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ABSTRACT

This is an evaluation of an experimental one-semester course, offered by the Vancouver School Board. The course provided students with the opportunity to learn the basic techniques of television production through actual experience in the studio. The evaluation design consisted of three phases: a written pre- and post-test designed to measure students' growth; students selected at random from the class were assessed by a qualified television technician; and a team of external evaluators assessed the students' growth in production skills. The results showed that the students in TV 11E had become reasonably proficient with the studio equipment, and had learned to use their skills effectively in productions. (Author/BB)

RESEARCH REPORT

An Evaluation of the Locally-Developed Course Television Production 11R at Eric Hamber Secondary School

July 1973

Susan Leslie

Research Report 73-13

DEPARTMENT OF PLANNING AND EVALUATION
Board of School Trustees
1595 West 10th Avenue
Vancouver 9, B.C.

AN EVALUATION OF THE LOCALLY-DEVELOPED COURSE TELEVISION PRODUCTION 11E AT ERIC HAMBER SECONDARY SCHOOL

Susan Leslie

Research Report 73-13

Filming the commercial: director, talent and cameramen at work.

Production of a Commercial in the Eric Hamber Television Studio

Preparing the lights

Taping the show: work at the video console, the audio console and the video tape recorder.

ACKNOWLEDGEMENTS

The Department of Planning and Evaluation is most grateful to Dr. Stewart Martin, Mr. Gordon Kilpatrick, Mr. Charles Gosbee, Mr. Ralph Ralston, Mr. Terry Barker and Mr. Howard McAllister, members of the Television Advisory Committee, for their assistance in the over-all planning of this study; and to Mr. Bruce White and Mr. Dan Pratt, Faculty of Education, University of British Columbia, Mr. Gene Lawrence, Provincial Media Centre, British Columbia Institute of Technology, and Mr. Ian Franks, Television Technician, University of British Columbia, for their part in the external evaluation.

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AN EVALUATION OF THE LOCALLY-DEVELOPED COURSE TELEVISION PRODUCTION 11E AT ERIC HAMBER SECONDARY SCHOOL

ABSTRACT

Television Production 11E is an experimental one-semester course in television production offered by the Vancouver School Board at Eric Hamber Secondary School. Presented in this report is the evaluation of T.V. 11E prepared for the Department of Education.

Television Production 11E is primarily a practical course, which provides students with the opportunity to learn the basic techniques of television production through "hands-on" experience in the studio. Accordingly, the evaluation of the course concerned itself chiefly with examining the acquisition of practical skills by the students in the course.

The evaluation design consisted of three phases:

1. A written pre- and post-test designed to measure the growth in students' knowledge of basic sound, video and lighting techniques, was administered to all students.

2. Several students, selected at random from the class, were assessed by a qualified television technician as to their ability to use the studio equipment.

3. An assessment was made by an independent team of external evaluators of the students' growth in production skills as evidenced by samples of student productions.

While the results of the written examination show some growth, there was not a significant difference between pre-test and post-test scores. The lack of significant improvement may be the result of the late administration of the pre-test, for the T.V. 11E students had already been in the course for nearly four weeks when they wrote the pre-test.

The assessment of the use of equipment indicated the students had become competent with the studio equipment. The technician's ratings of the nine students he examined were:

"Excellent" - 2
"Very good" - 3
"Good" - 4

The evaluators who assessed the student productions were, in general, impressed with the students' work. They were reluctant to isolate for assessment specific skills and techniques, however; because of certain problems they perceived in the studio equipment, they could not clearly distinguish between student error and equipment defect.

In view of the experience and background of the members of the evaluation team, their subjective assessments seem a reliable appraisal of the students' skill in television production. From their assessments, it is clear that the students in T.V. 11E have become reasonably proficient with the studio equipment, and have learned to use their skill effectively in productions.

AN EVALUATION OF THE LOCALLY-DEVELOPED COURSE TELEVISION PRODUCTION 11E AT ERIC HAMBER SECONDARY SCHOOL

INTRODUCTION

The British Columbia Department of Education has recently granted permission to several school districts to offer locally-developed courses. In some of the districts concerned, approval of the courses has been conditional, pending an evaluation. Such was the case with Television Production 11E, a course developed by the Vancouver School Board at Eric Hamber Secondary School.

This report contains the evaluation of Television Production 11E (T.V. 11E) prepared for the Department of Education. Evaluation in this context, it should be noted, is concerned only with the curriculum. Inasmuch as it is possible to separate the content of a course from the way in which the course is taught, the evaluation of T.V. 11E examines only the scope and effectiveness of the course content, not the skill of the instructor.

