the television control room and studio areas. The concepts reviewed include operation of the television camera, video switcher, audio console, and production crew responsibilities. Proper operation of the audio console in the radio production area is also reviewed.

Students begin with elementary exercises, such as a simple ad-lib interview between two students. Eventually they will work their way to a half hour newscast complete with visuals, edited videotape interviews, and commercials they have written, edited, and produced. All practical exercises are handled in this fashion. For instance, the first practical lighting exercise requires lighting two people, using the basic photographic lighting principle. At the end of the first year, the lighting exercise consists of lighting five people with movement and chroma key, and hod card considerations. This requires applying an advanced lighting technique implementing multiple lighting stipulations. There are exercises designed in this sequential manner for all the skills taught the first year.

Students are rotated through all the crew positions

demanded of a particular exercise. This means that before each exercise is completed, every student in class will have had the opportunity to perform the duties of a camera operator, audio operator, switcher (video), floor director, announcer, and on camera talent for each exercise.

The more advanced exercises will also require a projectionist, video tape operator, and several individuals to change graphics or visuals in the studio. This process seems tedious at times, given the great number of students in class, but the results are well worth the effort.

The first practical television production exercise, as previously mentioned, is a simple ad-lib interview between two students called "Close-Up". (See Appendix D) One serves in the capacity of host, and the other as guest. The exercise places minimal production demands on the students in their respective positions.

The camera operators need only to compose two-shots, medium close-ups, and close-ups of the talent.

The audio operator's responsibilities are to properly modulate the microphones of the host, guest, and an announcer. No music mixing or additional audio sources are incorporated into this exercise.

The floor director needs only to position him or herself properly, cue the talent when asked by the

director, and give three basic time cues.

The announcer has a brief open and close, while the host is responsible for a three minute interview of the guest, as well as brief opening and closing comments.

Needless to say, the exercise is very basic. The importance, however, is great. This exercise helps to shape and form the basic production principles that form the basis from which these young people will develop and grow as television production specialists. The development of a good, solid foundation in basic principles and equipment operation, begins here.

The instructor directs each rotation of the exercise. He carefully gives positive feedback and constructive criticism. Grades are given for each student in each position. The criteria for each position have been established since the first day of class, and are repeatedly discussed. Although the grading is subjective in nature, the instructor uses a sheet listing all the positions and a brief description of respective "Do's and Don'ts" to keep the grading process as objective as possible. This detailed sheet also helps in writing evaluations of student performances for feedback purposes. (See Appendix E)

A few words about grading is relevant at this point. All vocational classes in the state of Michigan are

required to use the competency based education philosophy in grading procedures. Briefly, competency based education incorporates the use of performance objectives as a grading criteria. A performance objective is the listing of a specific task/skill competency for an individual student. To be evaluated properly, the conditions of the task, as well as the evaluation criteria of the task, need to be made explicitly clear. The date, or dates, the performance objectives were completed must be noted for each student. Performance objectives need to be included in each individual student's file.

The instructor decides how many performance objectives constitute a particular grade each marking period. All performance objectives for this class are not accomplished on one particular date, but are an ongoing process throughout an entire school year. For instance, the P.O. for camera operation states the condition as: "given a studio camera and verbal director's cues at a normal pace, the student shall display knowledge of all standard TV shots, camera set-ups, and camera movements." The evaluation criteria is 100%. Appendix F contains examples of several performance objectives utilized in the beginning class.

The production exercises are a learning vehicle to help a student ultimately accomplish the completion of performance objectives. The performance objective

itself, is the ultimate goal. The production exercise is the vehicle. As such, the two are inseparable.

One could not rightfully expect any student to accomplish the performance objective for camera operation their very first time in the studio. It takes time and repetitive opportunities for that to occur. Yet, comparatively speaking, a student's first time on camera must be evaluated for feedback purposes. This is when the instructor uses his or her intuitive knowledge drawn from previous experiences in the classroom, as well as in the industry, to evaluate each student on an individual basis in hopes of the student ultimately passing a particular performance objective.

At the same time, the first television production exercise is going on, students are involved in their initial audio production exercise. This exercise requires the recording of a 30 second commercial on a reel to reel audio tape. The exercise (see Appendix G) is designed to force the student to begin developing an announcer's delivery. The copy (i.e. all material to be read on the air) is highly visual. Without the aid of music background, the student is forced to use only his/her voice to create a mood through articulating imagery.

Grading criteria for the initial audio production exercise is rather lenient, but becomes quite strict

before long. Time is so very important in the radio/ TV industry. A 30 second commercial is not 25 seconds or 38 seconds long, but 29 or 30 seconds exactly. Consequently, timing is an essential evaluation criteria. On this initial exercise, if a student is within 5 seconds of the allotted 30 second time frame, it is considered "A" work as far as timing goes.

Recording level is important for all recorded exercises. Ideally, the students are taught to record with the VU meter in the -3 to 0 range. This is the acceptable standard in the professional setting. A VU meter is a volume unit meter located on all audio consoles, which measures volume units, or the relative loudness of amplified sound. If the needle on the meter is primarily in the red line section on the far right of the scale, the sound is amplified too much, and there is a risk of distortion.

If the needle is so low that it is barely moving, there is hardly anything being recorded. Ideally, the needle is oscillated near the middle of the scale and peaks at, or occasionally over into the red colored area of the meter, which is the "overload" zone. Proper audio recording level is something the beginning student works on all year long.

The third grading criteria for this exercise is delivery of copy, or the manner in which the copy is

announced. Students are taught to modulate their voices and emphasize the words of a commercial. If a commercial is delivered in a monotone voice, or is too "sing-songy", the commercial is not being delivered properly. The criteria mentioned here are the basis for evaluating all television and audio production exercises.

Mid-way through all production exercises, television and audio, several days are allocated to the playing back of the recorded material. To be able to see and/or hear what one is doing wrong and right is a very valuable learning opportunity. If, for instance, a student has been told that certain of his/her camera movements need to be smoother, he/she can actually observe where improvement is necessary.

This manner of feedback can be very worthwhile if the students are attentive. Unfortunately, after several exercises are played back, the students generally become restless. Their attention begins to dissipate, and the purpose of the playbacks begins to deteriorate for the majority of the students.

To date, the classroom lectures and book assignments have been primarily concerned with the camera, or a major component of the video, or picture portion of television. The other essential part of television is the sound, or audio portion. All one needs to do

to realize how very important sound is to television is to turn the volume on a TV down completely while viewing a program.

Zettl's chapter on audio is assigned reading, in several installments. The accompanying workbook material is also assigned to students. Students are taught the various ways microphones are classified. The various microphone sound generating elements, pick-up patterns, and operational characteristics are covered in detail.

Another element of audio covered at this time includes the physics of sound in regards to how microphones convert sound waves into electrical energy, and how this energy is amplified and reconverted into audible sound waves by the loudspeaker.

Students learn how to use the appropriate microphone for the demands of particular production situations. The various types of sound recording and playback equipment for television and the techniques for using them are discussed and demonstrated, as well as the equipment and techniques of creative sound mixing. Before the next production exercises begin, students are given a written test covering the aspects of audio just mentioned. (See Appendix H)

The next practical audio exercise requires students to apply a most elementary sound mixing principle.

Students are asked to record a thirty second instructor written commercial, and mix sound (music) with the voice track. (See Appendix I)

As easy as this sounds, many students take all year to perfect the proper balance between their recorded voice and underlying music. The key is to have the music loud enough to be heard, but soft enough not to draw attention away from the spoken word, which should be the dominant element, unless some special effect is being sought. The proper selection of music is also important. The music should compliment the announced copy, not detract from it.

The first marking period culminates with the students' second practical television production exercise. (See Appendix J)

Talent requirements for this exercise are similar to the first one in that a host is responsible for interviewing a guest. This time, however, the guest needs to bring something into the studio to demonstrate.

The whole exercise incorporates several new production elements, as each successive exercise throughout the remainder of the year shall.

The demonstration area is located a distance from where the opening interview takes place in the studio. This requires both talent to move from one area to another. When doing so the student talent quickly learn

that their microphone cables don't necessarily aid in the transition.

Camera operators are asked to make on-air movements to follow the talent to the demonstration area. The most demanding requirement of camera operators during this exercise is to follow the actual demonstration while on as close a shot as possible. This begins to develop the fine motor movements, concentration, and control of the television camera so greatly needed by anyone with professional aspirations.

The audio operator needs to cue up open, and closing music, from two different sources (record and audio cart), and mix the music with an announcer's open and close. The proper modulation of the guest's, host's, and announcer's microphones are required also.

The switcher, or technical director, is responsible for interpreting production terminology commands from the director (instructor) and depressing the proper buttons or moving fader bars on the video switcher to obtain the visual effect asked for. During the first exercise the switcher was responsible for performing a fade, take, and dissolve. In addition to those switching techniques, the demonstration exercise requires the switcher to perform an electronic effect called a key, which is the cutting in of an image (usually lettering) into a background image.

What must be stressed here is the importance of the demonstration. If the guest brings in an object that just sits there, like a painting, and merely talks about it, there's no demonstration for the camera operator to follow. This defeats the purpose of the exercise. This must be emphasized to students. Of course the other extreme should be avoided as well. An example is the guest who drove the camera operator half crazy by demonstrating various tricks a person can perform with a yo-yo. The demonstration was entertaining, but impossible to follow with the close-up camera responsible for the primary coverage. This needs to be taken into consideration.

The second marking period begins with the topic of television lighting.

Zettl's chapter on "Techniques of Television Lighting" is assigned, complemented by the viewing of the 3M Company professionally produced program titled "Lighting for Video Tape Production."

Students are then introduced to the various studio lighting instruments, such as the spotlight, scoop, and broad, as well as taught how to use a light meter, light patch panel, and light dimmer control.

Definitions of lighting terms, the photographic lighting principle, operation of lights, and special lighting techniques are covered in detail in lecture,

and during studio demonstrations.

Students are also instructed on how to properly design a floor plan, and lighting plot, and then required to design one of their own. A floor plan is a plan of the studio floor drawn to scale showing the walls, the main door, and the location of the control room, with the lighting grid or batten pattern superimposed over the floor area. (See Appendix K) The lighting grids are metal pipes suspended from the studio ceiling, which the lighting instruments are secured to.

A light plot is drawn on the floor plan showing the lighting instruments, their location, and function for a particular studio production.

Exactness in floor plan and light plot design must be emphasized. Individuals responsible for lighting studio productions interpret these designs to light most studio productions. If lights are improperly placed on the lighting plot then they will be improperly placed in the studio, and in all likelihood will result in a less than natural and unprofessional looking production.

During the studio demonstrations safety is covered emphatically. Students will be working with high voltage equipment and must take proper precautions, such as shutting off the circuit breakers to the studio light dimmer controls and light panel when patching lights.

Students will also be required to climb studio

ladders to reach the lighting instruments they must move to desired locations, and then adjust.

To expedite the process, most studio ladders are on wheels, and one person remains on top the ladder holding a light, while another pushes him/her to the sought for position. This is an approach used by professionals, as well.

Fortunately, to date, no students have fallen off a ladder, nor have any lights been dropped on people below. However, a student did receive a chipped tooth from a wrench dropped by a student working atop the ladder. The incident could have been more serious; luckily it wasn't. It did reemphasize the need for caution and safety awareness at all times.

Although this has been the only injury to date, horsing around and pranks of any sort are dealt with immediately to deter behavior that could easily lead to someone's injury. The students' intensive exposure to television lighting concludes at this stage with a written test. (Appendix L)

Design for television production is the next subject covered in lecture. The two major features of design are: 1) television graphics and 2) scenic design. Graphics are all two dimensional visuals prepared for the television screen, such as studio and title cards, charts, and graphs. Scenery includes all

three-dimensional items used in the studio, such as flats, furniture, and hand properties.

Zettl's chapter on "Design" and corresponding workbook material is assigned the class, and students are taught the major factors of preparing graphics for television. These are aspect ratio, scanning, and essential areas, readability and balance, and color and color compatibility.

The students are then given a "hands-on" demonstration in the art of audio tape editing. Editing can mean various things. In this context it is the cutting and rejoining of pre-recorded audio tape with a temporary joint. Editing is generally undertaken for one of three reasons: 1) Getting the program timing right, 2) shaping the program: giving it a beginning, a middle, and an end, 3) Cutting out mistakes. Students are introduced to the equipment they will be using and given the opportunity to actually perform several edits. The various equipment necessary for performing audio edits includes a portable reel to reel audio tape recorder, audio tape splicing block, a sharp razor blade, leader tape, a wax pencil, jointing tape, and a take up reel. Safety must be stressed to the students. They will be physically cutting audio tape with a razor blade and approaching this aspect of audio production without concentration, and safety consciousness could easily lead to a painful

injury.

For the next week students work on four different practical assignments applying what they've learned to date. Working in groups of six, students are given a studio lighting assignment, an audio editing task, a 60 second audio public service announcement to record, and the task of constructing a simple framing guide to aide them in proper graphic composition.

The requirements for their first lighting assignment are quite simple. They are to design a floor plan and light plot for one person, and then light the set according to that floor plan. Grading criteria for the exercise includes the use of proper lighting plot symbols and proper placement of those symbols on the floor plan. The instructor also evaluates the use of proper lighting instruments for their intended purposes, the actual placement of these lights, and proper intensity, or brightness of the lights, as measured with a light meter. This is done using the basic photographic lighting principle technique as the evaluative concept. The six different students working on the lighting assignment daily are broken into groups of three. Each of these groups work in one of the two studios to accomplish their assignment. Although they are asked to approach the lighting task as a group venture, it becomes individulaized because each student is responsible for handing

in his/her own lighting plot. Furthermore, each student is responsible for the patching, setting, and intensity measurement of one particular light in the context of applying the basic photographic lighting principle.

The audio editing exercise consists of students editing out three mistakes purposely recorded during a 30 second radio commercial. The commercial chosen is the same one that was assigned as their first radio production exercise. This allows them a familiarity with the copy, and permits easy identification of the mistakes. Grading criteria is simple. The three mistakes need to be edited out so that the edited commercial remains in tact and mistake-free.

The 60 second public service announcement (PSA) is an instructor written cancer PSA requiring the proper mixing and recording of music, from a record source, with an announcer's copy. Each student is given 30 minutes on the audio console to record this assignment onto reel to reel audio recording tape. Timing, delivery, mixing, and recording levels are the grading criteria for this assignment.

The last component during this week of practical assignments is the construction of a framing guide (template) to aid students in preparing television graphics. The application of aspect ratio, scanning area, and essential area becomes apparent. Each student is given

a standard studio card, and with the aid of instructions from the teacher, and illustrations from Zettl's book, constructs the template. The 11x14 inch studio card has a scanning area of 7.5x10 inches, centered within the card. The essential area, centered within the scanning area, measures 6x8 inches. Students cut out four small slots to indicate the scanning area. Then they cut the essential area from the center of the card. By placing this guide on top of a studio card, students can mark the respective areas accurately, and they can easily check whether or not graphics are composed properly.

