University of Regina

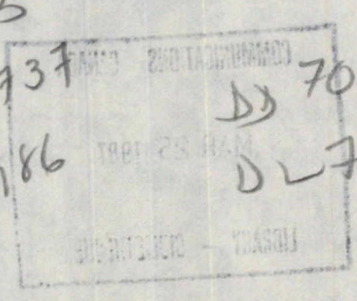
# A SYSTEM EVALUATION OF THE UNIVERSITY OF REGINA TELEVISION PROJECT FALL 1985 SEMESTER

# A SYSTEM EVALUATION
# OF THE
# UNIVERSITY OF REGINA
# TELEVISION PROJECT:

## FINAL REPORT
## MARCH 1986

CYRIL KESTEN, Ph.D.
J. ORRISON BURGESS, D.Ed.
I. CHRISTOPHER ELFORD (RESEARCH ASSISTANT)
OF THE
EDUCATIONAL STUDIES GROUP
FACULTY OF EDUCATION
IN COLLABORATION WITH
UNIVERSITY EXTENSION
UNIVERSITY OF REGINA

FOR
THE DEPARTMENT OF COMMUNICATIONS
GOVERNMENT OF CANADA



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# EXECUTIVE SUMMARY

This is a report of the University of Regina television project during the 1985 Fall Semester. The purposes of the evaluation were to determine the effectiveness of the particular approach to distance education (television and two-way audio communication) and the appropriateness of a particular evaluation model for such an evaluation.

The University of Regina project is a delivery system of university classes to centers in southern Saskatchewan through the use of one-way television transmission and two-way telephone hook-ups. Four different classes were offered; in each instance there was a class on-campus receiving the instruction "live" and class groups in five other centers receiving the class via television. Two hundred and thirty-seven students were enrolled in the classes (99 on-campus and 138 off-campus).

This evaluation was designed to attempt to determine the following:

1. Do students at a distance using this format learn as well as on-campus students?
2. Is this an accepted method of learning from the student's perspective and is this an accepted method of teaching from the instructor's perspective?
3. What production techniques are needed to permit a good learning environment yet at the same time not to change the way university professors relate with students?
4. What equipment improvements are needed to make these classes better for students and instructors?

5. To examine support systems, technical systems, student's perception and achievement and student-instructor interactions resulting from classes being delivered utilizing the mode of instruction indicated above.
6. Does the application of analysis procedures to the collected data concerning intended antecedent conditions, intended transactions, and intended outcomes and actual antecedents, transactions, and outcomes provide a suitable and efficient evaluation model?

Data were collected before, during and after the semester from all of the participants: University Extension, university AV Services, community colleges, instructors and students. Some or all of the participants provided data through questionnaires, interviews, observations and weekly reports.

The evaluation was based upon the contingencies present within the antecedents, transactions and outcomes and the congruencies between intentions and actual events. These findings are described in Part I of the Report. The evaluation of the evaluation model is found in Part II and the Report concludes with thirty-eight conclusions and the forty-seven recommendations based on the findings and conclusions.

The major conclusions of the evaluation have to do with the evaluation model and the University of Regina delivery system.

The model is appropriate for evaluating technical and instructional systems similar to the University of Regina model.

The "system" conclusions relate to the degree to which the classes were comparable to classes delivered using "normal" university practices. Intentions and expectations of all participants were met; however, there was a hesitancy to plan or use procedures which

took advantage of the technology. Off-campus students were willing to overlook problems (transmission difficulties, boredom, feelings of isolation, etc.) in order to take a class locally. The two-way telephone system is a major problem because it seems to be too disruptive and awkward to use. However, these problems seemed to have no effect on achievement; the off-campus students' grades were similar to students on-campus.

A number of small changes in the support system and technical system would greatly enhance the program of distance education but the most significant improvements would result from careful selection of skillful instructors who are willing to plan for and exploit the advantages which are offered by this class delivery system. The expected improvements would result from the program of instructional planning, monitoring and coaching which the evaluation report recommends.

# INTRODUCTION AND EVALUATION DESIGN

## INTRODUCTION

I. Rationale

This evaluation has been done for two purposes: to determine the efficacy of the unique approach to distance education being utilized at the University of Regina and to determine the appropriateness of a modified Stake Countenance evaluation model for evaluating the approach.