OBJECTIVES OF TELEVISION PRODUCTION 11E

Over the past six years that Television Production has been offered at Eric Hamber School, the focus of the course has altered from teaching visual communication to teaching the specific skills of television production. While teaching visual communication necessarily involved teaching certain technical skills, the original television production course was chiefly directed at making students "visually literate." The present course, T.V. 11E, is "intended to be a survey of television technology and techniques of television production, and to provide hands-on experience in these areas through production."[1]

Accordingly, the evaluation of T.V. 11E concerned itself primarily with measuring the acquisition of practical skills by the students in the course. While they may also have acquired some degree of "visual literacy," the evaluation did not attempt to measure it directly.

There are many factors operant in the success of any course - notably the quality of the facilities and the interest of the students - but it was assumed that the effectiveness of T.V. 11E could be measured by examining what the students learned during the period of the course. If the course content were valid and realistic in terms of the time and facilities available, then in varying degrees students would acquire the skills outlined in the course objectives.

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[1] See Appendix A, "Television Production 11E, Course Description," p. 11.

The course description written by the instructor, Mr. Terry Barker, lists the following objectives for T.V. 11E:

1. Students must complete a series of graded exercises effectively using:

   (a) television camera
   (b) audio console and accessories
   (c) video console and accessories
   (d) audio and video recording equipment
   (e) lighting equipment
   (f) miscellaneous production equipment

2. Students must prepare suitable graphics and related scripts in support of:

   (a) their own work with television equipment
   (b) their production work as outlined in Objective 3

3. Students must present a minimum of one of each of:

   (a) program entry
   (b) musical interlude
   (c) demonstration
   (d) 30-second commercial
   (e) 60-second commercial
   (f) interview

and participate in:

   (a) a half-hour presentation
   (b) an hour presentation

From these objectives, a method of evaluating the course was designed.

EVALUATION DESIGN

The evaluation design consisted of three phases:

1) A written pre- and post-test designed to measure the growth in students' knowledge of basic sound, video and lighting techniques was administered to all students.

2) Several students, selected at random from the class, were assessed by a qualified television technician as to their ability to use the equipment listed in Objective 1.

3) An assessment of the students' growth in production skills was made by an independent team of external evaluators.

The written test (see Appendix B), which was administered in March, and again at the end of May, covered the basic technology of the equipment listed in Objective 1. Improvement from pre-test to post-test can be considered an index of the effectiveness of the course in teaching basic television techniques.

For the second phase of the evaluation, a technician from the Faculty of Education at the University of British Columbia was asked to assess the students' use of the studio equipment. His assessment of their work was, of course, subjective; however, his experience with television production students at U.B.C. offered some measure of validity, for it provided him with a context in which to consider the work of the Hamber students. Thus his assessment indicated the level of skill attained by the Hamber students relative to that attained by other T.V. production students.

The third phase of the evaluation was also a subjective assessment. Three external evaluators, with varied backgrounds in T.V. broadcasting and audio-visual education, were asked to view student productions prepared specifically for the evaluation on a pre- and post-test basis. In March, students were grouped into production crews of seven. (Students who were repeating the course were excluded from these groups.) Each crew was given the same assignment: to prepare a two-minute segment, consisting of station identification, and a one-minute commercial. The students were given two hours in the studio to complete this assignment. They were supplied with graphics materials and an assortment of "props." A technical advisor was on hand to ensure that the equipment was functioning properly, but the students were given no assistance with their production. The results from this assignment in March were compared with those from a repeat assignment in June. The improvement from the first to the second set of productions was assessed by the three evaluators.

After viewing the commercials, and some student productions prepared as class assignments, the external evaluators were asked to discuss what they had seen. Their discussion was taped and transcribed; relevant portions of it have been included in this report.

Thus the evaluation comprises two viewpoints. There are objective data gathered on a pre- and post-test basis, which attest to measurable development in skills and knowledge. There is also subjective evidence which indicates that, in the opinion of informed observers, T.V. 11E is providing students with useful experience in the technical aspects of television production.