The lighting assignments and templates are graded daily. The audio editing and radio PSA's are graded after the entire class has completed them. Two days are set aside for the playback, grading, and constructive criticism of the audio and editing exercises. The class is divided into two groups, and this responsibility is shared between the instructor and the classroom aid. The students' input is always encouraged during these sessions.

After this is completed the class is instructued in scripting principles and formats for radio and television. This element of production is important, because all productions need to begin with a script. There are basically four types of television scripts: 1) the

semiscripted show, 2) the fully scripted show, 3) the show format, and 4) the fact or rundown sheet. Examples of each of these formats are given the students, as well as a thorough explanation of each by the instructor.

A great deal of time is spent in the teaching of proper script design for each media. Students are taught about the separation of audio and video columns for television scripting, and that all directions for both entities need to be in capital letters (upper case), while dialogue needs to be in upper and lower case letters. Professional radio commercials and PSA scripts from local stations are handed out as examples and their format is discussed thoroughly.

The scripting lecture and previous graphics information is designed to help prepare students for their next series of practical exercises. The students are once again placed into groups containing six members and their assignments for the next week are: 1) the writing, preparation of graphics, and the recording of a 30 or 60 second television commercial; 2) writing and recording a 30 second radio commercial or PSA; 3) another studio lighting exercise; 4) writing a 3 page report on an article from Broadcasting Magazine.

The television commercial assignment requires the script to be written in proper format. Visualization of the commercial demands the preparation of a minimum

of three student constructed graphics, and one key card constructed of rub-on white lettering placed upon a black studio card. All graphic materials are provided, and students have the option of producing a 30 or a 60 second commercial on a topic of their choice. Students are given two class days to write their scripts, and prepare their graphics, while one day is allocated to the actual recording of the commercials. The instructor directs the commercials and respective student group members comprise the production crew. Students are given individual grades for script writing, graphics preparation, production crew responsibilities, and for their commercials.

The TV script writing grade reflects application of, or a lack of, the necessary demands of proper script format (i.e., all directions in capital letters, double spacing, separate audio and video columns, etc.). Graphics grading criteria includes utilization of 3x4 aspect ratio, and scanning and essential area considerations. Production crew grading criteria has been previously discussed. The grading of the commercials themselves presents some difficulty. The industry, or commercials produced by local stations are the yardstick by which commercials are ultimately measured, but the instructor must take into account the students' experiences to date, and the individual student's capability as well.

When the assignment was originally given, numerous professional and student produced commercials were presented the class for incentive and demonstration purposes. That procedure helped acclimate students to the instructor's expectations.

It should be noted at this time that when the class is involved in various activities such as one group writing a commercial, another lighting a set, another recording an audio exercise, etc., the responsibilities for supervision and instruction of these students in various areas is distributed between the instructor and an assistant. The instructor generally carries more responsibility, but quite simply cannot be in two places at once. The instructor usually oversees the television production lighting and writing exercises, while the assistant is responsible for the students in the audio production areas.

The writing of the radio PSA is graded upon continuity of copy, proper length, and proper script format. Examples of various radio commercials are played back for students at that time, and for the same reasons, the television examples are played back for the class. Subject matter is optional for the student excluding vulgarity and general poor taste. A music mix is mandatory. The students are also given a grade for the recorded final product.

The grading criteria for all exercises (audio, video, lighting, etc.) throughout the year remains basically the same. What changes is the level of competence expected of the students. What constitutes a good, or "B" grade, at the beginning of the year, would change once a student has a certain amount of experience in a particular endeavor. Students are expected to continually progress in their practical abilities, while performing the tasks asked of them. Naturally, the instructors must use their classroom experience and insight into human behavior to determine what might be excellent work by one student, yet good, or poor work by another based upon individual competency.

The criteria for grading the lighting exercise is the same as the initial one, as are the basic requirements. There are, however, several exceptions. As opposed to constructing a light plot and lighting one person in the studio the students are now required to light two people. This constitutes application of a simple multiple lighting technique where the function of one particular light, with minor adjustments, serves several lighting purposes (i.e., one talent's key light will also serve the function of another talent's fill light, and vice versa). This, in reality, is what television lighting is actually based upon. The beginning student often gets the impression that if it takes three light fixtures

to light one person, then it should take nine fixtures to properly light a three-person interview program. An experienced lighting technician learns how to use his/her lighting instruments for more than one function. The realities of many studio productions demands it. This lighting exercise begins to develop these skills in the students.

The writing of a three page report from a Broadcasting Magazine article is intended to be more than just busy work for the students. In a profession as competitive and dynamic as radio and television production one needs to continually keep abreast of the current circumstances, demands, and changes within the industry. This assignment is conceived to do just that. Intermittently throughout the year students are given assignments from the magazine. Sometimes the reports are handed in, other times they are presented to the class for discussion. Although many students merely copy material verbatim from their respective articles, they nevertheless are exposed to important information that hopefully will benefit their education in this discipline.

The remainder of the second marking period consists of a brief television exercise, and a disc jockey exercise.

Once again, students are rotated through the various

production crew positions. The TV production exercise is called "Break" and calls for only one studio talent acting as the fictitious host of an afternoon movie program. The host is responsible for delivering several lines, which is the lead-in to a commercial break. The commercial break consists of a film PSA followed by a student produced commercial, from the previous week's assignment. After the commercial break the production returns to the studio for concluding comments from the host.

Although the duration of the television exercise is brief, several important new elements are introduced. The exercise requires a videotape operator to not only record each rotation for playback purposes, but to cue up the student produced videotape commercial, and roll it when asked by the director. A projectionist is also needed, so the students learn how to thread the film projector, cue up the film, and rewind it after use. The video switcher learns how to preview film and video-tape and then include either of these two valuable visual sources when needed. The audio operator learns where film sound (SOF) and video tape audio are located on the audio console and learns how to incorporate these two new audio sources into a production.

The disc jockey exercise requires the students to follow a play list of five songs, and asks them to perform

voice over music lead-ins, or "segues", to several of the records they are asked to play. They are also responsible to begin their program and close it with a pre-recorded audio cart. This requires the modulation of a new audio source (cart) on their behalf. They are also required to have opening and closing comments prepared, and a brief weather segue as well. The exercise is recorded on reel to reel audio tape and they are graded on preparation, recording level, mixing, delivery, and how closely they have followed the script they were given. Other criteria include whether the records were cued properly, and the amount of dead-air. Dead air time is when nothing was being said, or no music was being played. Their goal should be to have no dead air at all.

This concludes the second marking period.

The third marking period begins with several days allocated to playbacks of the television and audio production exercises just completed. Once again, the purpose of playing back these exercises is so the student can genuinely understand what they are doing right and where they need to improve. The playbacks are followed by group production projects, and then a much needed Christmas vacation. After the vacation the remainder of the marking period is devoted to analysis of television news and a television newscast production exercise

coupled with a more demanding disc jockey exercise. The first semester concludes with a written final examination.

Generally students are a little restless at this time of the year due to the continual rigors and demands of the class, and the anticipation of the Christmas holiday that lies ahead. The group production projects are designed as exercises compelling the students to apply the various aspects of television production they have learned, in an atmosphere of geniality. It is natural for students to form friendships with certain individuals based upon common interests. The instructor arranges the groups taking this into consideration. In other production exercises the grouping together of such companions sometimes becomes disruptive and counterproductive, because of their silly behavior. The group project exercise lends itself to placing them together on account of their likeness and common purpose.

The project requires each group, consisting of four students, to produce a television program that is a minimum of 15 minutes in length and a maximum of 60 minutes long. The groups are responsible for designing and implementing a lighting plot, writing a script for the production, preparing a mandatory minimum of four graphics, and providing the talent for the production. The production crew is made up of the other members of the class. The subject matter of the programs are optional.

This puts a certain amount of pressure on the students to come up with a program idea. The instructor assigns a topic for those unable to decide on one themselves. The students are graded on all aspects of the production (i.e., lighting, scripting, etc.), as well as assigned crew responsibilities.

The project is valuable because it forces the students to apply their production skills in the context of a "group dynamics" situation, which is a learning experience in the realities of television production. The quality of the resulting program depends upon application of acquired skills and production common sense, as well. Students quickly learn the need for attention to even the smallest details. Realistic pressures such as script and production deadlines are valuable experiences. All in all the projects are generally entertaining because of the diversity of students' interests, and a constructive and pleasurable way to head into the Christmas holiday.

After the vacation a thorough classroom analysis of television and radio news takes place. Students are taught the vocabulary of news, pacing of stories within a newscast, accepted industry story length, visualization of news, and how to write a news story. Examples of professional newscasts, both radio and television, are screened by the students. Newscasts from major

markets (Detroit) are compared to locally produced ones for educational and discussion purposes. Aiding in the effort is the use of a five part television series produced by the local public television affiliate called "Broadcasting Journalism: The Hows and Whys." An understanding of radio and television news is indispensible for any serious production student because of the great number of employment opportunities associated with this segment of the broadcasting industry. The majority of originally produced programs on a local level are related to news. Not to thoroughly explore this facet of the industry would be an oversight.

The final two weeks of the first semester are allocated to a television newscast production exercise, and the students' second "DJ" audio exercise.

Students are assigned to newscasting teams of three members per group and quickly learn how much work is involved in the producing of a simple half hour newscast. The assignment requires the students to write all their own news and a director's script and prepare a minimum of two graphics per student. The individual stories have a maximum time limit of ninety seconds. Three commercial breaks are to be scheduled within the newscast.

In any group situation there will be members who meet the challenge of the work and those that sit idly by expecting others to carry the burden. This newscast

effort is no different. The instructor has to give a great deal of thought in planning which students are in which group.

Professionally produced newscasts put a great deal more emphasis on visualization than the exercise just described, so will subsequent newscast exercises. For the time being, the major goals of this exercise are the development of news continuity processes (the decisions involved in establishing the order of the news stories so as to maintain viewer interest) and good news writing habits.

Students are given individual grades for the writing of their stories (pass-fail), group participation, presentation of their news, and individual production crew grades. Each group presents their newscast a minimum of two times. This allows an opportunity for the newscasting team to improve and is also necessary so each student has the chance to be placed in all the production crew positions.

The disc jockey audio exercise requires the students to record a half hour radio program following a station play list. Contained within the playlist are commercial and public service announcement breaks. The students are asked to begin developing an "air personality." In other words, it is not sufficient just to play the music and commercials in the order asked. Several required

ad-lib "segues" are required of the students as well. The emphasis during this exercise is proper audio console operation and recording level. In later disc jockey assigned exercises the emphasis will shift to the development of their "air personality."

After the production exercises and playback of them have concluded several days are spent reviewing information in preparation for the written final examination (Appendix M). The final examination completes the first semester of the beginning class.

The second semester begins with an influx of new students into the program. Their number varies depending on how many students have dropped the class. This situation creates logistic problems with equipment. Also, management problems need to be addressed by the instructor. The circumstance dictates assistance, flexibility, and patience on everyone's behalf, students' as well as the instructor's. The instructor's primary concern is to get the incoming students near a knowledgeable and performance level already attained by at least three-quarters of the class, and to do it as quickly as possible, so as not to impede the progress of the returning students. This is generally attained by the end of this marking period.

The condition requires the in-coming students to readily apply themselves to homework reading and workbook

assignments on a nightly basis for the first two weeks, and intermittently thereafter throughout the remainder of the marking period. During that time these students cover Zettl's chapters and workbook assignments on "Learning Television Production", "The Camera", "Lenses", and "Audio." In-class lectures help the student understand the material. All handouts, studio tours, etc. given students at the beginning of the year are given these new students as well. Two objective written tests are given covering the information on camera and audio. In short, the in-coming students are exposed to the same information and given the same tests as the returning students were at an equivalent time in their education in this discipline. The difference being that these students take a "crash" course for a period of time.

Meantime, the returning students work on audio editing, lighting, and disc jockey exercises. Zettl's chapter on "Directing" is also assigned these students.

The audio editing exercise requires students to perform 15 edits, not only eliminating purposely recorded mistakes, but inserting several sound effects at required places.

The lighting exercise requires the application and design of a lighting plot reflecting the lighting technique called cross key lighting. This is a simple modification of a four point lighting technique, which the

students have already been exposed to. The students are required to light two people in the studio using this method. Basically, cross key lighting is so named because the two front lights, usually hard spot lights, are crossed so that the light on the left is aimed at the talent on the right, and vice versa. This lighting technique is readily used in industry during panel shows.

The disc jockey exercise is a repeat of the last one with more emphasis on air personality development by the individual student.

The lecture, book, and workbook assignments on Directing are planned with hopes that aspiring directors begin to formulate good directing principles. So far, the instructor and aid have served as director role models, but there is much more to directing than what initially meets the eyes and ears, and this assignment is designed with that thought in mind.

The ad-lib interview exercise (Close-Up) is repeated at this time primarily for the benefit of the incoming (new) students. This is their initial exposure to the demands of a television production, so a concerted effort to put the situation in proper perspective needs to be maintained by everyone concerned. All students participate in the exercise. The experienced students are called upon to help acquaint the inexperienced ones with the various production tasks and responsibilities. Their

aid is valuable and lends itself to a positive learning experience for all. It is during this repeat of the interview exercise that experienced students are allowed to volunteer to direct certain run throughs of the exercise under the guidance of the instructor. This is done to help maintain their interest. The rotations primarily comprised of inexperienced students are all directed by the instructor for obvious reasons. Students are evaluated according to their experience with the same applicable criteria as previously mentioned. The inexperienced students (referred to hereafter as "new" students) also record the first two audio exercises during this time.

After these audio and video exercises are completed the class is divided into groups of three students per group and spend the remainder of the marking period preparing and recording another newscasting exercise, completing an audio editing assignment, and presenting an in-class report. The groups are composed of experienced students working with no more than one "new" student per group. This allows the inexperienced students to learn from their skilled peers as well as the instructor. It also continually reinforces the knowledge already acquired by the majority of the class and helps establish self confidence in the "veterans", because of the leadership role they are placed in and the demands of

that responsibility.

The groups are given several days for the writing of their news stories and director's script. Each new student has several homework reading and workbook assignments to complete during that time also. Zettl's chapter, "Design" and a reading assignment on script writing needs to be completed for them to better understand the requirements of the newscasting assignment and become a viable member of their assigned news team. The newscasting group is responsible for producing a half hour newscast. Each student is responsible for the preparation of a minimum of three graphics, so that at least nine stories will be visualized. Hundreds of slides are also made available to each group so they may better visualize their newscast. The groups are required to use at least two video taped stories, or interviews, within the newscast. These stories are made available to them from a library comprised of recorded and edited stories from previous classes. Three commercial breaks are also required, and a choice of film PSA's or student produced videotaped commercials are to be used to satisfy this requirement. The students are also held responsible for writing character generator information to be used during the weather portion of the newscast. A character generator is a special effects keyboard device, much like a typewriter, that

electronically produces a series of letters or numbers directly on the television screen or keyed into a background picture. The required information is used during the performance of keying this weather information over a weather graphic. This is accompanied by music and the weathercaster's report. Grading criteria is the same as the previous newscast exercise with emphasis placed upon planning and organization. With the numerous visuals, videotape and film requirements, a great deal of organization and implementation of production knowledge is necessary.