II. Objectives of the Evaluation Study

A. Objectives

This study has been designed to attempt to determine the following:

1. Do students at a distance using this format learn as well as on-campus students?
2. Is this an accepted method of learning from the student's perspective and is this an accepted method of teaching from the instructor's perspective?
3. What production techniques are needed to permit a good learning environment yet at the same time not to change the way university professors relate with students?
4. What equipment improvements are needed to make these classes better for students and instructors?
5. To examine support systems, technical systems, student's perception and achievement and student-instructor interactions resulting from classes being delivered utilizing the mode of instruction indicated above.
6. Does the application of analysis procedures to the collected data concerning intended antecedent conditions, intended transactions, and intended outcomes

and actual antecedents, transactions, and outcomes provide a suitable and efficient evaluation model?

B. Audiences served by the evaluation

This report is of particular interest to the participants in the program at the University of Regina:

-the Faculty of Extension, Extra Session Degree Credit Division,

-Audio-Visual Services, and

-the instructors and their Departments.

To a somewhat lesser degree these following agencies, groups and individuals will be interested in the report:

-Department of Communications, Ottawa,

-the Community Colleges system in Saskatchewan,

-faculty and Faculties of the University of Regina who have participated in distance education or who are contemplating such activity, and

-Sasktel

A third audience group might be composed of others who are considering distance education via television with two-way audio communication, program evaluators, and former and/or future students.

III. Normal procedures for classes offered by Extension

The Faculty of Extension is responsible for providing and managing those classes which are offered during the regular semester at night and off-campus. Additionally, this Faculty has complete responsibility, in an organizational and management sense, for all of the classes offered during the Spring and Summer Sessions. This evaluation is concerned with a unique portion of the classes offered in the 1985 Fall Semes-

ter. Although the classes are unique due to the format of delivery, the procedures employed to set up the classes are the same as those employed for all the Fall 1985 classes offered by Extension.

Extension develops the total offering of the program from suggestions made by Departments and Faculties, Community Colleges and students. Instructors, usually university faculty members, are secured and the various advertising processes are initiated--a calendar, newspaper ads, announcements, and the like. In some instances the community college might also duplicate some of the advertising procedures.

Normal prerequisites and regulations apply to the students. They are registered in the classes either through normal university procedures and channels or through their local community college.

IV. Description of the Program

A. Introduction

The University of Regina has offered distance education to its students for many years. Until 1984 the program had primarily taken the form of off-campus classes or "teleconferencing" (where there was a telephone hook-up between a professor located on the University campus and students in their home communities). The students most often met for their "class" in the local school. In September of 1984, the University had the unique opportunity to utilize "narrowcasting" of classroom activity to distant classroom sites in southern Saskatchewan utilizing fibre optics and television. From the initial inception of this approach four classes have been provided each semester.

B. Classes and delivery mode

During the period of this evaluation, the classes offered were in Administration (management), History (Western Canadian), Psychology (child development), and Social Work (children's services).

The classes spanned the range from first year to fourth year: one first year, two second year and one fourth year.

Each class was offered as an on-campus night class, i.e., in a normal classroom, with an on-site instructor (a university faculty member) delivering instruction to a group of students who had been registered in the class through the normal procedures. In this classroom however there were two ceiling suspended cameras, fixed microphones and a multi-channel telephone with speakers.

The signal is carried from the classroom to the AV centre at the University of Regina. From here it is transmitted to the Sasktel building on co-axial cable. Sasktel sends the signal to the five remote centers by fibre optic cable.

At Swift Current, Moose Jaw and Yorkton, Saskatchewan the signal is "dropped" at the local cable operation and subsequently distributed on channel 28 within the UHF band. A converter on the television set in the classroom provides the signal there. This is the same manner in which cable operators distribute UHF channels. Consequently, anyone who is a subscriber to this option can pick up the class on their own set at home. This group could, therefore, include students enrolled in the class who might opt to

stay at home for the class rather than go to the community college location.

In the other communities--Weyburn and Estevan, Saskatchewan--the signal is distributed by micro-wave. Only the community college location can pick up the signal. (A technical report and log of technical problems are provided in Appendix I.)

This equipment provided the means for the off-campus delivery of the classes. These centres could phone in to the on-campus site at any time. The conversation between the centre and the instructor was amplified so that the students in all the centres--on and off campus--could hear the questions, answers and ensuing discussion.

Most of the off-campus sites were classrooms in community college settings which were specially fitted with a television set and the phone/speaker arrangement for the special line to the university in Regina.

This program was provided in Regina and in five off-campus sites. The details of classes, sites and initial and final enrolments are shown on Table 1.