FACILITIES AT ERIC HAMBER SECONDARY SCHOOL

In any course where the emphasis is on teaching technical skills, the quality and kind of equipment available is obviously an important factor in the course's success. As of June 1973, the studio at Hamber was equipped with:

1 Shure Professional Audio Mixer
3 Panasonic Rack Mount Monitors
1 Panasonic Special Effects Generator
1 Outgoing High Resolution Monitor
2 Shibaden Low Resolution Monitors
1 Panasonic Vidicon Camera
with headset and front-controlled zoom lens and tripod dolly
1 Panasonic Vidicon Camera
with headset and rear-controlled zoom lens and tripod dolly
1 Tektronic Waveform Monitor
2 Mole-Richardson 1000 Watt Scoops
4 Strand Pattern 23 1000 Watt Floods
2 Electrohome TV Monitors
1 Sony Videotape Recorder

In his discussion of the skill of the students, one of the external evaluators made reference to the quality of the equipment:

> "They have technical facility, but they don't have technical facilities, in terms of the hardware. For instance, only one of those cameras can you pan. You simply can't pan the other camera, without it going like that (waving gesture). So it's impossible to make a measurement about camera work. In terms of sound, with mismatched impedances, and the equipment, there's no way of making a judgment about sound...it (the equipment) has not been maintained, and it requires a high degree of skill to keep it up."

If his description of the equipment is accurate - and his many years of experience lend credence to it - then the students' development has been hindered by inadequate and poorly-maintained equipment. His comment, it should be noted, is based not just on evidence of technical difficulties in the student videotapes, but also from his own experience using the Hamber T.V. equipment. He spent several hours in the studio, watching the students use the equipment, and using it himself.

The other members of the evaluation team concurred with him on the limitations of the Hamber equipment. They all were reluctant to assess the technical aspects of the student productions because they felt that it was impossible to consider the quality of students' work in isolation from the quality of the equipment they used.

As will be seen from the results of the assessment, the evaluators were convinced of the competence of the students. Whether the equipment was faulty or not, the evaluators felt that there was enough evidence in the videotapes to permit their conclusion that the students understood the basic techniques of television production. However, they did not want to make judgments about specific skills and techniques because they found it difficult to distinguish between student error and equipment defects.

The members of the evaluation team agreed that there were defects in the equipment and that those defects complicated the evaluation of the students' productions. They were not agreed on the impact that defective equipment would have on the progress of the course. While two of the three felt that inadequate equipment would be a serious impediment to the students' learning, the third felt that the development of skill and creativity was not contingent on sophisticated equipment. In his opinion, the studio at Hamber was adequately equipped for the purposes of the course.

RESULTS OF THE EVALUATION

At the time of the pre-test, there were thirty-five students enrolled in T.V. 11E. Of this number, twelve were taking the course for a second time. For the purposes of the evaluation, only the work of the remaining twenty-three students was considered.

(1) The written exam was administered in March, and again at the end of May. (See Appendix B.) The mean score in March was 43.1%. Although the mean score in May - 52.3% - shows some improvement, the difference between pre-test and post-test scores is not statistically significant. (See Table 1.)

When the students wrote the pre-test at the beginning of March, they had already been in T.V. 11E for nearly four weeks. The lack of significant improvement in the post-test scores may only reflect how much the students had already learned by the date of the pre-test. Students without any previous experience in television production would probably not have scored as high marks on the exam as the T.V. 11E students did in March.

TABLE 1

PRE- AND POST-TEST SCORES ON WRITTEN TEST

Student	Pre-Test Scores (%)	Post-Test Scores (%)
1	66.7	72.9
2	60.4	77.1
3	50.0	70.8
4	29.1	44.8
5	59.4	47.9
6	33.3	61.5
7	39.6	44.8
8	41.7	43.8
9	51.0	63.5
10	66.6	64.6
11	49.0	56.3
12	31.3	32.3
13	24.0	47.9
14	25.0	37.5
15	18.8	37.5
16	42.7	43.8
17	54.2	45.8
18	33.3	47.9
	Pre-Test Standard Deviation 14.5 Mean 43.1%	Post-Test Standard Deviation 12.8 Mean 52.3%

(2) A randomly selected group of nine students (out of 22 students) spent two and a half hours with the technician. He took them individually through the studio, asking each to perform various tasks with the equipment. He worked with a checklist (see Appendix C), prepared from the instructor's description of the specific skills necessary to the "effective use" of the equipment listed in Objective 1 on page 2 of this report. However, rather than assess the students' competence on each of the items on the checklist, he made a global estimate of their skill with the equipment. He rated two of the nine students "excellent," three as "very good" and four as "good." There is, of course, no normative context in which to view these ratings, but given the evaluator's experience, it seems reasonable to assume that they are reliable assessments of the students' practical skills. The comments of the three evaluators who participated in the third phase substantiate his judgment.

(3) The videotapes prepared by the students for the assessment presented some problems to the external evaluators. They felt that the tapes were not informative enough to allow them to make any worthwhile judgments of the students' production skills. As the remark quoted earlier indicates (see page 4), the evaluators thought that difficulties with the studio equipment were likely responsible for the technical defects in the tapes. For example, variation in sound level noted by the evaluators may have been caused by the mismatched impedances of the sound equipment. They also thought that the restricted unimaginative format of the commercials resulted in restricted unimaginative work that was not representative of the students' capabilities.