The audio editing exercise requires the "veteran" students to perform 30 edits. Students are given two reels of pre-recorded audio tape. The master reel, or what will ultimately be the finished product, contains dialogue with ten mistakes. Also recorded on this reel are instructions where sound effects and other information has been recorded onto the other reel of tape. The student's task is to edit out the mistakes and insert the various segments in their proper order, without clipping or cutting out words, so the finished product is at least 70 percent mistake-free. The new students are assigned the first audio editing exercise, which was previously described. The veteran students work side by side with the new students and aid them in acquiring necessary audio editing skills.

The lighting assignment requires the design and application of a lighting plot reflecting cross key lighting technique once again. This time, however, students are responsible for lighting three people in the studio and not just two. The new students are also assigned Zettl's chapter, "Techniques of Television Lighting" and the accompanying workbook material. They are given explanatory handouts covering lighting terms, safety requirements and other helpful information. The students are given two days to complete the assignment, allowing ample time for the veteran students to help instruct the new students on lighting techniques, light plot development, and other necessary lighting information. The instructor is also available for instruction on these and other lighting principles and devotes a great deal of time addressing the nuances of lighting during the critiquing of the assignment.

The radio newscast assignment requires the students to record a 5 minute newscast onto reel to reel tape. No story is to be more than 20 seconds long. The students also need to write and record a 30 second PSA, with a music mix, onto an audio cart. This PSA is one of two they need to use during a one minute commercial break. The students are graded on delivery, timing, and recording levels for both the newscast and the public service announcement. Although students have played back audio

cassette carts as a source of music in previous exercises; this will be their initial venture into recording onto an audio cart. All their audio recording to date has been onto reel to reel audio tape.

The marking period concludes with students presenting in-class reports on articles assigned them from Broadcasting Magazine. The presentations always lend themselves to good discussions and are presented between playbacks of the newscast exercise just completed. This helps to break up the general routine of the playbacks and aids in maintaining student interest in both endeavors.

The second marking period of the second semester is an important one for the class. So far the students' educational and practical classroom experiences have been confined to studio productions. The state of the art of the television industry also demands production activities taking place away from the studio. Sometimes these productions include large, single events, such as athletic contests, requiring a multiple camera set up interfaced with all the electronic components generally found in a studio control room. Quite often these productions are covered with a single camera (called mini-camera) as in the coverage of news stories sent through microwave relays to the station for live broadcast, or more often recorded on a portable videotape recorder to be taken back to the station, edited, and played back

on the evening's news. This marking period, and the succeeding one, finds the instructor primarily concerned with teaching students the skills necessary for portable camera set up and use and video tape editing principles. Although practical exercises in all facets of radio and television production continue throughout these remaining two marking periods, they revolve around, and incorporate practical exercises in portable camera use and videotape editing.

Students are given reading assignments from Zettl's chapter on "Small-Format Television" and Richard Williams' chapter entitled "Electronic VTR Editing." The classroom lecture devoted to portable camera set-up and uses allows the students to actually set up a portable camera and recorder, video tape each other, and play back the results. It is during the set up and operation of portable cameras that students need to readily apply their acquired knowledge in performance characteristics of lens (i.e., depth of field, F-stop, etc.) and specific considerations of how cameras function. New criteria such as camera white balancing and use of necessary filters is explained. A videotape produced by the Sony corporation is played for the students, which explains in detail the set up, operation, and care of the camera they will be using and all its interrelated components (camera control unit, AC color adaptor, Camera AC adaptor, portable VTR,

etc.). The students are eventually divided into small groups and given practical tests on set up, operation, and care of portable cameras and video tape recorders.

Video tape editing corresponds with portable camera use because most of what is shot and taped with portable cameras is ultimately edited. Video tape editing is performed for many of the same reasons audio tape editing takes place (cited earlier). In the early days of television, video editing was accomplished similar to audio editing. The editor would mechanically cut the videotape with a cutting device and splice the two ends together with splicing tape. By contrast, the equipment of today allows one to edit electronically and is accomplished without physically cutting or splicing the tape. The terms, techniques, and principles of video editing are addressed to the students during lecture to aid them in learning the skills of videotape editing. However, learning the language of editing is one thing; setting down at an editor and performing a series of calculated edits is another matter entirely. Therefore, after a brief written test on editing terms and techniques, the students are exposed to the editing system and allowed to perform the three basic types of video edits: Assemble edit, video only insert edit, and audio only insert edit. The editing system consists of five basic elements: 1) an editing or record machine, 2) a playback videotape

recorder, 3) the electronic editor, 4) a video monitor for the playback VTR, and 5) a monitor for the record machine. Students are instructed in proper operation of these components, and while performing the basic edits, begin to grasp editing concepts and proper equipment use. This marking period is comprised of another disc jockey exercise, lighting exercise, and radio news assignment that includes an edited radio interview. However, the primary assignment is the writing of a television commercial requiring the video to be recorded with a portable camera, the audio track to be recorded onto reel to reel tape and edited, and then the commercial to be electronically edited together.

Radio news, disc jockey, and television newscast exercises, in addition to an edited television interview and lighting assignment, are all components of the final marking period. A practical final examination exercise concludes the school year.

The radio news exercise requires students to write and record a six minute radio newscast. National, state, and local stories need to be included, with two minutes allocated to each area. Maximum length of each story is 30 seconds. This requires the development of writing discipline and editorial judgements. The students also need to record an interview and edit it to a maximum length of 90 seconds. The interview must contain

opening and closing comments. Grading criteria includes timing, delivery, and preparation.

The final radio disc jockey assignment is similar to its predecessors. Students follow a station playlist, as described before. The primary criteria is how they have developed as "on-air" personalities.

The lighting exercise consists of designing a floor plan and lighting five people in the studio. The talent, two at a time, will hypothetically be asked to move to another part of the studio. Whenever talent is asked to move from one lighted position to another, it is necessary for students to consider three elements: both positions where the talent will remain, and the transition area through which the talent will move. Students also need to light the set for the implementation of a special video effect called a chroma key. This exercise teaches students that the most important aspect of lighting the chroma key set area is even background illumination.

The importance and practicality of portable camera operation has already been alluded to. The television interview assignment requires students to set up and utilize such equipment on location, in and around the school building. Students are once again placed into news groups and interview each other. Students are scheduled for video editing time after the interview

has been recorded and must include in the final edited version an on-camera open and close (called a standup) and at least one action cutaway. This assignment tests students on portable camera set up, operation, and technique, as well as news interviewing procedures and video editing skills.

This edited interview is then incorporated into the final newscast television production exercise. Newscasting teams are comprised of three students, again. The requirements and grading criteria for the exercise are the same as the earlier ones with several exceptions. All videotape commercials and interviews used during the newscast are to have been produced by the current class, as opposed to using materials produced by previous classes. Also the incorporation of the chroma key special effect is required to be used twice during the newscast. A chroma key is the "laying-in" electronically of a background image, such as a scene of a fire, behind a foreground image, such as a medium close-up of the newscaster.

The year concludes with a final examination consisting of group video production projects. The students are divided into groups according to similarities and friendships, again. The idea behind this final is for students to be tested on their production skills during an actual studio production, which everyone has

fun being involved with. Students are asked to choose a song with vocals that they, as a group, wish to lip sync, and pretend they are the musicians performing the selection for television. Each group is assigned a production crew and the entire exercise is always enjoyable and a pleasurable way to cap the year.

Additionally, the students have the opportunity to gain valuable practical production experience throughout the year by volunteering to be crew members on school district television productions taking place after school hours. These productions range from an on location live cablecast of the Lansing Symphony Orchestra, requiring a multiple camera set up with portable color video switcher, to a talking heads studio interview.

Students gain the opportunity to further their skills as camera and audio operators, play by play announcers for basketball games, and in some instances technical directors.

Advanced Class

The primary objective of the advanced class is to provide a positive and realistic working environment for the students to sharpen and refine their acquired skills in radio and television production. This is accomplished in a variety of ways.

The Director of Vocational Education decided to have a separate beginning and advanced radio/television production class. Prior to the 1977-78 school year, students, regardless of class experience, could enroll in either a morning or afternoon class each semester. The primary reason for the division was to provide the school district with an experienced group of production personnel for its cable television productions. The administration believed an advanced class applying itself toward the aims of becoming totally involved with cable productions could accomplish two major goals: 1) provide numerous and much needed programming for the district's cable television channels, and 2) provide the students with realistic and educational job related experiences. The situation has necessitated the Office of Cable Television to work cooperatively with the instructor of the class, and vice versa, especially during the scheduling of productions. So far, it has been a good marriage with the students deriving the greatest benefits in the form of practical work experience.

The second year of the program expects and demands the students to apply what they have learned and to cultivate their skills as near to professional standards as hard work allows. Production goals vary from marking period to period each year because of the changing production requests asked of the class. These goals are

set for specific learning areas such as television directing, complete remote equipment set up and production considerations and many others. Cable production demands vary in scope and quantity yearly and have a direct bearing on what subject matter will be taught in which marking period. Therefore, an overview, as opposed to a definitive description, of the advanced class is in order.

Whenever possible, all cable productions, studio as well as remote, are scheduled at the time the advanced class is in session. The advanced class' primary responsibility is to set up and crew all cable productions scheduled at this time. Due to the heavy production schedule, students can sometimes be working on as many as three productions per week. Idealistically, all productions would be scheduled at this time. Reality, however, dictates a great number of night time productions. Students' availability cannot be required for these productions, but participation in a minimum of two night productions per marking period is mandatory for students wishing an "A" or "B" grade for the course. These productions are viewed as functional homework by the instructor. Enough of these productions are planned well enough in advance and posted on an accessible production calendar to allow even working students the opportunity to plan accordingly. Round trip transportation is provided

for students in need of a ride, so only a lack of self motivation deprives them of attaining both valuable production experience and a good grade.

Program subject matter varies greatly allowing for a wealth of diversity and production challenges. One day a student may be scheduled to be a member of a crew videotaping an elementary school Christmas play, while another day's assignment could be a crew position for the Adult Education graduation ceremonies. Board of Education meetings, boys and girls basketball games, a studio interview with the Superintendent of Schools, instructional music programs, musical concerts, and teacher in-service programs are many of the television programs the class has the possibility to become involved with. The number and types of programs produced seems to increase each year, providing the advanced class with an abundance of practical working opportunities. The advanced student is given as much responsibility as he/she can handle during these productions and, on some occasions, a little more for learning purposes. Students are eventually held responsible for the entire setup of a multiple camera remote production. This responsibility includes lighting, microphone and camera placement, staffing the production crew, and properly striking all the equipment.

The class is also required to produce a regularly

scheduled series of their own each year, beginning with the start of the second marking period. The program length and subject matter varies and depends upon the interests of the class as a whole. One year the series was a weekly newscast cablecast live from the studio. The news concerned itself with school and district wide news, as opposed to what most people view in their homes each evening at 6 PM. This past year the series was a bi-weekly sports program entitled "CAC Sports Scene." Complete with at least three video tape stories per show, the series co-hosts and producers enlightened their cable viewers with the latest information and scores from sporting events involving members of the Capitol Area Conference. The program was cablecast on the public access channels in both Lansing and East Lansing as well as the school district's channel.

The opportunity to specialize in a given area, or work on individual projects in either radio or television, is also an option. One of the most ambitious special projects to date was an original murder mystery entitled "Death Stalks the DJ." The two students who collaborated on this tongue-in-cheek project keenly cast all the members of the class as the staff of a fictitious radio station experiencing a loss of all their disc jockeys due to murder by strangulation with an audio patch cord. The finished product was quite entertaining and was cablecast.

Advanced students gain valuable radio experience by staffing WHBS radio. This student managed and operated station is cablecast live over cable channel 34 daily betwen 11:30 AM and 1 PM. The students decide on the play list, jock rotation, and all other managerial judgements. WHBS has a station manager, music director, news director, and a staff of disc jockeys. Class related assignments include the writing and producing of promos, public service announcements, and occasional radio documentaries. For those students interested in pursuing radio as a career, F.C.C. 3rd class license with endorsement material is taught them. The year culminates for the advanced students with class assignments requiring the production of an edited video resume tape and edited audio resume tape, as well as a typed written resume.

CHAPTER III

FINAL WRITTEN SCRIPT

Definitions of Script Abbreviations

BG - Background

CU - Closeup. Object or any part of it seen at close range and framed tightly

FG - Foreground

4-SHOT -Framing of four persons

LS - Long shot. Object seen from far away or framed very loosely

MCU - Medium closeup. Framing an object between a medium shot and a closeup.

MS - Medium shot. Object seen from a medium distance

OS - Over-the-shoulder shot. Camera looks over the person's shoulder (shoulder and back of head included in shot) at another person or object

PAN - Horizontal turning of the camera

3-SHOT -Framing of three persons

XCU - Extreme closeup

ZOOM - Changing from a wide shot to closeup, or vice versa, including any shot in between

SCENE	LENGTH	VIDEO	AUDIO
1.	:05	MS CAMERA OPERATOR (He dollies in, out of view)	MUSIC UP
2.	:22	XCU HANDS ON AUDIO CONSOLE ZOOM OUT TO COVER SHOT OF AUDIO OPERATOR	MUSIC UNDER ANNOUNCE ANNOUNCER: Radio and television production is a two year vocational course offered by the Lansing School District.
3.	:20	MS CABLE OPERATOR (She's kneeling to patch audio and video info. Then stands and checks on control box) TILT UP AND ZOOM OUT TO INCLUDE TV MONITOR	The class is designed to prepare students with the skills necessary to secure entry level jobs in the broadcasting industry, industrial and educational media, advertising, and related fields, such as cable television. MUSIC UP AND HOLD FOR 5 SECONDS THEN UNDER ANNOUNCE
4.	:10	OS STUDENT EDITING AUDIO TAPE	The preparation and placement of graduates of the class into a junior college, or university program is a major goal of the course as well.
5.	:15	MS STUDENT THREADING FILM PROJECTOR ZOOM INTO CU HANDS	MUSIC UP AND HOLD FOR 10 SECONDS AND OUT

		VIDEO	AUDIO
			INSTRUCTOR:
6.	:20	MS INSTRUCTOR AT DESK ZOOM INTO MCU	Hello, my name is Dean Smits, and I'm the instructor of the course just described. The class is housed here at Hill Academic and Vocational Center. The course actually consists of two classes, a beginning class, and an advanced class. The following program was produced to let you realize what this course, Radio and Television Production, is really all about.
7.	:15	3-SHOT STUDENTS IN CLASSROOM STUDYING AT DESKS ZOOM OUT AND PAN LEFT TO COVER SHOT OF CLASS	MUSIC UP AND HOLD FOR 10 SECONDS THEN UNDER ANNOUNCE
			ANNOUNCER:
8.	:05	MS STUDENT READING AT DESK	Television production is demanding work and the work begins in the classroom.
9.	:10	MS STUDENT WRITING AT DESK	MUSIC UP FOR 10 SECONDS THEN UNDER ANNOUNCE
10.	:07	MS STUDENT READING AT DESK	Students are given reading and workbook assignment on a regular basis, especially during the first 12 weeks of class.
11.	:22	COVER SHOT OF STUDENTS VIEWING VIDEOTAPE ON TV MONITOR (Camera is located behind students)	Reading assignments, coupled with lectures, videotape instruction, and practical hands-on production exercises allow the students to learn