C. Procedures for televised classes

A variety of activities are engaged in prior to the first class. Extension does some minimal in-service with the instructors--essentially a meeting to view a videotape describing the delivery system and to answer questions about the system. Extension also assures that the site is ready for these classes. The Audio-Visual Services unit secures and trains its operators and establishes that the technical details and operations of the system are opera-

Table 1

Enrolments in Narrowcast Classes in all Centers:
Highest Enrolment and Final December Enrolment

| SITES | | ENROLMENT IN CLASSES HIST 100 | ADMN 200 | PSYC 210 | SW 414 | |
|---|---|---|---|---|---|---|
| Regina | Highest | 13 | 33 | 37 | 26 | |
| | Final | 10 | 29 | 37 | 23 | |
| | | | | Final on-campus total | | 99 |
| Weyburn | Highest | 5 | 1 | 3 | 12 | |
| | Final | 5 | 1 | 3 | 12 | |
| Estevan | Highest | 3 | 17 | 4 | 3 | |
| | Final | 3 | 9 | 4 | 3 | |
| Swift Current | Highest | 9 | 9 | 3 | 8 | |
| | Final | 7 | 9 | 3 | 8 | |
| Moose Jaw | Highest | 13 | 13 | 10 | 19 | |
| | Final | 13 | 11 | 8 | 11 | |
| Yorkton | Highest | 2 | 15 | 0 | 13 | |
| | Final | 2 | 13 | 0 | 13 | |
| | | | | Final off-campus total | | 138 |
| Totals | Highest | 45 | 88 | 57 | 81 | |
| | Final | 40 | 72 | 55 | 70 | |
| | | | | Final total | | 237 |

tional. AV Services also offers assistance to the instructors, if so wished, with respect to use of audio-visual and instructional aids and details concerning instructing via television.

Because of some of the activities of Extension and AV Services the community colleges are somewhat more active with respect to these classes than to others they are coordinating. Normally, an instructor comes to the community college site and after the first class begins there is relatively little for the community college staff to do with respect to the class. In these instances--the television classes--there is much more planning and continuing involvement due to the need to secure and arrange for the equipment, act as a book seller, and during the semester to be the contact between the class and the instructor for assignment and handout distribution and for testing and examination arrangements.

Often the instructor makes some contact with the off-campus students before the first class. This contact takes many forms--meeting and sharing photographs, having the technology explained, discussing the courier or delivery system, etc.--but essentially, the major objective is for the instructor and students to have an opportunity to meet each other in a "live" situation.

Much of what happens at the first class is what always happens: outlines are distributed and discussed, assignments and reading responsibilities are discussed, deadlines are clarified, expectations and regulations are reviewed. In addition, in these class situations someone from AV

Services is present to explain the operation of the system and to make sure the off-campus sites are getting a good transmission of the picture and audio and that each of these sites can operate the telephone arrangement.

For the classes constituting this evaluation, one of the evaluators was also present at the first class and explained that an evaluation was taking place, the primary objectives of the evaluation, the manner in which the students would be involved in the evaluation, and the possibility of one or more members of the evaluation team attending some classes or all of the sites.

D. Extension students

This section will indicate who these students are and how they are attracted to night classes offered by university extension.

Generally, these students are more mature than their regular student counterpart. There are possibly more exceptions to this for those who take classes on-campus but the general characteristic is maturity. They enroll in these classes, on- or off-campus, because the classes are a normal degree requirement, or because the credit will enhance their employment status, or because the class is of personal interest--it must be noted that the personal interest choice is almost exclusively restricted to off-campus students. The vast majority of all of the students are part-time students.

Students are attracted to these classes as a result of a number of influences: the advice of their university counsellor, the description in the Calendar, the class

being timetabled at an appropriate time, newspaper advertisements (the Regina paper and in some instances the local paper) and information bulletins distributed by the local community college.

**EVALUATION DESIGN**

I. Description

The evaluation of this project was based upon the "system of delivery" of the classes. The evaluation methodology was a modified Stake "Countenance" Model. In this model there are two matrices of consideration: description and judgment. In this evaluation it was decided that only the description matrix would be employed due to the absence of either comparable or absolute standards--a requirement of the Stake model.

A more detailed description of the model is provided as an Appendix (A). However, a brief operational description follows. The intended antecedents (variables) are identified, the manner in which the activities are intended to proceed are described, and the intended (or expected) outcomes are stated.