The evaluators felt that a more accurate appraisal of the students' production skills could be made from samples of students' class work. Produced without the restrictions of time, subject matter, and assistance which were imposed on the evaluation tapes, the samples of class work which the team of evaluators saw indicated a much higher degree of skill and expressiveness. But restrictions notwithstanding, the evaluation tapes were still considered by the evaluators to exhibit a reasonable degree of competence.

The comments of the evaluators after viewing the tapes affirm the growth and development of skills in T.V. 11E. The evaluators were agreed that, given the short duration of the course, and the limitations of the equipment, the students had become reasonably competent. They were also in agreement on the value of a television production course, and on the quality of the Hamber students' work. The following excerpts from their taped discussion touch on its main points:

> "I didn't get much at all out of the commercial thing but I saw a great deal of quality, much more than I expected to see, some of it rivalling anything I've seen on commercial T.V. for the use of camera angle, for the use of some of the criteria that you've spelled out on these sheets - centred clear image, smooth

movement, effective use of different angles and motions, staying with the talent - using the visual nature of the medium to its utmost. I was really impressed."

"I don't think there's any question that there has been growth in this course. You've got an experienced teacher and you've got equipment, and you're working in a medium that is very common to today's young people - it would be a miracle if there wasn't growth. I think that from the little bit that I saw...there's no doubt in my mind that a course like this should go on. There's a need for it."

"If we are to actually measure the productions in terms of the sophistication of technique, then it stands to reason that they would have to have pretty sophisticated equipment...That's why it's so difficult to measure the technical aspect of the tapes...the difficulty in terms of having this kind of equipment is that in some ways it's too sophisticated, and in other ways not sophisticated enough. It's sort of a middle ground. They're trying to do things that they would see in television that involve cutting and switching and special effects amplifiers, mixing sound and records and voice over with live announcers...and the equipment isn't sufficient for that. It really is a handicap."

"Maybe the limitations aren't that important unless... it's to put across something to show to the public, maybe it's important to have highly sophisticated equipment... On the other hand, the things that we've spoken of here - the creativity, the original thinking - maybe they should do that with the kind of equipment they've got here...maybe they just need the doors open for them."

Because the evaluation - and the course - were primarily concerned with the acquisition of technical skills, much of the discussion focused on the quality of the Hamber T.V. facilities. All the evaluators seemed agreed that there were problems with the maintenance and compatibility of the equipment, but whether those problems in fact impeded the course was not agreed on. In the opinion of the last speaker quoted above, highly sophisticated equipment is not a prerequisite for learning television production. However, despite the problems that exist with the equipment, it is clear that, in the opinion of the external evaluators, T.V. 11E students have learned the basic technical skills outlined in the objectives and they have used those skills to produce creative and intelligent material.

CONCLUSION

It is clear that in the opinion of the evaluation team the Hamber students learned to use effectively the television equipment listed in the first objective of the course description. Given the short duration of the course - a single semester - the students became,

in the evaluators' opinion, reasonably proficient with the studio equipment, and learned to use their skill effectively in productions. This necessarily subjective judgment is the crux of the evaluation of T.V. 11E, and is valid only because of the experience and background of the individuals concerned. While their standards of "effective use" are not absolute, they remain the only scale against which the acquisition of practical skills in T.V. 11E could be measured.

Taken with the objective data from the written test, the subjective assessments indicate that a substantial degree of skill in television production was attained by the T.V. 11E students. In terms of the stated objectives then, the course has been successful. It has also been successful in introducing students to career opportunities in television: at least two of the present students plan to take further training in television as a result of the course.

APPENDIX A

TELEVISON PRODUCTION 11E

COURSE DESCRIPTION

TELEVISION PRODUCTION 11E

COURSE DESCRIPTION

The course Television Production 11E is intended to be a survey of television technology and techniques of television production, and to provide "hands-on" experience in these areas through production.

T. J. Barker

ERIC HAMBER SECONDARY SCHOOL
5025 WILLOW STREET
VANCOUVER 13, B.C.