		VIDEO	AUDIO
			the basics of production, and have
		ZOOM INTO CU OF TV MONITOR	that knowledge reinforced in a variety
			of ways.
			MUSIC UP AND HOLD FOR 10 SECONDS THEN OUT
			ANNOUNCER:
12.	:10	XCU OF STUDENT'S HAND WITH PENCIL	Besides learning how to run the equip-
			ment in the radio, and television
		(Student is writing at desk)	studios, students learn how to run
		ZOOM OUT TO MS	a simple piece of equipment: the
			pencil.
13.	:05	MCU STUDENT READING NEWSPAPER	It takes more than just lots of techni-
		.	cal equipment to make a television
14.	:05	TWO SHOT OF STUDENTS READING PAN RIGHT TO REVEAL ANOTHER STUDENT	program. It takes ideas, information,
			and people who can write and communi-
			cate those ideas.
15.	:12	4-SHOT OF STUDENTS	These students are working on the
			preliminary stages of a newscast
			assignment. Long before the lights
			and cameras are turned on, the news
			has to be written, scripted, and
			rehearsed.
16.	:10	MCU STUDENT WRITING SCRIPT AT DESK	Students are taught the mechanics of
			script writing, and regularly write
			and script their own news, and
			commercials.
17.	:40	OS CAMERA OPERATOR'S VIEWFINDER	MUSIC UP AND HOLD FOR 15 SECONDS

		VIDEO	AUDIO
		ZOOM OUT TO REVEAL AUDIO OPERATOR IN FG WITH CAMERA OPERATOR AND TALENT IN BG (Production crew's backs are to camera)	
			MUSIC UNDER ANNOUNCE
			ANNOUNCER:
		PAN LEFT REVEALING DIRECTOR AND VIDEO SWITCHER SEATED AT CONTROL ROOM CONSOLE NEXT TO AUDIO OPERATOR	Television production is a process that involves the use of complex equipment and the coordination of a team of production specialists. Whatever part you play, you should realize that television production is teamwork. Every person involved with a production must work closely with everyone else. This means that if one person isn't doing his, or her, job right, then the entire production could be harmed.
			MUSIC UP AND HOLD FOR 5 SECONDS THEN UNDER ANNOUNCE
18.	:10	3-SHOT CONTROL ROOM PERSONNEL	Communication between the members of the production crew is vital. The crew has a vocabulary all their own and to do the job properly
19.	:03	MCU SWITCHER	a person must be in command of this vocabulary.
20.	:07	XCU SWITCHER'S HANDS	This means a person must be able to understand what they are asked to do, and be able to respond quickly and correctly.

		VIDEO	AUDIO
21.	:04	MCU SWITCHER	MUSIC UP AND HOLD FOR 5 SECONDS THEN UNDER ANNOUNCE
22.	:05	MS AUDIO OPERATOR	The production crew consists of many different people, all assigned one or more jobs,
23.	:05	XCU AUDIO OPERATOR's HANDS	and it is their responsibility to see that the job is carried out.
24.	:04	MS CAMERA OPERATOR	Some of the different crew members are the camera operator (PAUSE)
25.	:03	XCU FLOOR DIRECTOR	floor director (PAUSE)
26.	:03	MCU AUDIO OPERATOR	audio operator (PAUSE)
27.	:05	3-SHOT CONTROL ROOM PERSONNEL (DIRECTOR IN MIDDLE)	and the director. All of these people must work closely together to create the final product: the television program.
28.	:13	MCU CAMERA OPERATOR IN STUDIO ZOOM OUT TO REVEAL PRODUCTION CREW AND TALENT (Talents' backs are to camera)	With the aid of numerous scripted production exercises, students receive hands-on experience in equipment operation and production crew responsibility.
29.	:23	OS CAMERA OPERATOR WITH TALENT IN BG	These exercises provide ample opportunity for students to begin to master television production terminology, and equipment operation, while working on an actual television production. Students begin with elementary exercises, such as a simple ad-lib interview, and ultimately work on programs they've written and produced themselves,

	VIDEO	AUDIO
30. :10	COVER SHOT OF PRODUCTION CREW IN CONTROL ROOM (Their backs are to camera with camera operator and talent in B)	like CAC Sports Scene, a bi-weekly sports program written and produced by advanced students of the class, and cablecast throughout the Lansing area.
31. :25	3-SHOT CONTROL ROOM PRODUCTION CREW	STUDENT DIRECTOR: Give them a standby. VTR OPERATOR (Off Camera): Anytime you're ready, John. STUDENT DIRECTOR: Roll and record B deck, please. Ready to fade up on VTR, ready to give me sound on VTR. VTR OPERATOR: B deck rolling and recording. STUDENT DIRECTOR: Roll A deck, please. VTR OPERATOR: A deck rolling. STUDENT DIRECTOR: Fade up on VTR.
32. :28	XCU CONTROL ROOM TV MONITOR ZOOM OUT TO 2-SHOT (DIRECTOR AND SWITCHER)	Give me sound on VTR. (CAC SPORTS SCENE PROGRAM AUDIO IN BG) Ready to take Camera 1, ready to mic and cue Jeff. Ready to lose C.G. Ready to lose sound on VTR
33. :04	OS SWITCHER	Lose C. G. Fade out sound on VTR.

	VIDEO	AUDIO
34. :20	3-SHOT CONTROL ROOM PRODUCTION CREW	Take 1, mic, cue Jeff. Ready to take 2, ready to mic and cue Shane. Pan right a little, Robert. FADE OUT AUDIO
35. :18	MS INSTRUCTOR ON LOCATION	INSTRUCTOR: Another important part of the television industry is the ability to report an event from the actual location of the event. Electronic news gathering, or electronic field production is just that.
	PAN LEFT TO REVEAL PRODUCTION CREW	
36. :15	CU ENG CAMERA OPERATOR	With the use of portable video equipment one can go right into the field
	PAN LEFT TO 2-SHOT (REPORTER AND SUBJECT)	to get that necessary interview, or program segment that enhances the quality of a program, and is taken for granted, as well as expected by today's sophisticated television audiences.
37. :05	OS SUBJECT	Although the studio is a flexible environment, many events cannot be brought into the studio,
38. :05	OS REPORTER	so a knowledge of the set-up and operation of portable videotape equipment is important.
39. :10	XCU PORTABLE VTR PAN LEFT AND TILT UP TO CU ENG CAMERA OPERATOR	The current state of the art in television demands it. In class, students

	VIDEO	AUDIO
		have the opportunity to work with portable equipment, and learn its set-up and many uses.
40. :04	2-SHOT STUDENTS WORKING WITH PORTABLE SWITCHER (DIFFERENT LOCALE)	Additionally, students have the possibility to apply what they've learned
41. :04	XCU SWITCHER'S HANDS	in class and gain valuable practical experience by volunteering to be crew
42. :03	TWO SHOT STUDENTS WORKING WITH SWITCHER	members for school district cable television productions.
43. :08	OS CAMERA OPERATOR ON LOCATION (Symphony orchestra in BG)	These productions are actually cablecast over the Lansing School District's cable television channels, 34 and 35, throughout the greater Lansing community.
44. :15	MS SYMPHONY TROMBONIST ZOOM OUT AND PAN LEFT TO REVEAL CAMERA OPERATOR ON LOCATION SHOOTING ORCHESTRA	A heavy production schedule each year allows students to work on such diverse programs as symphony concerts, basketball games, elementary school plays, board of education meetings, as well as various other remote productions, and numerous studio productions.
45. :08	COVER SHOT STUDENTS CARRYING EQUIPMENT ON LOCATION	When working on a remote, or production done outside the studio, a great deal of preliminary work is involved during the setting up of the equipment.
46. :08	LS STUDENT SECURING CABLES ZOOM INTO CU HANDS	Camera, and audio cables need to be laid properly, and secured, so no one injures themselves, or disrupts the cablecast, or videotaping.

	VIDEO	AUDIO
47. :06	MS STUDENT SETTING UP SWITCHER	The cameras need to be set up, and adjusted, as well as the video switcher, the audio mixer, microphones,
48. :09	KNEE SHOT - DIFFERENT ANGLE	and an enormous amount of related equipment. Students working under the
	ZOOM INTO CU HANDS	guidance of professionals quickly learn television production is not all bright lights and glamour,
49. :13	2-SHOT STUDENTS SETTING UP CAMERA	but hard work and sometimes tedious work, as well. The students are given as much responsibility as their experience allows, and before long become seasoned veterans.
50. :10	MS CAMERA OPERATOR	Like the human eye, the television camera needs light in order to see
	(Operator pans left)	and function properly. However, the television camera is much more demanding as to the amount of light needed.
51. :28	MS INSTRUCTOR ON STUDIO LADDER	INSTRUCTOR: Lighting for television is really hard work. In the Radio/Television Production course students learn the techniques of television lighting, which lighting instruments to use and why. The lighting of a television production can contribute to its overall success as much as any other factor.
	ZOOM OUT TO COVER SHOT	MUSIC UP AND HOLD FOR 10 SECONDS
		THEN UNDER ANNOUNCE

	VIDEO	AUDIO
52. :40	EXTREME HIGH ANGLE LS THREE STUDENTS IN STUDIO	ANNOUNCER: As one of the photographic arts, television is subject to photographic lighting principles. Students work
	(Students move about working on lighting Camera follows)	closely together, and once again, teamwork is extremely important. MUSIC UP AND HOLD FOR 10 SECONDS THEN UNDER ANNOUNCE Working from a floor plan, students employ the most basic photographic lighting principle, commonly known as basic triangle lighting. This lighting set up consists of three main light sources for every person to be lit, and the lighting instruments are
53. :25	3-SHOT STUDENTS WORKING ON LIGHTING	positioned in such a way that they fulfill their assigned function. MUSIC UP AND HOLD 10 SECONDS THEN UNDER ANNOUNCE
	(Students move about, camera follows) ZOOM OUT TO COVER SHOT STUDENTS WITH LADDER	Safety is an important factor when discussing lighting. Students work with lighting instruments using high voltage connections, and are also required to climb studio ladders, so they can reach the lights, which are
54. :17	UP ANGLE MS STUDENT CLIMBING STUDIO LADDER	suspended from the ceiling, and attached to metal pipes called grids MUSIC UP AND HOLD 10 SECONDS THEN UNDER ANNOUNCE
	ZOOM INTO MCU	

	VIDEO	AUDIO
55. :22	XCU SPOTLIGHT ZOOM OUT TO 3-SHOT (two students with backs to camera, other on ladder adjusting light)	When the lights are on one has to be very careful when moving and adjusting the instrument. Special gloves are worn, so hands and fingers don't get burned, because the lights get very hot quickly. MUSIC UP AND HOLD FOR 10 SECONDS THEN UNDER ANNOUNCE In the actual operation of lighting instruments, one should heed the rule for all production activities: (MUSIC OUT)
56. :15	UP ANGLE 2-SHOT	safety first! After working on numerous pre-designed lighting plan exercises, students eventually design their own lighting plot, and floor plan, and light a set according to that floor plan.
57. :12	COVER SHOT STUDENT EDITING VIDEO	SOUNDS OF VTR'S STARTING AND STOPPING, AUDIO FROM VIDEO BEING EDITED
58. :12	MCU STUDENT EDITOR	VT AUDIO CUEING (BACKSPACING)
59. :05	CU VTR MONITOR	EDITED VT AUDIO
60. :15	OS LS STUDENT EDITOR	SOUNDS OF VT BEING EDITED
		ANNOUNCER:
61. :13	CU HANDS ON EDITING MACHINE	Editing is a major part of the post production process of television production. Post production means assembling shots and scenes that have been previously recorded on film or

	VIDEO	AUDIO
62. :05	OS STUDENT EDITOR	videotape into a meaningful program. It is so called, because the editing takes place after the production, and not during it. In the Radio/
63. :10	CU STUDENT EDITOR	Television Production class students are assigned to shoot their own interview or commercial from a script they have written, and then edit.
64. :05	OS STUDENT EDITOR	Most of what you see on television is prepared for broadcast in this manner.
65. :15	MS STUDENT EDITOR	Quite often this post production activity takes longer than the production itself. Editing is a painstaking process requiring a great deal of preparation, patience, and concentration.
		INSTRUCTOR:
66. :15	MS INSTRUCTOR AT AUDIO PRODUCTION CONSOLE	Many students are attracted to this program because of the seemingly glamorous world of the disc jockey. The job looks and sounds easy, but in actuality a great amount of work and skill is required.
67.1:05	MS STUDENT DJ AT RADIO CONSOLE	WHBS STUDENT RADIO SIGN-ON CART
		STUDENT DJ:
		Hello out there in Lansing. This is K. Hollywood your mid-day DJ. I'm

	VIDEO	AUDIO
		gonna be here for another 90 minutes bringing you the best in rock and soul. So, sit back and listen to the magnificent sounds of the J. Geils Band comin' off their album Freeze Frame. MUSIC UP AND OUT
	(DJ cues record)	ANNOUNCER: Good physical dexterity is a must. Quite often a disc jockey is doing several things at once, such as cueing the next song to be played, playing
68. :05	OS DJ PAN RIGHT TO REVEAL CONSOLE	that song and then controlling the voice level of the introduction of the song. A thorough knowledge of the audio console is essential.
69. :10	XCU AUDIO CONSOLE PAN (RIGHT) CONSOLE	In class students learn which volume control, or potentiometer controls which audio source, how to modulate music, and the art of developing a
70. :04	MS DJ AT CONSOLE	good announcing voice. The class is designed to help students acquire
71. :08	XCU AUDIO CART MACHINE ZOOM OUT TO OS DJ AT CONSOLE	these skills. Students learn to write and record their own radio commercials, public service announcements, station promos, and newscasts.
72. :05	MS DJ AT CONSOLE	Good diction is also important. Class exercises help students learn to speak clearly, correctly, and naturally.

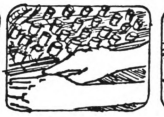
	VIDEO	AUDIO
73. :10	XCU VU METER	During the second year of the program students staff WHBS Radio, which is cablecast into the community on Lansing School District cable television channel 34.
		STUDENT DJ (OVER MUSIC):
74. :48	MS DJ AT CONSOLE	That was Prince here at WHBS (MUSIC OUT), and we'll be right back with more music after this important announcement from Wherehouse Records.
	(DJ moves-camera follows)	
	TILT DOWN AND ZOOM INTO XCU ALBUM RECORD LABEL.	WHEREHOUSE AND WHBS STATION PROMO
	DEFOCUS	
		INSTRUCTOR:
75. :30	MS INSTRUCTOR AT DESK	In closing I'd like to mention that students wishing to enroll in the Radio/Television Production class need to be able to follow directions, work cooperatively with others, and should possess better than average reading and writing skills, as well as a basic math background. I hope you've enjoyed viewing this program, and trust that it has allowed you to realize what the Radio/Television Production course offered by the Lansing School District is really all about.