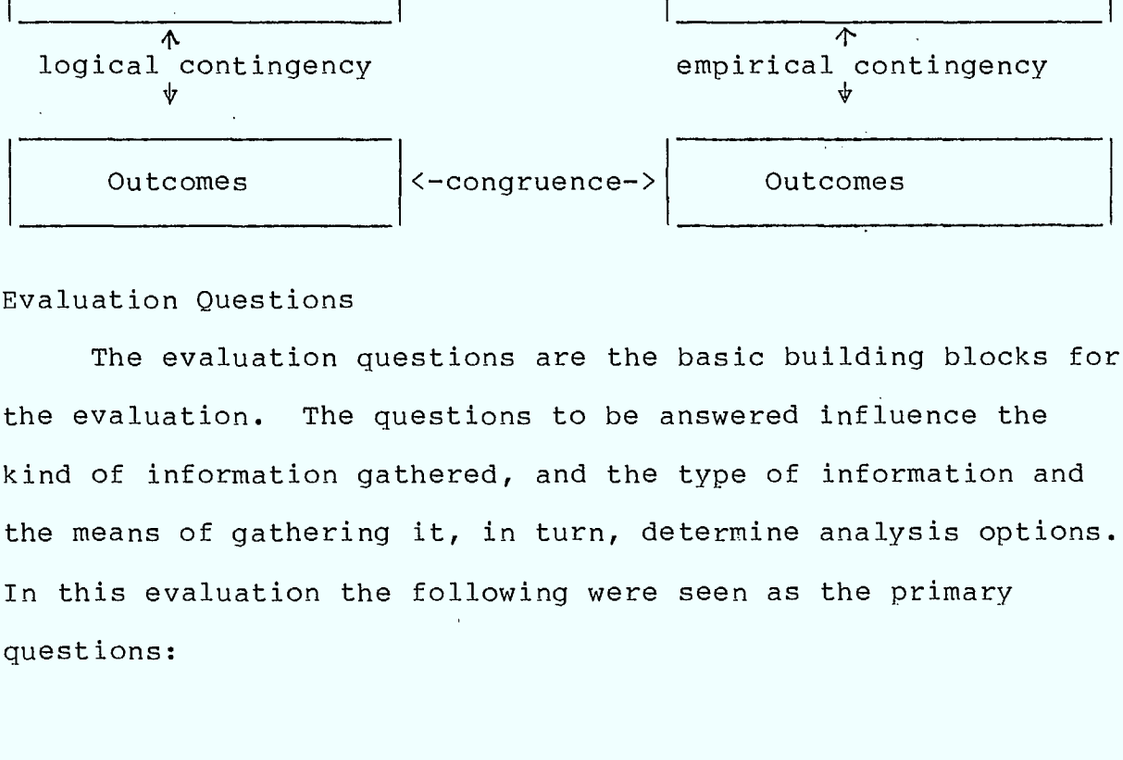
| Intended |
|---|
| Antecedents |
| Procedures |
| Outcomes |

These descriptions are then observed and compared. What antecedents were actually present? How did activities actually proceed? And what/which outcomes were achieved?

| Intended | Observed |
|---|---|
| Antecedents | Antecedents |
| Procedures | Procedures |
| Outcomes | Outcomes |

Descriptive Matrix

The evaluation questions relate to determining the degree of logical and empirical contingency between antecedents, procedures and outcomes; as well as the degree of congruence between intentions and observations.




## II. Evaluation Questions

The evaluation questions are the basic building blocks for the evaluation. The questions to be answered influence the kind of information gathered, and the type of information and the means of gathering it, in turn, determine analysis options. In this evaluation the following were seen as the primary questions:

1. What do students expect of a class with respect to planning, organization and instructional delivery?
2. What do students like and dislike about receiving a class via television and two-way audio communication?
3. Does this type of class satisfy outcomes designed by both the on-campus and off-campus students?
4. What do instructors intend to do? What do they actually do?
5. What does the class delivery system (Departments, Extension, AV Services, the Community Colleges) intend to have in place and to operate in a way which will meet the objectives of the various parts of the system?
6. Does the system provide what is perceived to be the appropriate level of support?
7. Are there features of the delivery system (particularly technical aspects) which detract from achieving the objectives of the class? Of the system?
8. Is the Stake model an appropriate device for securing answers to these questions?

III. Sources, Methods and Schedule for Data Collection

Data were collected according to the parameters set out by the evaluation model chosen. Questionnaires, interviews and class observation, both live and taped, were the primary sources of information. (See Figure 1.)