TELEVISION PRODUCTION 11E

COURSE OBJECTIVES

Students taking the course Television Production 11E must demonstrate a knowledge of television production and its supportive technology by:

Television Technology

1. Completing a series of graded exercises effectively using:

    (a) television camera
    (b) audio console and accessories
    (c) video console and accessories
    (d) audio and video recording equipment
    (e) lighting equipment
    (f) miscellaneous production equipment

Graphics & Scripts

2. Preparing suitable graphics and related scripts in support of:

    (a) his own work with television equipment
    (b) his production work as outlined in Objective 3

Production Activities

3. Presenting a minimum of one of each of:

    (a) program entry
    (b) musical interlude
    (c) demonstration
    (d) 30-second commercial
    (e) 60-second commercial
    (f) interview

    and participating in each of:

    (a) a one-half hour presentation
    (b) a one hour presentation

CONTENT–DESCRIPTION	REFERENCE	STUDENT ACTIVITIES	CONCOMITANT ASSIGNMENTS	AUDIO–VISUAL AIDS
BASIC AUDIO-VISUAL MACHINES A. Audio Machines 1. Record Player (Rheem Caliphone) 2. Reel To Reel Tape Recorder 3. Cassette Tape Recorder B. Video Machines 1. Slide Viewer 2. Film Strip Projector 3. Overhead Projector 4. Carousel Projector C. Audio-Visual Machines 1. Super 8 - Regular 8 Movie Projector 2. 16mm Movie Projector 3. Video Tape Recorder	Reserve section in Library under Television... you will find file entitled Audio-Visual Equipment	1. You are required to be able to operate each of the listed Audio-Visual Machines 2. In small groups... after introductory lectures regarding Audio-Visual Machines, it is suggested that you operate same asking for assistance where necessary. Please use only practice tapes and films for this purpose	1. In your notebook list basic operational features of each of the listed pieces of Audio-visual Equipment. 2. Assignment: To be handed in. Select any one of the Ten Basic Audio-visual Machines listed and include the following: (a) sketch or illustration (b) physcial features (c) operational features (d) special accessories (e) specific applications The above assignment is to be type-written.	
PROJECTION SURFACES A. Front Projection Screens 1. Beaded Surfaces 2. Non-beaded Surfaces B. Rear Projection Screens 1. Beaded Surfaces 2. Non-beaded Surfaces	Physics and/or prescribed Science texts Library reserve file entitled Projection Surfaces	1. Using a lightmeter tabulate and record in your notebook reflected light from four different projection surfaces. Place light sources at different increments on same surfaces and tabulate the observable effects.	1. Students taking the course for an A lettergrade are required to submit a type-written paper on some aspect of Light or Light Theory.	

CONTENT–DESCRIPTION	REFERENCE	STUDENT ACTIVITIES	CONCOMITANT ASSIGNMENTS	AUDIO–VISUAL AIDS
RECORDING TAPE AND AUDIO TAPE A. Tape Construction 1. The Manufacturing Process 2. Tape Classifications 3. Oxides B. Tape Classifications C. Audio Tape vs Video Tape D. Tape Care And Maintenance 1. Editing a. Audio b. Video 2. Splicing a. Audio b. Video 3. Handling 4. Storage	Reserve section in Library Fifty Recorder Tape	1. Make a chart showing recording times of standard tape lengths at standard recording speeds. 2. Edit a cassette tape 3. Edit and splice a reel to reel tape. 4. Clean a tape recorder using Isopropyl Alcohol.	1. Hand in a survey of differences of tape costs from at least five commercial outlets. You should include at least two different classifications of tape of two or more tape lengths. Indicate the sources of your information. The above assignment is to be type-written.	

CONTENT–DESCRIPTION	REFERENCE	STUDENT ACTIVITIES	CONCOMITANT ASSIGNMENTS	AUDIO–VISUAL AIDS
TELEVISION GRAMMAR A. Vocabulary B. Grammar for Production C. Hand Signal D. Cues and Cueing	Printed notes	1. In small groups practice hand cues. 2. Use cues and hand signals in a simple product commercial of one minute duration.	Television Vocabulary and Hand Signal Recognition Quiz.	
TELEVISION CAMERA CONSTRUCTION A. Introduction 1. The Television Camera 2. The Viewing Set B. Television Cameras 1. Black and White a. Image Orthicon b. Videcon c. Plumbicon 2. Colour a. Plumbicon	Zettl Television Production	1. In your notebook make a schematic drawing of a Videcon tube labelling the important parts. 2. In your notebook make a schematic drawing of a television picture tube labelling the important parts. 3. In your notebook make a schematic drawing of a Plumbicon Colour Television Camera.	Using Library references and/or any other references you may find explain one of the following: 1. How the Television Camera takes a picture. or 2. How we see a picture on a Television Viewing Monitor. The above assignment is to be typewritten.	