VIDEO	AUDIO
FADE TO BLACK	
FADE UP ON CLOSING CREDITS	MUSIC UP
Production Support	
AARON HEGMAN	
AND THE RADIO/TELEVISION PRODUCTION CLASS	
Engineering	
BOB DE MEESTER	
THE PRECEDING PROGRAM WAS A DEAN SMITS PRODUCTION	
FADE TO BLACK	MUSIC OUT

CHAPTER IV

SHOOTING SCRIPT

SCENE 1



SCENE 2

SCENE 2

ZOOM OUT TO. . .

SCENE 3

SCENE 4

SCENE 5

SCENE 6

SCENE 7

SCENE 8

SCENE 9

SCENE 10

SCENE 11

SCENE 12

SCENE 13

SCENE 14

SCENE 15

SCENE 16

SCENE 17

ZOOM OUT TO. . .

SCENE 17

SCENE 17

SCENE 18

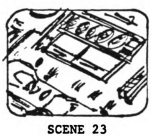
PAN LEFT TO. . .

SCENE 19

SCENE 20

SCENE 21

SCENE 22



SCENE 23

SCENE 24

SCENE 25

SCENE 26

SCENE 27

SCENE 28

SCENE 29

SCENE 30

SCENE 31

SCENE 32

SCENE 32

ZOOM OUT TO. . .

SCENE 33

SCENE 34

SCENE 35

PAN LEFT TO. . .

SCENE 35

SCENE 36

SCENE 36

PAN LEFT TO. . .

SCENE 37

SCENE 38

SCENE 39

PAN LEFT

TILT UP TO. . .

SCENE 39

SCENE 40

SCENE 41

SCENE 42

SCENE 43

SCENE 44

ZOOM OUT

PAN LEFT TO. . .

SCENE 44

SCENE 45

SCENE 46

SCENE 47

SCENE 48

SCENE 49

SCENE 50

SCENE 51

SCENE 51

ZOOM OUT TO. . .

SCENE 52

CAMERA
FOLLOWS TO. . .

SCENE 52

CAMERA
FOLLOWS TO. . .

SCENE 52

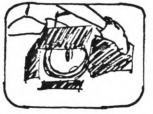
SCENE 53

SCENE 53

SCENE 54

ZOOM OUT

PAN RIGHT TO. . .



SCENE 55

SCENE 55

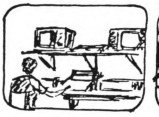
SCENE 56

ZOOM OUT TO. . .

SCENE 57

SCENE 58

SCENE 59



SCENE 60

SCENE 61

SCENE 62

SCENE 63

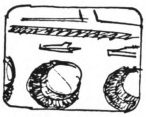
SCENE 64

SCENE 65

SCENE 66

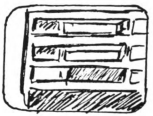
SCENE 67

SCENE 68



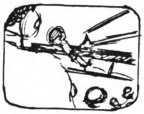
SCENE 69

SCENE 70



SCENE 71

ZOOM OUT TO. . .



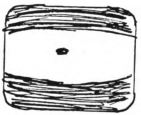
SCENE 71

SCENE 72

SCENE 73

SCENE 74

ZOOM INTO. . .



SCENE 74

SCENE 75

CHAPTER V

PRODUCTION OF THE VIDEOTAPE

The making of a television program is a complex and involved process. It requires the implementation of various production components and artistic considerations to get from initial concept to finished product.

The means by which this is accomplished is common to the making of most videotape programs. This chapter will explain this step by step procedure, provide insight into the methods specific to this videotape program as well.

Before the production went beyond the idea stage, questions for evaluating the program idea were proposed and answered by its producer. Was the program feasible for production (i.e. sufficient production time available, obtainable technical resources, attainable personnel)? Would the cost be feasible? Would there be an audience for it? Was the program suited for the television medium? The answer to all these questions was a yes. Students of the class could be utilized as talent and production personnel. This would not only provide them a valuable learning experience, but justify the use of the television production facilities of the

school district for the project. Consequently, the cost factor would be minimal. The audience has been previously defined, and what better material could be suited for the medium than a program about a component of televison?

Once the decision was made to produce the program the logical starting point was writing a script. The fully scripted show format was chosen as the most appropriate because of the production style that would eventually be used. This format refers to a complete script that includes every word that is to be spoken during the show, as well as detailed audio and video instructions. This format can be compared to the semi-scripted show, which only indicates dialogue without writing it out completely. The semiscripted format is generally used for interview, variety, and other types of programs requiring a great amount of ad-lib discussion and commentary. The writing of a fully scripted show of any length requires a great deal of work. The benefits were well worth the effort. For example, knowing what was to be said during each segment and what each scene was to look like allowed the director to visualize the production more thoroughly and begin the mental aspects of the editing process while shooting. The fully scripted format also enhances preparation and organization while lending itself to keep the shooting ratio

lower and more manageable for editing purposes.

Before script writers can begin writing, they will need to define the intended audience. The vocabulary one chooses needs to be understandable to the targeted audience. The script was written with this awareness. This presented a challenge. The targeted audience (described in the Introduction) would range from school administrators, many with Ph.D.'s, to high school students, some with very little reading and writing ability. This factor was a constant consideration.

The actual writing of the script was approached in segments as was the production. Since the videotape was to convey a factual portrayal of what was actually taught in the class, the following segments were decided upon: classroom work, television studio production aspects, portable camera operation, location production, television lighting, video editing, and audio console operation.

The creation and use of a shooting script, or storyboard (Chapter IV), greatly aided in the visualization and picturization process of the production. A story board shows the key visualization points, the major shots of an event, and gives some idea as to the composition of different scenes. Storyboards helped the director to communicate picture composition to camera operators and other production crew members. The shooting script

also allowed the director to work out details of visualizing the production through the use of sketches, before the actual taping started. In the long run this helped eliminate potential production mistakes which could have cost the production dearly in lost time.

Next, a production schedule was required. Its development was no simple task. The production needed to be recorded in the remaining six weeks of the school year. Ordinarily this would have been easy to accomplish, but the schedule was required to work around existing scheduled cable productions and various classroom assignments and projects. Eventually the shooting schedule was completed reflecting student crew and talent responsibilities and pre-production meeting considerations, as well as actual production dates and times. The shooting schedule took into account potential problems, and the ramifications they could have on completing the project on time. One confining factor was the limitation and pressure of scheduling and having to record segments in three hour time frames. Both classes met for three hours each day. This meant that each segment, including <u>all</u> its scenes, had to be completely recorded on the day and at the time it was scheduled. If not, the scene would require re-shooting for continuity purposes because the student talent would be all wearing different clothing on subsequent days.

The nature of most of the written segments demanded the action within to flow continually.

The actual taping, or production, of the program was done "film style." Film style shooting refers to the technique of taping or filming an entire program using one camera to record all the scenes, and afterwards editing, or selecting and arranging the scenes into segments and segments into a meaningful program. It is important to keep in mind that film style techniques can be used in the studio as well as on location.

> The traditional studio director has been trained to shoot programs as one long scene, in chronological order, and often with a "live" look. Film style directors, on the other hand, break the program down into specific scenes and camera angles. Each shot is carefully calculated and planned in advance and not necessarily shot in chronological order.
> (Williams, 1981, p. 159)

For example, the disc jockey segment was the last major segment in the finished product, but it was actually the first segment recorded. It was necessary to schedule that segment early in production because the radio studios were unavailable at a later time.

> A director using film style shooting must have extensive experience with that technique to be able to keep all the visual elements clear in his or her mind during the shooting session. As a general rule a director using film style technique must be better organized and prepared than the traditional studio director. A studio director can shoot with only an outline of a script, but

> the film style director must have a detailed script with exact instructions as to content, camera angles and so forth.
> (Williams, 1981, p. 160)

This became clear to the students throughout the production process, primarily during the recording of the studio lighting segment. The first scene of this segment (scene 52) was shot with the camera zoomed all the way out, and at an extreme high angle. This composition was decided upon for several reasons. Suspended from the ceilings of most television studios are metal pipes 1 to 2 inches in diameter, strung either crosswise or parallel. These pipes are suspended at least 10 feet above the studio floor. The lighting instruments (lights) used for studio productions are mounted to these pipes, called grids, with the use of "C" clamps. This network of grids and lights are the domain of lighting technicians. This area of production specialization requires production personnel to spend most of their time high atop ladders positioning, securing, and directing lights. This area of the studio was an absolute necessity to visualize for the lighting segment. The only two choices were an up angle shot, shooting up at the grid work, or a high angle shot, composing the shot from above and shooting down.

The latter composition was decided upon for aesthetic reasons, and the ease with which the scene could be shot.

Generally, when composing an extreme high angle shot one needs the use of a crane, platform, or tall ladder to get above the action to be shot. The production facilities at Hill were designed to allow the instructor to observe both television studios, from a perspective one floor above them, through the windows of the radio production area. This allowed scene 52 to be shot through one of these windows. The result was a nice creative touch, visually stimulating, and accomplishing its intended goal.

Scene 52 was also one of the lengthier scenes in the final program. Its composition allows the viewer to observe three students actually working on a lighting assignment in the studio, as well as the grid work and lights. The students' movements and activities were rehearsed and timed out to the second to correspond to the script monologue. When teamwork was being stressed in the script, the students were to be working together. When it was stated, students worked from a floor plan, while working on lighting assignments, that is what they were to be doing. The intercom system aided greatly in the timing and recording of the scene. The director, camera operator, and videotape operator were located in the radio production area already described. The intercommunication system at Hill allows one to communicate from this area to the television control room and from

the control room into the television studios. Working from the detailed script, the director gave his cues for "action" and specific movements to certain areas of the studio via a student in the control room, who in turn would relay the cues to the students acting as talent in the studio. Coordination, communication, cooperation and organization during rehearsals, and ultimately the recording process resulted in the successful completion of the lighting segment. The segment was not recorded without its problems, however.

> Quite often a television director using the film style approach will not have a camera monitor other than the camera's viewfinder to see the framing and movement. In these cases the director must depend heavily upon the ability and experience of the camera opearator for correct compositions and movements based upon proper motivation. It is necessary in these circumstances for the director and camera operator to work as a team. Film style camera operators generally need more experience than most studio camera operators. (Williams, pp. 159-160)

Proper motivation in regards to camera composition and movement was dependent upon the actual action taking place within a scene being taped. For example, when the student DJ moved from behind the audio console to obtain several audio carts located in a different area of the radio studio (Scene 48) the camera operator was motivated to pan in order to follow the action.

Although the director of this videotape was quite often the camera operator, as well, students from the

advanced class were given that responsibility quite often. This allowed them experiences in film style shooting and electronic field production that many of them may never have had. Scene 52 was shot by a camera operator without the use of a camera monitor. The taping went fine. Afterwards, the equipment was set up in the studio, and the various other scenes for the lighting assignment were recorded. Not until the scenes were played back did the director and crew observe a problem. Scene 52 looked to have a brown tint to it, and the video did not match up with the other recorded scenes. One student suggested this might be due to recording the scene shot through a window. The instructor dismissed that suggestion because a test recording had been performed several days earlier with no such results. The camera operator had recorded the scene using the wrong lens filter. Ordinarily this wouldn't have presented a problem, but due to the limitations of using a student crew available only at particular times of the day, and only for a limited amount of time, a problem existed. Scene 52 required re-shooting. For continuity's sake the talent needed to wear the same clothing. Scheduling conflicts and time constrictions for the re-shoot needed to be worked out. Eventually everything worked out, but not until one of the three talent received a ride home to pick up the proper clothing necessary to re-record

the scene.

The entire production was shot with broadcast quality studio cameras that could be adapted to the field or location shooting. The scenes that were taped in and around the production facilities allowed a camera tripod to be used. The use of the tripod assured smooth camera movements. Scenes 36 and 44 are two scenes requiring the camera to be placed upon the camera operator's shoulder during production as opposed to the tripod. This camera shooting style is sometimes referred to as ENG (electronic news gathering) or EFP (electronic field production). EFP camera operation requires experience for smooth camera movements and operation. The lack of that experience is noticeable in the final versions of these scenes, especially scene 36, which displays a great deal of unwanted camera movement. The director was constantly concerned with quality but needed to work with the realization that the project was a learning environment for high school television production students. This perspective was maintained by the director throughout the production of the program.

For continuity's sake, when recording different scenes, and one take ended and the next began with a different camera angle or camera composition involving the same talent, there would be an overlap of action. That is, whatever action was performed toward the end

of the first take would be repeated at the beginning of the next one. This allowed a choice as to what point to cut at during the editing process and guaranteed no gaps in the action, no discontinuity.

For example, the video editing segment (scenes 57-65) was eventually edited to a length of one minute and thirty-five seconds. The script called for nine different camera angles (i.e. over the shoulder shots, etc.) and numerous compositions ranging from a medium shot of the student seated and working on video editing equipment to a close-up of his hands on the equipment. To make the final product appear as continuous action recording an overlap of action was necessary. The camera was placed behind the student editor to record over the shoulder shots. The script called for a different take to appear after each one of the three times the over the shoulder shot was used in this segment. These different takes were a close-up of the student's hands on the editing equipment, a close-up of the student and a medium shot of the student. When the close-up of the student was recorded, he was looking up at the video tape monitor. During the recording of the medium shot the student was using his left hand, as well as his right, and looking in various directions. It was important for those actions to be repeated when the over the shoulder shot was recorded for the reasons already described. Attention to

details such as these was a necessity when using the film style shooting technique.

The vector line principle was adhered to whenever necessary during the shooting of the production so viewers wouldn't be confused with screen direction.

> In order to make sense out of a series of shots, we try to locate--organize and stabilize in our mind--the picture field as much as possible. We tend to preserve continuity by remembering the relative screen positions of objects from one shot to the next. If, for example, you have two people talking to each other in an over-the-shoulder two shot, the viewer expects the people to remain in their relative screen positions even during closeups or reverse-angle shooting. By establishing a vector line--or as it is also called, 'line of conversation'--and keeping the cameras on one or the other side of it, you will avoid many confusing picturization mistakes.
>
> (Zettl, 1976, pp. 270-271)

The proper use of the vector line principle is most noticeable in scenes 35-38 or during the portable equipment operation segment. These scenes depict a portable camera operator taping a reporter who is interviewing a subject. The reporter appears screen right, along with the camera operator, and the subject appears screen left during the establishing shot. That means that all scenes recorded thereafter needed to take this screen direction into account. Subsequently, the script called for a two-shot of reporter and subject, and an over-the-shoulder shot of each. If the vector

line principle would not have been applied by keeping the camera on the same side of the talent for all recorded shots, then the result would have been confusion for viewers viewing this segment.

Film style technique also includes shooting ratio, or the ratio of tape shot to final footage used. The shooting ratio for this project varied from scene to scene, but overall the tape was shot at an 15:1 shooting ratio. A little over 300 minutes, or 5 hours, of videotape was recorded to complete the 20 minute final running time of the videotape. Generally speaking, the greater the shooting ratio the greater the flexibility of the editor to edit the program. A higher shooting ratio also allows for exceedingly more visualization of the final product. However, this is not to be interpreted as the more footage one shoots the better the final product will be.