CONTENT DESCRIPTION	REFERENCE	STUDENT ACTIVITIES	CONCOMITANT ASSIGNMENTS	AUDIO–VISUAL AIDS
TELEVISION CAMERA LENSES A. Construction of a Lens 1. Physical Features 2. Optics B. Viewing Angles and Distances of Lenses 1. Viewing Angles a. Horizontal b. Vertical 2. Viewing Distances a. Horizontal b. Vertical C. Lens Configurations 1. Normal 2. Wide Angle 3. Telephoto 4. Zoom	Reserve section in Library Zettl: Television Production	1. In your notebook make a chart showing horizontal and vertical viewing angles of each of the lenses on the illustrator Television Camera at a distance of ten feet, subject to camera distance	1. Quiz on Lenses 1. Lens Construction 2. Viewing Angles 3. Viewing Distances 4. Selection of the appropriate taking lens	
SCRIPTS AND SCRIPTING A. Necessity of Scripts B. Types of Scripts 1. Story Board 2. Working Script 3. Formal Script 4. Production Script C. Writing Scripts D. Reading Copy	Reserve section in Library Zettl: Television Production	1. In your notebook write a script for: 1. A commercial product 2. A school newscast 2. Make a storyboard for both of the above.	Hand in a type-written script of what you consider to be your best effort – 1. Commercial Product or 2. School Newscast	

CONTENT – DESCRIPTION	REFERENCE	STUDENT ACTIVITIES	CONCOMITANT ASSIGNMENTS	AUDIO–VISUAL AIDS
SETS AND PROPS A. Set Design B. Set Construction 1. Economy 2. Basic Elements 3. Angles of View C. Properties	Reserve section in Library ... Levin: Television By Design	On graph paper provided make scale labelled drawings of at least two dissimilar set designs.	1. Students taking this course for an A lettergrade are to make a scale cardboard model of a set design of your own choice. Include, sets and properties, lights, microphones, etc. 2. All other students are to hand in a scale drawing of the above.	
PRODUCTION PERSONNEL A. Writer B. Producer C. Director D. Audio Controller E. Video Switcher F. Audio Technician G. Video Technician H. Cameraman I. Sets and Properties J. Special Effects K. Lighting L. Make-up M. Management N. Distribution	Reserve section in Library ... Zettl: Television Production	In this section of the course you will participate in a number of minor productions. You will be required to assume a number of production roles as well as operate and manipulate most of the television equipment. Such productions will include: 1. Commercials 2. Demonstrations 3. Off-air Recordings 4. Educational Productions 5. Miscellaneous Productions	Write a type-written paper of a detailed job study regarding any one of the indicated Production Personnel jobs. Because of the similarity of these Television Production Jobs to the Radio and Movie Industry, you may decide to investigate a production personnel job in one of these areas.	Field Trips 1. CBUT - Channel 2 Field Trips 1. CBUT - Channel 2 2. CHAN - Channel 8

CONTENT--DESCRIPTION	REFERENCE	STUDENT ACTIVITIES	CONCOMITANT ASSIGNMENTS	AUDIO–VISUAL AIDS
GRAPHICS A. Viewing Ratios 1. Slides 2. Pictures 3. Showcards B. Materials Re Construction 1. Art and Craft 2. Manufactured C. Design 1. Stationary Graphics 2. Sequential Graphics 3. Movie Graphics		1. Design a graphic for an Educational Television show. 2. Design a series of graphics using picture formats. 3. Design a graphic to show or illustrate motion.	1. Design and make a television graphic for our Television Complex. Be certain to incorporate the basic fundamentals of graphic design with regards to contrasts and broadcast formats.	
STUDIO EQUIPMENT A. Control Console 1. Video Switcher 2. Audio Mixer 3. Announce Microphone 4. Viewing Monitors B. Rack Equipment 1. Conrac Tuner 2. Video Tape Recorder 3. Camera Drive Generator 4. Distribution Panels C. Floor Equipment 1. View-finder Camera 2. Illustrator Camera 3. Microphone Junction Box 4. Lights 5. Sets and Properties	Reserve section of Library ... Files: Manuals of Television Components	1. You are required to have an operational knowledge of all pieces of studio equipment as indicated. 2. Techniques of manipulation and set-up of cameras should be mastered at this time. 3. In your notebook you should have brief notes on all of the indicated Studio Equipment.	1. The class will participate in a number of productions. You will be required to operate efficiently equipment located in the Television Studio. 2. Evaluation will be of your acquired demonstrable knowledge of equipment during your involvement in Educational Television Productions.	

CONTENT–DESCRIPTION	REFERENCE	STUDENT ACTIVITIES	CONCOMITANT ASSIGNMENTS	AUDIO–VISUAL AIDS
MICROPHONES A. Classification 1. Ribbon 2. Electrostatic 3. Crystal B. Microphone Patterns 1. Omnidirectional 2. Unidirectional C. Microphones 1. EV 630 - Dynamic 2. EV 644 - Sound Spot 3. EV 664 - Dynamic Cardiod 4. EV 647A - Lavalier D. Care and Use of Microphones 1. Care and Storage 2. Speaking Distances	Reserve section in Library ... File: Microphones	1. Make sketches of common micropnone pick-up patterns. 2. Practice reading copy into various microphones. 3. Make notes in your notebook regarding special features of indicated microphones.	Hand in a short type-written paper on how a microphone functions.	

CONTENT–DESCRIPTION	REFERENCE	STUDENT ACTIVITIES	CONCOMITANT ASSIGNMENTS	AUDIO–VISUAL AIDS
LIGHTING A. Types of Light Sources 1. Hard Light Sources a. Spots 2. Soft Light Sources a Scoops b. Brawds B. Light Scales 1 Munsell 2. Kelvin C. Lamp Types 1. Flourescent 2. Carbon Arc 3. Tungsten Filert 4. Mercury Vapour 5. Quartz Iodide D. Lighting configurations for T.V. 1 Low Key Lighting 2. High Key Lighting E. Light Controls 1. Scrims 2. Gels 3. Gobos 4. Barn Doors 5. Reflectors 6. Dimmers F. Care and Maintenance 1. Lamps 2. Cables	printed notes entitled. Lighting Reserve section in Library ... File: Lighting	1. Draw to scale on graph paper lighting configurations for the following sets: a. Graphic Stand b. Newscast c. Demonstration d. Interview e. Panel 2. Be able to set lights in the Television Studio for any of the above configurations. 3. Be able to calculate the total amperage, wattage, and circuitry for a given lighting configuration.	1. Quiz on Lighting a. Light Sources b. Light Control c. Lighting Sets d. Power Requirements. 2. Hand in work sheet on Lighting Problems.	

CONTENT DESCRIPTION	REFERENCE	STUDENT ACTIVITIES	CONCOMITANT ASSIGNMENTS	AUDIO–VISUAL AIDS
TELEVISION SYSTEMS A. Transmission 1. Video 2. R.F. 3. [illegible] 4. [illegible] B. Distribution 1. Broadcast Television 2. Microwave Television 3. Closed Circuit Television		1. Draw in your notebook the following: a. A schematic of a Video System b. A schematic of a R.F. System 2. Be able to patch via R.F. programmes to the viewing monitors in the library. 3. Draw a schematic for a ten room single floor school closed circuit television installation. Assume that the school has labs and a studio and subscribes to a cable viewing system.	Students taking this course for senior credit and desire an A lettergrade are to turn in drawings and specifications regarding the aforementioned activity regarding the ten roomed closed circuit television installation.	

APPENDIX B

TELEVISION PRODUCTION 11E

WRITTEN EXAMINATION

Name_____

Date_____

TELEVISION 11E

1. You are a cameraman. The director tells you to

   (a) Dolly

   (b) Truck

   What is meant by these terms?

2. Camera 1 - has a picture of your speaker.
   Camera 2 - has a picture of a graphic of the speaker's name.

   (a) How would you show both pictures at the same time?
   (b) What equipment would you use to accomplish this?

3. You wish to make a graduai transition from a picture on Camera 1 to Camera 2.

   On what equipment would you do this?

TELEVISION 11E

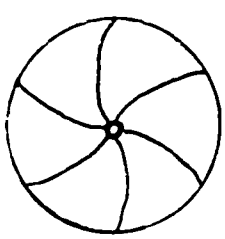
4. You want to show footage of the Winnipeg General Strike. Simultaneously, in the corner of the picture, you want to show a filmed interview with one of the important participants, discussing the events seen in the footage.

   (a) What equipment would you use to accomplish this?
   (b) What is the picture in the corner called?

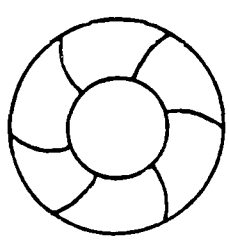
5. What is the purpose of external sync?