The majority of the program's audio track was recorded onto reel to reel audio tape and consisted of an announcer's off camera narrative, accompanied by an occasional music track. The remainder of the audio was comprised of the instructor's on camera deliveries and recordings of actual sounds of: 1) the student production crew producing CAC Sports Scene, 2) video tape machines in use during the video editing segment, and 3) the student DJ's on-air delivery.

The instructor of the class also served in the capacity of program announcer. Thus, it was decided that it would be a good idea to include several on camera monologues by the instructor. These recorded scenes served two primary purposes. They added credibility to what the announcer had to say because of the identification factor of instructor as announcer. Also, they served as valuable transition devices between various program segments.

The reel to reel recorded audio track was completed after the video scenes had been recorded. This was out of necessity rather than design. Recording the audio track prior to shooting the footage could have aided in the timing of scenes and segments, but the program's producer was still seeking appropriate music accompaniment during the time the video was being shot.

Maintaining an audience's interest throughout an entire program should be one of the primary goals of any television program.

> The importance of gaining and keeping viewer interest is usually one of the last considerations affecting an educational, or industrial presentation--if, indeed, it is considered at all. But, as the videotape program on vehicle safety suggests, where there is a lack of audience interest, there is also a probability of a lack of audience content retention. It is very unlikely that anyone will learn and retain information from a videotape if he or she is not paying most of his or her attention to what is

> seen and heard...And since the goal of education and industrial television is content retention, continuous viewer interest is highly important. (Williams, p. 230)

Maintaining this interest was accomplished throughout the various stages of production in a variety of ways.

During the pre-production stage, which consisted of script writing and extensive production planning, audio and cinematic attention getting devices were discussed and eventually written into the script. These ideas were realized during the second stage of production, the production itself. Interesting shot compositions, such as scenes 52 and the initial stages of scenes 28 and 32. Use of interesting and appropriate music at critical portions of the program were recorded to help maintain viewer interest as well. However, it was during the final stages of the production process that lent itself most to accomplishing this goal and helped shape the entire videotape. The final stage of production was the editing or post-production process.

Many things have been written and said about editing, but suffice it to say it is during the editing process that the pacing, continuity and flow of a production is created. The editor (person responsible for editing the program) is much like a sculptor, who takes a mass of substance and shapes it into its final form. The decision making processes of editing included which takes of a

particular scene would be used in the final product, sequential order of scenes, and the length of time the chosen scene remained on the screen. The juxtaposition of these factors and more had a direct bearing on what the completed television program looked like and more importantly, how an audience would eventually interpret the information presented them.

> Editing methods vary greatly depending on how sophisticated your electronic editing equipment is....In its most elementary form, you simply depress an edit button at the exact spot where you want the next shot to adjoin the preceding one. (Zettl, p. 285)

This is accomplished with the use of two videotape machines, synchronized with one another and specially designed for electronic editing. One machine serves as the playback machine supplying the various scenes. The other is the recorder, which edits the scenes together.

More advanced editing methods do exist and are actually the norm in the television production industry. These editing systems incorporate more sophisticated videotape machines with SMPTE Time and Control Code readers and computer-controlled editing systems to allow an editor frame accurate editing. The SMPTE Time and Control Code is an electronic signal that when recorded on the cue track of a videotape provides identification information for each frame of recorded videotape. Videotape is recorded at a speed of 30 frames per second,

compared to motion picture film which records at a speed of 24 frames per second. This implies that a time code, computer assisted, frame accurate editing system is capable of performing edits with the precision once only possible in the realm of filmmaking.

The editor for this project was limited to employing the elementary form of editing due to the limitations of available equipment. An electronic editor was accessible, but as a result of its continuous malfunction in the early stages of the editing process, it was discarded in favor of the elementary method described.

Before the editing process actually began, all the recorded videotape had to be viewed and catalogues. Since a little over five hours of tape was recorded, the reader can deduce the amount of time spent on this vital period of editing process.

It is important for any editor to become as familiar as possible with the material they will be working with. This requires viewing it as often as is necessary to be able to edit scenes into segments and segments into a professional looking and sounding product.

The cataloging process was accomplished with the use of a counter on the videotape machine. Each recorded scene was identified numerically and then described for the purpose of expediency's sake during the editing process. For example, the final version of the classroom

and news writing segment consisted of ten different scenes edited together and lasting one minute and forty seconds. Approximately twenty-five minutes of videotape containing a great number of recorded scenes were contained on two different videotapes. If each scene wasn't identified precisely, then a great deal of time would have been wasted in locating a needed scene during the editing process.

Every editor has their own method of identifying takes and segments. If a time code device is available, the process is hastened. If not, the use of the videotape recorder's counter is essential. Using these two devices will help locate a scene on a particular videotape with expedience. The actual form of describing scenes for further identification is generally left up to the individual editor.

Although editors follow scrips when editing, quite often they are given a certain amount of artistic freedom in deciding which one of several takes to actually use. For example, in the classroom segment, scene 8 calls for a 5 second medium shot of a student seated at a deak reading. The editor had a choice of at least 10 different students to choose from. The eventual decision of which take to use was derived by a knowledge of which students were already used in preceding takes, what compositions

were asked for in subsequent takes and which takes reflected a realistic portrayal of students' classroom study behavior.

An editor's choice of the exact location of each edit (edit point) can have a direct bearing on a viewer's attentiveness, as well as interpretation. Even an extra second or two can alter the viewer's perception. If a scene is held a little too long, a viewer may become subconsciously bored and tune out the material presented.

Scene 5 is a medium shot of a student threading a film projector. It is the fifth and final scene of the videotape's opening segment. Scene 6 is a medium shot of the instructor seated at a desk delivering his opening comments. An artistic decision had to be made regarding how to make a transition between these two scenes without disrupting the flow of the program while maintaining viewers' attention to the information presented.

This was accomplished with coordinating and preplanning the recording of these scenes based upon the director's idea of how they would eventually be edited together.

Scene 5's audio track consists of music, and this music was faded out completely, during editing, as the camera zoomed into a close-up of the student's hands threading the film projector. Several seconds expired without any sound. The combination of no sound for several

seconds, and the viewer's attention being brought to focus closer to what is happening visually, as a result of the zoom, was designed to create a feeling of anticipation in the viewer just before the take to scene 6. By merely holding the close-up, at the end of scene 5 for several seconds without any sound, then making the edit to scene 6, helped to create the desired feeling. That is what the editing process can help accomplish.

The feeling of anticipation was repeated as a transition device again between scenes 74 and 75, which were the last two scenes of the videotape.

Cinematic transition techniques, such as these, are important to incorporate into a creative project, but one needs to be careful not to overuse them.

Transitions between segments, or for that matter scenes, is generally accomplished through the cooperative efforts of the writer, director, and eventually the editor of a production. The writer gives specific shot composition descriptions in the script. The director sees that they are recorded, and the editor puts them all together. Each of these people need to have at least a superficial knowledge of the other's responsibilities and needs for any project to culminate in something worthwhile.

The script was written with a knowledge that each scene had to be composed a certain way so the flow and continuity of the program's material could be edited in

a manner that would lend itself to a defined audience retaining and interpreting the information as the program's creator had envisioned. The writer had to realize whether the production demands were feasible because of time constraints, available production crew, and available equipment.

The director had to make sure, among other things, that all scenes were recorded long enough for editing purposes. For reasons which will be explained later, the videotape editing process requires a certain amount of video recorded continuously before and after the actual footage that is actually used in the midst of editing.

The editor creates the mood intended by the writer and director.

In short, everything and everyone is dependent on everything and eveyone else.

The videotape was edited with the use of a time base corrector. This is an electronic accessory to a videotape recorder that helps make playbacks and transfers electronically stable. The editing process consisted of using both assemble and insert edits to complete the videotape. An assemble edit is the adding of shots on videotape in a consecutive order to make a program. Insert edits refer to inserting shots, or audio, in an already existing recording without affecting the shots

on either side. An assemble edit records both audio and video, while an insert edit can record both, or either video only, or audio only. Because most of the audio track was from an audio reel to reel tape source, and the majority of the various scenes needed to be edited when exact words were being said or music played, a combination of audio only and video only insert edits were the types primarily used in the completion of the videotape.

Prior to editing the program, "black" was recorded onto the videotape which was to be the master program. Black refers to the darkest part of a television gray-scale and is a source of video obtained from a video switcher. This needed to be done so that a control track would be recorded onto the videotape. A control track is the area of videotape that records synchronous information which is essential for videotape editing. When performing assemble edits, control track is recorded simultaneously with the performance of the edit. However, insert edits do not record control track. They have to use existing control track, and if there is not any recorded onto the videotape, an editor is unable to perform an insert edit. It simply will not record.

The editing process consisted of cueing up the reel to reel audio track for each segment and then inserting it into the videotape. Then the corresponding video

scenes were edited (inserted) together at the designated places called for by the script and audio track. The scenes comprised of both audio and video were assembled onto the master edited tape at the appropriate places as well. These editing activities were repeated until the videotape was completed.

> Because of the start up time delay in VTR, there is a requirement in editing to backspace the machine to a point before the edit point. The amount of the backspace is usually determined by how long it takes the VTR to stabilize from a parked position. Typical backspace amounts are from three to ten seconds.
> (Williams, p. 134)

It is important to realize that continuous control track is needed not only at the edit point, but prior to the edit point for backspacing or cueing purposes. This helps stabilize and synchronize the video signal on both machines. Also, when performing an edit, it is never ended at the point where the next edit will occur, but several seconds beyond it. Consequently, control track needs to exist beyond the point at which edited scenes are actually recorded. This is particularly true of assemble edits. An assemble edit begins with a clean transition but ends with several seconds of recorded video breakup or glitches. To compensate for this breakup assemble edits are ended at least several seconds beyond the ensuing edit point. Then, when the next edit is performed, it has solid control track to "grab"

onto and merely records over the breakup. This was the reason for the director's need to record video before and after each scene, while videotaping the production. This allowed for necessary backspacing and elimination of video breakup during the editing process.

An awareness of the various stages of production (pre-production, production, and post-production) and their interdependence was incorporated and implemented during the various phases of the production process that evolved into the realization of the completion of this videotape.

CHAPTER VI

CONCLUSIONS

In addition to partial fulfillment of the requirements for the Master of Arts degree, this creative thesis' purposes were to:

1) PROVIDE A VIDEOTAPE FOR PROSPECTIVE STUDENTS

Quite often students entering the class know little, if anything, about what is actually taught in the class. This comprehensive videotape will hopefully help dispel any misconceptions students may have. It is believed time spent viewing the program during the first class session can alleviate misunderstanding and allow students to make valid decisions regarding their suitability and interest in the course.

2) PROVIDE A VIDEOTAPE FOR COUNSELORS

Many counselors in the school district are unfamiliar with what the Radio/Television course actually consists of. As in any bureaucratic system it is impossible for all its members to know the details of its various components. This videotape can help enlighten those counselors, so they may better make decisions regarding placement of students. More importantly the tape can become a valuable counselling aid while disseminating

information about the course.

3) PROVIDE A VIDEOTAPE FOR PARENTS

Often, parents of prospective, as well as enrolled, students express concerns regarding how this course will benefit their children. A phone conversation, a studio tour, and/or a limited question and answer session with the teacher does not always resolve their anxiety.

This thesis will allow them to inclusively realize the many facets, demands, and possible rewards of the course by viewing a television program. The tape could aid in calming, or justifying, their fears and help in any impending parental decision.

The flexibility of airing the program on one of the cable channels for the convenience of parents is a considerable option.

4) PROVIDE A MODEL FOR OTHER SCHOOL DISTRICTS

In recent years, groups representing school districts from around the state have become frequent visitors to the Telecommunications Center and Radio/Television Production class. The groups usually consist of teachers and administrators whose school districts have recently received cable television channel allocation by their community's cable franchise. Their immediate need is a prototype and the facility and class provide that model.

Due to the multitude of questions these visitors

have expressed regarding curriculum, programming, and equipment, the video tape will provide a concise and informative complement to the general tour. Due to the demands of the classes taught, there is never a sufficient amount of time to address their inquiries, and the recorded program could help compensate for that.

One of the positive repercussions of the advent of cable television at its rapid rate has been the allocation of cable television channels to educational institutions, such as school districts. Just as important has been the commitment of these school districts to utilize these channels, and an initial step is the development of a Television Production course.

With this persistent growth rate in mind, the need for the Lansing School District's Radio/Television Production class to continue to serve as a model is apparent, and this videotape, depicting the program, could be sent through the mail to those school districts unable to visit personally.

As a means of evaluating the completed videotape, a group of individuals viewed the tape and then filled out an evaluation form (See Appendix N). The group consisted of students, past and present, some of their parents, school district counselors, the Director of the district's cable television channels, several advisory committee members, and local professionals working in

cable and public television.

The evaluation instrument used a Lickert Scale asking the group to rate various aspects of the videotape numerically on a scale from 1 to 5. The number 1 corresponded to poor and 5 reflected excellence. Fair was indicated by circling the number 2, while average was 3, and good was 4. The various aspects included content, technical quality, pacing, writing (script), flow, understandability, editing, and information. Six questions were also asked with space for comments. These questions pertained to such matters as presentation of information, improvement of attitude toward the course, strengths and weaknesses of the videotape, and overall technical quality.

The results were overwhelmingly favorable and positive. All but one evaluation rated the aspects just explained as excellent, or good, with an excellent rating being by far the most frequent response. The one exception rated technical quality and pacing average, and the remaining categories good, with content evaluated as excellent.

Various comments included "excellent display of the elements of the course," "good visual representation of concepts," "it will give the students a more in-depth view of what is expected of them," "I now understand what my son is doing and talking about in class," "I've never seen such an efficient crew," "Very clear. The information

was presented in a creative manner," "This was well thought out to present details, yet understandable to those as yet unexposed to the program," "it broadened my knowledge of the complexity of the program and what is expected of students in this instructional experience," "It offers a good close look at the students actually performing in their learning experiences and what those activities include," "I strongly believe that this course has a great deal to offer Lansing students," "If I were a student not knowing anything about TV Production, I would sure know a lot of basics about it now."

Several people commented that the audio during the instructor's on camera lead-in to the lighting segment was a little distorted and difficult to understand. Two other respondents mentioned they would like to have seen more examples/samples of student productions.

In response to what the videotape's greatest strength was, excellent editing, entertaining, and comprehensive were the descriptions used most. The evaluation group collectively agreed the technical quality was good enough for broadcast or cablecast, and most commented that it would be unfortunate if more people were not able to view the program.

Action based upon results from the evaluation

instruments will be minimal. The only alteration to the final product will be the re-shooting of the scene described as having slightly distorted audio, and then inserting it into the videotape.

After the screening several counselors enthusiastically discussed with the instructor the value and possible uses of the videotape at their respective high schools. One expressed the desire to have a program produced for all the vocational classes. The counselors felt a copy of the videotape, if made available to the respective schools, could greatly aid in informing students about the course. As a result of the conversation, tentative plans were arranged with the district's Director of Cable Television to cablecast the videotape at various times throughout the school year corresponding to when students generally schedule classes. Cable television public access coordinators from Lansing and East Lansing expressed an interest in cablecasting the program over their public access channels as well.

VOCATIONAL TELEVISION/RADIO PRODUCTION BUDGET SUMMARY 1973-1982

PROGRAM YEAR	TOTAL	INSTRUCTIONAL SUPPLIES	TEXTBOOKS	EQUIPMENT REPAIR	EQUIPMENT REPLACEMENT	EQUIPMENT ADDITIONAL
1973-74	$ 8,572.00	$ 5,743.00	$86.00	$ 720.00	$ 385.00	$1,638.00
1974-75	9,450.00	5,000.00	00.00	1,250.00	1,500.00	1,700.00
1975-76	11,250.00	4,500.00	00.00	1,250.00	1,500.00	4,000.00
*1976-77	7,499.00	3,664.00	425.00	350.00	859.00	2,201.00
1978-79	5,396.00	1,500.00	800.00	1,000.00	1,000.00	1,096.00
1979-80	4,876.00	2,000.00	300.00	1,500.00	876.00	2,000.00
1980-81	4,444.00	1,111.00	222.00	889.00	1,111.00	1,111.00
1981-82	2,574.00	928.00	000.00	1,346.00	300.00	000.00

*1977-78 Budget Information unavailable.

APPENDIX B

TELEVISION AND RADIO PRODUCTION

Terms You Can Expect To Hear From Your Director

ON CAMERA:

Dolly in - physically push the camera toward the subject

Dolly Out - physically pull camera from subject

Tilt up - tilt camera head so that the lens moves up. Your subject will move lower in the viewfinder

Tilt down - opposite of tilt up

Truck right - physically push the camera to the right, parallel to the set

Truck left - opposite of truck right

Pan right - move the camera head so that the lens moves to the right (your subject will move to the left in the viewfinder)

Pan left - opposite of pan right

Arc Left - move the camera in an "arc" around the subject to the left (let the subject be the center of a circle and the camera ride on an imaginary circle around the subject)

Arc right - opposite of arc left

Zoom in - push the zoom handle in so that the subject is closer (use a longer lens)

Zoom out - pull the zoom handle out so that the subject is further away (use a shorter lens)

Looser - zoom out

Tighter - zoom in

Pedestal up - crank the pedestal control so that the entire camera mounting moves up (like the hydraulic lifts for cars)

Close-up, two-shot, etc. will be covered in class and readings

ON CAMERA (Con't)

Headroom - tilt up to allow more room above the subject's head

Nose room - pan to allow more room in front of the nose of a subject

Focus - you're out of focus

FLOOR DIRECTOR:

Time cues - verbally pass these cues to all personnel before a production has begun. Use hand signals while a production is in progress

Standby - "standby" in studio. All should be quiet, ready to go. Hand in air, ready to cue talent

Other information - pass it on. Don't keep it a secret

Cue talent - pull hand down, point to talent

AUDIO:

Ready - be ready to do something, like "ready to open Host's mic"

Open mic - open the pot

Close mic - close pot

Sound on film - exactly what it says

Voice over - may be live from studio or on cart or tape; know the script

Music under - be prepared to pot up or down

SWITCHER:

Ready - be ready to do command from director

Take - push button on same bank

Dissolve - push fader bars from one bus to another bus

SWITCHER (Con't)

Take effect - push "eff" button

Fade to Black - move fader handles to bus which is "black"

Fade up on _____ - move handles from black bus to another bus

Super - move fader bar or handle half way between buses

Show - push show button on slide

Lap slide - push advance on slide. Change slide

CRITERIA FOR GRADING ASSIGNED CREW POSITIONS

FLOOR DIRECTOR:

- -proper cues?
- -paying attention to the director?
- -passing information rapidly?
- -passing information properly?
- -not in the way of the camera?
- -helping cameras and others when needed (e.g. arcing)?
- -scanning set? are mic cables out of the view of cams?
- -doors closed?

SWITCHER:

- -follow directions?
- -proper operations of board: takes a take, etc.?
- -pre-sets special effects?
- -execution of commands swiftly?
- -knows how to roll film, show slides/film?

AUDIO:

- -set up mics in studio properly and swiftly?
- -unused mics left open?
- -operation of board? knows which mic is what talent?
- -proper levels? distortion? balance?
- -mics properly struck? cords rolled properly?

PROJECTION:

- -proper film threading? sound matches film?
- -proper slide loading?
- -switches set to remote?

CAMERA:

-swift responses to commands?
-proper responses to commands?
-framing?
-smooth operation of zooms, pans, etc?
-proper focus?

HOD:

-are cards in order?
-are cards flat?
-changing cards swiftly?

TALENT:

-looking into lens when speaking to camera?
-quick response to cues?
-composure; goofing off?
-knows script?
-has practiced times segments?
-getting out on time?

STANDBY/OBSERVE

-usually is not graded. However, be prepared to fill in for someone.

APPENDIX C

TV PRODUCTION

TEST #1 Name_____

Define the following terms:

Tilt Up -

Looser -

Two shot -

Pan left -

Noseroom -

F-stop -

Depth of Field -

Tighter -

Short lens -

Long lens -

Focal length -

TV PRODUCTION TEST # 1 (Con't)

DEFINITIONS (Con't) Name_____

Pedastal up -

Camera head -

CCU -

Tally Light -

2. FILL IN THE BLANKS

The lens and its attachments are part of the _____ _____ system.

The pick-up tules are part of the _____system

The third main part of the television camera is _____.

The three basic colors in television are _____, _____, and _____.

The heart of the audio console is the audio _____.

To pre-set your zoom focus you would zoom _____, and focus.

The television _____ is the most basic of all television equipment.

The television _____ is where the production of TV programs is done.

TV PRODUCTION TEST # 1 (Con't)

FILL IN THE BLANKS (Con't) Name_____

Most color cameras have _____

or _____ pick-up tubes.

In a color camera, the chrominance channels deal with the processing of the _____ areas of the picture, and the luminance channel deals with the _____ areas of the picture.

The lenses that are attached to the turret of a black and white camera are called _____ focal length lenses. The zoom lens is a _____ focal length lens.

3. SHORT ANSWER

What's the difference between a medium close up shot and a close up shot?

What are the two major types of pick-up tubes used in color TV cameras?

What does a contrast ratio of 30:1 mean?

What does camera "resolution" concern itself with?

How can you increase depth of field?

TV PRODUCTION TEST # 1 (Con't)

SHORT ANSWER (Con't) Name _____

What's the first thing you do as a cameraman in the studio?

4. IDENTIFY each camera shot with the appropriate symbol:

extreme long shot_____ long shot_____

medium close-up_____ medium shot_____

extreme close-up_____ close-up_____

5. Name two of the three variables that influence "depth of field".

6. The _____ the iris opening the greater the amount of light coming through the lens, and the _____ the f-stop number.

TV PRODUCTION TEST # 1 (Con't)

Name_____

7. In the diagram below properly list what each labeled object is.

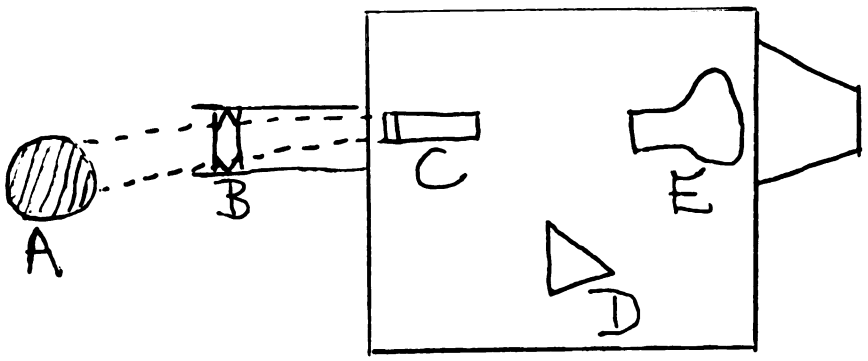
A.

B.

C.

D.

E.



APPENDIX D

"CLOSE-UP EXERCISE"

VIDEO	AUDIO	
FADE UP ON CU OF GUEST	ANNCR:	This is (NAME)_____, you'll hear his (her) exciting story on . . . Close-Up, a series of intimate interviews with outstanding students of Lansing's Hill High School.
ZOOM OUT TO TWO SHOT		And here to help you get acquainted with our
GUEST AND HOST		guest today is your host (NAME)_____.
ALTERNATE CU'S AND TWO SHOTS	HOST:	Good morning. (AD LIB INTERVIEW TO 15-SECOND CUE.)
	GUEST:	(RESPONDS TO HOST'S QUESTIONS)
	HOST:	(AT 15-SECOND CUE THANKS GUEST AND TURNS TO CAMERA.) We hope you've enjoyed our visit today on Close-Up. We'll see

CLOSE-UP EXERCISE (Con't)

you again tomorrow.

ZOOM IN TO CU OF GUEST ANNCR: Tune in tomorrow morning to Close-Up. . . for another intimate interview with an outstanding student at Lansing's Hill High School . . . with your host, __ (NAME) ____.

FADE TO BLACK

APPENDIX E

PRODUCTION GRADING CRITERIA

EXERCISE_____

ROTATION_____

FLOOR DIRECTOR: PROPER CUES___ RESPONDING TO DIRECTIONS ___
PASSING INFORMATION PROPERLY___
POSITIONING___ SCANNING SET___
MIC CABLES OUT OF VIEW___ CAMERA AID___

SWITCHER: FOLLOW DIRECTIONS____ CONCENTRATION___
PRE-SET EFFECTS___
PROPER OPERATION OF BOARD___
SWIFT EXECUTION___
ROLLS FILM, ETC. PROPERLY___

AUDIO: SET UP MICS CORRECTLY AND SWIFTLY___
LEVELS___ UNUSED MICS LEFT OPEN___
KNOWS WHICH MIC IS WHICH___

OPERATION OF BOARD___
HOW TO GET TAPE, ETC. ___
MICS PROPERLY STRUCK___
CABLES ROLLED PROPERLY___

PROJECTION: FILM THREAD CORRECTLY___
PROPER SLIDE LOADING___
SWITCHES SET TO REMOTE___
SOUND MATCHES FILM___

CAMERA 1: SWIFT RESPONSES... PRE-SET FOCUS___
FOCUS___ COMPOSITION___
PROPER RESPONSE TO COMMANDS___
SMOOTH ZOOMS___ SMOOTH PANS___
HEADROOM___ NOSEROOM___

PRODUCTION GRADING CRITERIA (Con't)

CAMERA 2:
SWIFT RESPONSES___ PRE-SET FOCUS___
FOCUS___ PROPER RESPONSE TO COMMANDS___
COMPOSITION___ SMOOTH ZOOMS___
SMOOTH PANS___ TILT PROPER___
HEARROOM___ NOSEROOM___

TALENT 1:
LOOKING INTO LENS___
QUICK RESPONSE TO CUES___
COMPOSURE; GOOFING OFF___
KNOWS SCRIPT___
HAS PRACTICED TIMED SEGMENTS___
GET OUT ON TIME___

TALENT 2:
EYE CONTACT___
QUICK RESPONSE TO CUES___
COMPOSURE: GOOFING OFF___
KNOWS SCRIPT___
HAS PRACTICED TIMED SEGMENTS___
GET OUT ON TIME___

ANNOUNCER:
KNOWS SCRIPT___ GOOD VOICE MODULATION___
PROPER ENUNCIATION___ PICKS UP CUES___
ENTHUSIASM___

APPENDIX F

LANSING SCHOOL DISTRICT
RADIO & TELEVISION PRODUCTION PERFORMANCE OBJECTIVES

EQUIPMENT OPERATION
TV

CONDITIONS	TASK/SKILL/ COMPETENCY	EVALUATION CRITERIA	DATE COM-PLETED	STUDENT INITIALS	INSTRUC-TOR INITIALS	COMMENTS
TELEVISION CAMERA	Student shall properly identify: camera, pedestal & aux parts, shot terminology, camera movements, camera persons job duties & set up procedure	at least 70% correct				
1) Given an objective written test						
2) Given a studio camera and verbal director's cues at a normal pace	Student shall display knowledge of all standard TV shots, camera set-up & camera movements	100%				
3) Given an objective written test	Student shall correctly display knowledge of basic camera operation theory: pickup tubes iris adjustment, lighting levels, depth of field considerations	at least 70% correct				
TELECINE						
4) Given a written objective based test	Student shall properly identify the major operational parts of a TV film chain	at least 70% correct				

APPENDIX G

DRIFTWOOD INN
:30

AT 5910 SOUTH PENNSYLVANIA ... FLAMING GAS LIGHTS WELCOME YOU TO A NEW EXPERIENCE IN FINE DINING AND ENTERTAINMENT ... BILL WARNER'S DRIFTWOOD INN. OUTSIDE, THE LIGHTS BURN BRIGHTLY ... BUT INSIDE, AHHH INSIDE, THE LIGHTS ARE SOFTENED, THE WINE FLOWS FREELY, THE CUISINE IS SUPERB, AND DISCRIMINATING PATRONS RELAX IN COMFORTABLE RUSTIC LUXURY. AND ON FRIDAY AND SATURDAY UNTIL 1:30 IN THE MORNING, DRIFTWOOD DINERS DANCE TO THE "THREE J'S PLUS ONE" IN THE ANCHOR ROOM. BILL WARNER'S DRIFTOOD INN ... IT'S JUST THE KIND OF PLACE YOU WERE WISHING LANSING HAD.

APPENDIX H

TELEVISION PRODUCTION TEST - AUDIO

Name_____

FILL IN THE BLANKS

1. All microphones convert _____ waves into _____ energy, which is amplified and reconverted into sound waves by the loudspeaker.

2. Two ways to classify microphones are by the _____ and the _____.

3. Two types of sound generating elements are _____ and _____.

4. Recorded sound can be played back from four major sources. List two of them: _____ and _____.

5. The primary function of the _____ _____ is the connecting and routing of various pieces of audio equipment

SHORT ANSWER

6. Regardless of the individual designs, all audio consoles, or audio control boards, are designed and built to perform three major functions. What is one of them?