6. What are "barn doors" used for?

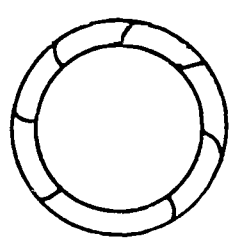
7. Circle the most appropriate f-stop number for each of the three diaphragm openings shown:



f/2.8
f/8
f/22



f/1.9
f/5.6
f/22



f/1.9
f/11
f/18

TELEVISION 11E

8. Match the given base-light levels with the appropriate diaphragm openings shown below (fill in letters):

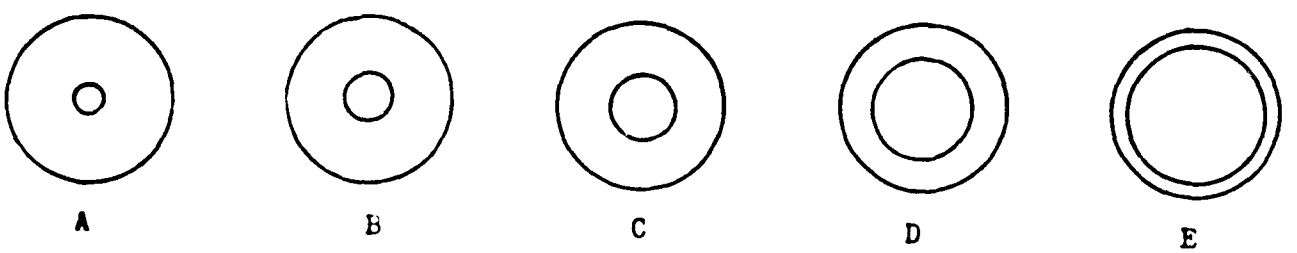
(1) very low level:

(2) high level:

(3) medium level:

(4) very high level:

(5) low level:



8a. In lighting a scene there are advantages in having a great deal of light. What are they?

9. If it was important to obtain picture quality, would you use the outgoing monitor or the Wave form monitor?

TELEVISION 11E

10. You have three people in an interview and you wish to introduce the program with music.

    (a) List two ways in which you can use microphones in this situation.

    (b) How would you blend microphones and music to control the sound from all sources?

11. Indicate with a check the output impedance of the following:

	High	Low	Both
Videotape recorder	____	____	____
Record player	____	____	____
Audio tape recorder	____	____	____
Hz microphone	____	____	____
Lz microphone	____	____	____
Microphone mixer	____	____	____

12. The floor director takes his forefinger and runs it across his throat. What does it mean?

13. When the production is in progress, who is the ultimate authority?

14. Explain the following terms:

    (a) pan

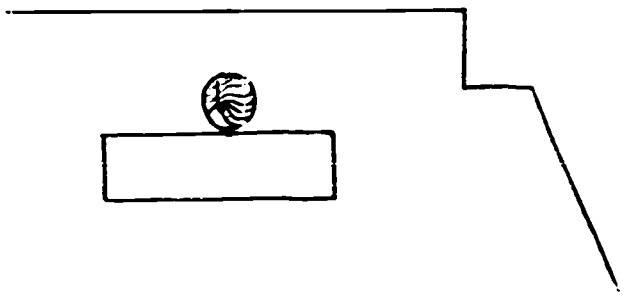
    (b) tilt

    (c) zoom

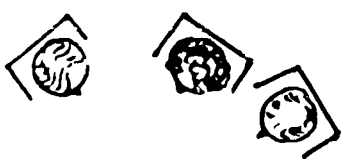
TELEVISION 11E

15. Using the symbols  (lights)  (camera)  (microphone), illustrate the position of lights, TV cameras and microphone for the following programs. List the Control Console equipment you would use for the programs.

(a) Newscast. Newscaster seated at desk throughout.



(b) Interview. Interviewer and two guests, all remaining seated.



APPENDIX C

TELEVISION PRODUCTION 11E

CHECKLIST FOR THE USE OF EQUIPMENT

CHECKLIST FOR USE OF EQUIPMENT

	Excellent	Good	Fair	Poor
1. Television Camera:				
a) turn on and adjust camera, using correct aperture and F-stop				
b) adjust head and mechanical locking devices				
c) dolly camera and pan camera				
d) hook up camera and RF and videotape				
e) sync up camera and monitor				
2. Video Console:				
a) turn on and adjust to test pattern for contrast i) viewing monitor ii) underscan monitors				
b) select and preview material				
c) use special effects				
i) fade				
ii) super				
iii) split screen				
iv) negative image				
d) use waveform monitor for				
i) camera outputs				
ii) VTR outputs				
iii) sync level outputs				
iv) initial set-up of all components				
3. Audio Console:				
a) turn on and adjust				
i) VU meter				
ii) potentiometer				
iii) master gain controls				
b) mix				
i) voice and music				
ii) voice and voice				
iii) music and music				
iv) 2-5 inputs simultaneously				
v) music under				
vi) voice under				
c) understand audio cues				
d) establish and maintain average 80% VU rating				
e) cue records				
f) hook up				
i) lavalier mike				
ii) electrovoice mike				

	Excellent	Good	Fair	Poor
4. Lighting:				
a) control lights with				
i) barn doors				
ii) scrims				
iii) gels				
iv) gobos				