TELEVISION PRODUCTION TEST - AUDIO (Con't)

Name_____

SHORT ANSWER (Con't)

7. What are the two most common microphone pickup patterns?

8. Draw a diagram, or illustration of the two most common microphone pickup patterns and label them accordingly.

FILL IN THE BLANKS

9. Lavaliere microphones generally have a _____ pickup pattern.

10. The letters VU in regards to a meter stand for _____.

11. The abbreviation for potentiometer is _____.

12. The combining of two or more sounds in specific proportion is called a _____.

Assuming normal conditions, specify the types of microphones (boom, lavaliere, etc.) that would most easily fulfill the requirements for sound pickup in these situations:

13. Newscaster seated, reading copy. _____

14. M.C. walking into audience to ask questions. _____

15. Singer accompanying him or herself on guitar. _____

16. Sports commentator in press box during game. _____

17. Governor leading the viewer through several rooms of his mansion. _____

APPENDIX I

AUDIO EXERCISE #2

(MUSIC UNDER) JUST IN TIME FOR THE FALL FOOTBALL SEASON, RON ROLSTON IS HAVING A TRUCKLOAD SALE ON TV'S. WATCH ALL THE COLOR OF THE BOWL GAMES ON YOUR NEW RCA VISTAVISION 19" COLOR PORTABLE. AT ROLSTON'S IT'S ONLY $399. THE SUPER BOWL WILL BE EVEN MORE EXCITING ON YOUR 21" COLOR HOME ENTERTAINMENT CENTER FROM CURTIS-MATHES. THESE SETS FEATURE A FULL 4-YEAR WARRANTY ON PARTS AND SERVICE, AND THROUGH SUNDAY THEY'RE ONLY $429. (Music out) GET A TRUCKLOAD OF TV'S NOW AT R. L. ROLSTON FURNITURE, CARPET, AND APPLIANCES, IN THE FRANDOR SHOPPING CENTER.

APPENDIX J

Television EXERCISE #2

"On The Pedestal"

VIDEO		AUDIO
FADE UP ON KEY: TITLE OVER LS HOST AND GUEST (THEY ARE IN SILHOUETTE)	ANNCR:	Good afternoon and welcome to "On the Pedestal" where interesting people bring us interesting things to see. Now to introduce us to today's guest is (NAME).
LOSE KEY (FADE UP LIGHTS)	HOST:	Hi there. I'm (NAME).
CU GUEST		And with me today is (NAME) who will be showing us..... (BRIEFLY DESCRIBE OBJECT).
(ALTERNATE 2S, CU, MCU, GUEST AND HOST DURING DISCUSSION)		(AD LIB QUESTIONS ELICITING GUEST'S BACKGROUND).
	GUEST:	(RESPOND TO HOST'S QUESTIONS).
2S HOST AND GUEST	HOST:	(AT CUE) Now it's time to go to the pedestal and find out a little more about today's object. If you'll (TO GUEST) just walk over here with

EXERCISE #2 (Con't)

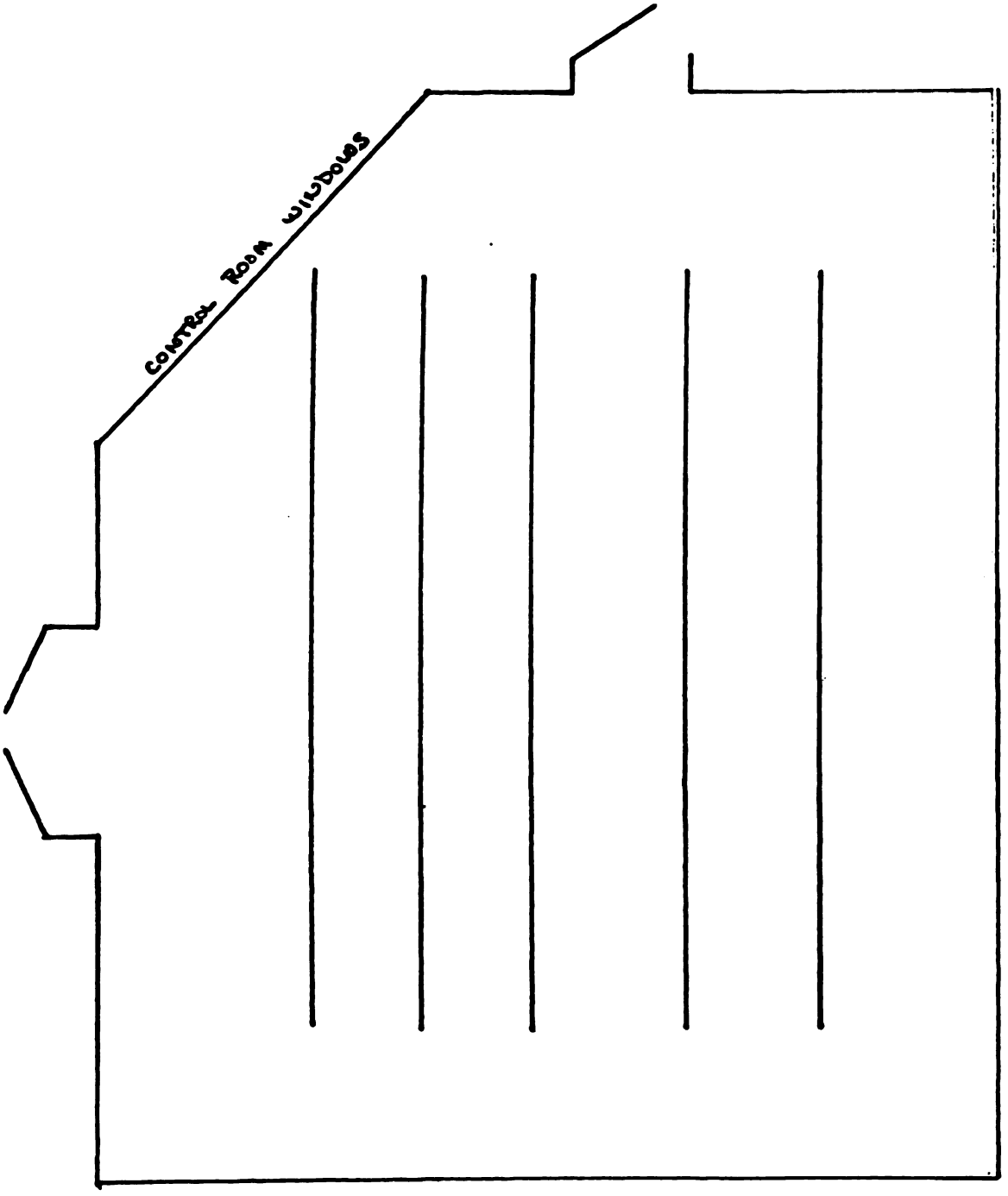
VIDEO		AUDIO
PEDESTAL UP		me (THEY RISE) I think both the viewers and I would be interested to see and hear more about (NAME OF OBJECT)
TRUCK RIGHT AND FOLLOW THEM		(THEY WALK TO PEDESTAL)
	HOST:	(ASK GUEST TO DESCRIBE OBJECT).
XCU OBJECT	GUEST:	(DESCRIBE AND DEMONSTRATE OBJECT).
(ALTERNATE WITH REACTION OF SHOTS OF HOST)	HOST:	(MAY ASK CLARIFYING QUESTIONS)
CU HOST	HOST:	(AT CUE) Well, I guess that's all the time for today.
CU GUEST		Thanks to (NAME) for being with us today. And thanks to you for joining us "On the Pedestal." (TURNS TO GUEST)
2S HOST AND GUEST (LIGHTS FADE TO SILHOUETTE)		
KEY TITLE	ANNCR:	This has been "On the Pedestal" with your host (NAME).

EXERCISE #2 (Con't)

VIDEO	AUDIO
	Stay tuned for the Channel
FADE TO BLACK	9 late afternoon movie.

APPENDIX K

STUDIO A FLOOR PLAN



APPENDIX L

LIGHTING TEST

RADIO AND TELEVISION PRODUCTION Name_____

1. As one of the photographic arts, television is subject to what is generally called the basic _____ lighting principle - or, as it is frequently called, basic _____ lighting.

2. This lighting principle consists of three main lights. Name them, and the type of lighting instrument you would use.

3. List the three main lights, once again, and what their functions, or purpose are. What do they accomplish?

4. There are several ways to adjust the intensity (brightness) of a lighting instrument. List one way!

5. What is meant by multiple function lighting?

LIGHTING TEST (Con't) Name_____

6. What is the main lighting concern for a chroma key are?

7. What is "lighting ratio"?

8. What is "cameo" lighting?

9. In the space provided below draw a diagram of the basic lighting setup. Include the three main lights. Label them properly, name the type of lighting instrument used for each, and use the proper symbol.

10. Sometimes additional lights are needed. In the space provided below draw a diagram of the basic lighting setup, with the same requirements as question 9, and add a "kicker" light, properly.

LIGHTING TEST (Con't) Name_____

11. Sometimes additional lights are needed. In the space provided below draw a diagram of the basic lighting setup, with the same requirements as question 9, and add a "side" light, properly.

You will be shown several lighting instruments, and lighting accessories in class. Give the proper technical names for each item below.

APPENDIX M

FIRST SEMESTER FINAL EXAMINATION
TV PRODUCTION AM BLOCK

NAME_____

FILL IN THE BLANKS

1. The camera lens and its attachments are part of the _____SYSTEM.
2. The pick-up tubes are part of the _____ SYSTEM.
3. The third main part of the television camera is the _____.
4. The heart of the audio console is the audio _____.
5. To pre-set your zoom focus you would zoom _____, and focus.
6. In a color camera, the chrominance channels deal with the processing of the _____areas of the picture, and the luminance channels deal with the _____ areas of the picture.
8. The larger the iris opening the _____ the F-stop number.
9. All light meters measure light intensity (brightness) in _____.
10. All microphones convert (change) _____ waves into _____ energy.
11. If the back tokey lighting ratio is 1:1, the lights are the _____ in intensity or brightness.

FIRST SEMESTER FINAL EXAMINATION--TV PRODUCTION, AM BLOCK

PAGE 2 NAME_____

12. Two types of sound generating elements for microphones are _____ and _____.

13. The aspect ratio of the television picture is _____ units high to _____ units wide.

14. Lavaliere microphones generally have a _____ pick-up pattern.

15. The letters VU in regards to a meter stand for _____.

SHORT ANSWER

16. Draw a diagram or illustration of the two most common microphone pickup patterns and label them accordingly.

17. Name two of the three variables (things) that influence "depth of field."

18. What's the first thing you do as a cameraman in the studio?

19. How can you increase depth of field?

FIRST SEMESTER FINAL EXAMINATION--TV PRODUCTION, AM BLOCK

PAGE 3 NAME_____

20. Regardless of the individual designs, all audio consoles, or audio control boards are designed and built to perform three major functions. What is one of them?

DEFINE THE FOLLOWING TERMS

Looser -

Noseroom -

F-stop

Depth of field -

Tighter -

Focal length -

CCU -

Burn-in -

FIRST SEMESTER FINAL EXAMINATION--TV PRODUCTION, AM BLOCK

PAGE 4 NAME_____

IDENTIFICATION

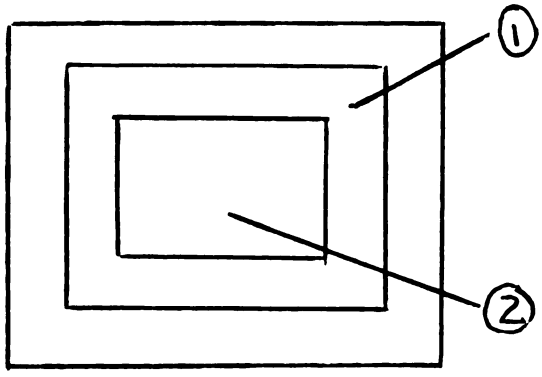
Identify each camera shot with the appropriate symbol:

extreme longshot_____ long shot_____

medium close up_____ medium shot_____

extreme close-up_____ close-up_____

IN THE SKETCH BELOW, CIRCLE THE APPROPRIATE NAME FOR THE AREAS INDICATED



SCANNING AREA

ESSENTIAL AREA

ESSENTIAL AREA

SCANNING AREA

FILL IN THE BLANKS AND LABEL ACCORDINGLY

The television _____ is the most basic of all television equipment.

The switcher is located in the _____ room.

Television cameras require a great amount of _____ to operate efficiently.

FIRST SEMESTER FINAL EXAMINATION--TV PRODUCTION, AM BLOCK

PAGE 5 NAME_____

Label the following diagram correctly with the proper letter.

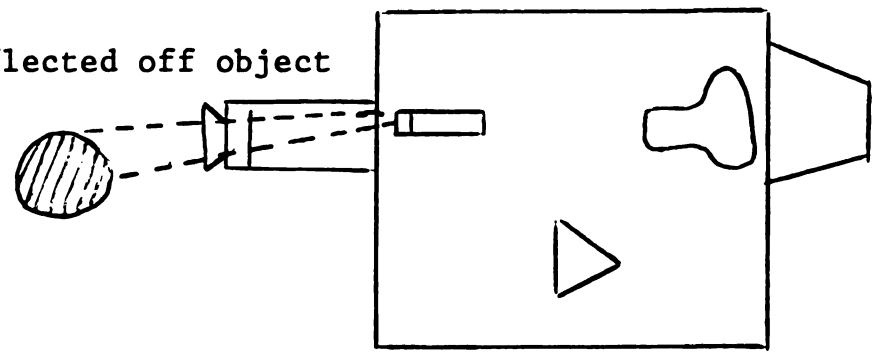
A. Electronic viewfinder, a small tv set

B. Preamplifier

C. Camera pick-up tube

D. Lens

E. Light reflected off object



YOU WILL BE SHOWN A VIDEO TAPE IN CLASS. IDENTIFY THE CAMERA MOVEMENTS OR SHOTS.

1. 6.

2. 7.

3. 8.

4. 9.

5. 10.

YOU WILL BE GIVEN FIVE FLOOR DIRECTORS' CUES IN CLASS. IDENTIFY THEM.

1.

2.

3.

4.

5.

FIRST SEMESTER FINAL EXAMINATION--TV PRODUCTION, AM BLOCK

PAGE 6 NAME_____

YOU WILL BE SHOWN 3 DIFFERENT LIGHTING INSTRUMENTS IN CLASS. IDENTIFY THE INSTRUMENT, NOT ITS PURPOSE!

1.

2.

3.

YOU WILL BE SHOWN 3 MICROPHONES IN CLASS. IDENTIFY THEM AS TO THE TYPE OF MICROPHONE IT IS, NOT ITS CLASSIFICATION!

1.

2.

3.

APPENDIX N

VIDEOTAPE EVALUATION

Please rate the following aspects of the videotape you've just seen by circling the number that most closely corresponds to your viewpoint.

Poor	Fair	Average	Good	Excellent
1	2	3	4	5

1. Content 1 2 3 4 5
2. Technical Quality 1 2 3 4 5
3. Pacing 1 2 3 4 5
4. Writing (Scipt) 1 2 3 4 5
5. Flow 1 2 3 4 5
6. Understanability 1 2 3 4 5
7. Editing 1 2 3 4 5
8. Information 1 2 3 4 5

Please take a few brief moments to answer the following questions. Your comments are encouraged.

1. Has the content within this program increased your knowledge of the Radio/Television Production class in the Lansing School District?

   Yes_____ No _____

   Comments:

2. In your opinion, was the information presented in a clear and concise manner?

   Yes_____ No _____

   Comments:

3. Has your attitude towards the Radio/Television Production course improved as a result of viewing this videotape?

   Yes____ No ____

   Comments:

4. What do you see as the biggest weakness of this videotape?

5. What is its greatest strength?

6. Do you feel the program you've just seen is technically good enough for broadcast or cablecast?

   Yes ____ No ____

   Comments:

Thank you for your cooperation!

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