Figure 1

Sources, Methods and Schedule for Data Collection

| | |
|---|---|
| Prior to classes | - Questionnaire (Instructors, Students, Extension, AV Services, Community Colleges) |
| | - Interviews (Students)* |
| 1st week 9/9/85 | - Interviews (Instructors, Extension, AV Services, Community Colleges); * |
| 2nd week | - Observation by video; * |
| 3rd week | - * |
| 4th week 7/10/85 | - Observation by video; * |
| 5th week | - Observation by video; * |
| 6th week | - (mid-term): * |
| 7th week | - * |
| 8th week 4/11/85 | - * |
| | - Questionnaires to all parties; Observation live off-campus; * |
| 9th week | - Interviews (all parties); Observation live off-campus; * |
| 10th week | - Observation live on-campus and off-campus; * |
| 11th week | - Observation live on-campus; * |
| 12th week 2/12/85 | - * |
| 13th week | - Questionnaire (all parties); Interviews (Instructors, Extension, AV Services, Community Colleges); * |
| in Jan. 1986 | - Interviews (Students) |

*Weekly report of plans and a review of previous class were turned in by instructors.

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A. Questionnaires

Questionnaires (see Appendices) were prepared, distributed, collected and analyzed in a preliminary manner at three times during the evaluation: early--antecedents; mid-term--transaction and late--outcomes. These questionnaires were sent to all students and instructors, as well as to the Director of Audio-Visual Services of the University, the Assistant Dean and the Administrative Assistant of University Extension, and the contact people of the various community colleges participating in the delivery of the classes.

The first battery was prepared and distributed prior to the first class-session. The questionnaires developed in the pilot evaluation in 1984 were used as the basis of the antecedent questionnaires with the exception of the community college representatives' form which is new to this evaluation and was not used in the pilot study. This latter form was developed because of the integral role it was felt that the community colleges play in the delivery of the classes.

These antecedent questionnaires asked for expectations regarding activities, conditions and outcomes for the classes.

The transaction questionnaires were distributed in early November, approximately half-way through the semester. The distribution was timed so that they would be filled out after the first assignments or tests had been submitted and the results made known in all four classes. Input for these questionnaires came from the experience and information gained during the Data Base Phase as well as the issues which emerged from the preliminary analysis of the antecedent questionnaires, observations, and antecedent interviews (see section on Interviews, below). These questionnaires were intended to elicit responses that would indicate the actions taken by the different principal groups and the attitudes that were developing toward the technology and the system by these groups.

The final student questionnaires, intended to gather outcome data, were distributed in December, at the time of the final examination in three classes and after the last

lecture period in the remaining class (Social Work 414), which did not have a final examination. Questionnaires for the other principal groups were distributed during the final examination period in December. The design of these questionnaires was based on the preliminary analysis of the first two sets as well as the results of observation, interviews and the pilot study.

Weekly reports were secured from the professors outlining their intentions for the next class and their actions during the previous class relative to instructional design and technical problems. A sample of this form is included in Appendix D.

B. Interviews

Extensive interviews were conducted with the principal groups involved. Randomly selected students were interviewed just prior to the semester, in November and again in January. These interviews followed the questionnaire forms for the most part and sought clarification and additional detail to identify the context of the responses gathered. Telephone interviews were conducted with 39 students. The antecedent interviews involved the students from each on-campus class and one student from each off-campus site. The transaction and outcome interviews involved one student from each on-campus class and two students (each in different classes) from each center; except in one case where only one student was contacted.

University Extension, Audio-Visual personnel and professors were interviewed in person at each stage. (One professor left on sabbatical leave prior to the interview

for the outcome data.) Students were also interviewed in person during visits to Moose Jaw (Psychology 210, History 100 and Administration 200) and Weyburn (Social Work 414).

C. Observations

Classes were observed to record the nature of the classroom transactions. Questions by students and discussion between off-campus students and professors were observed and recorded. Classes were observed twice on videotape (Social Work 414--September 16 and October 7; Administration 200--September 17 and October 15; History 100--September 18 and October 16; and Psychology 210--September 19 and October 17). Each class (Social Work 414--November 18; Administration 200--November 19; History 100--November 27; and Psychology 210--November 28) was observed live in the on-campus classroom. Four off-campus classes (Moose Jaw--History on November 20, Administration 200 on November 12 and Psychology 210 on November 7; Weyburn--Social Work 414 on November 18) were observed to experience the nature of the situation in these centers and to conduct interviews and discussions with off-campus students.

D. Attendance Record

Volunteers in each off-campus site were asked to keep attendance records which were to be submitted at the end of the semester.

IV. Data Treatment and Analysis

The ongoing analysis of the data collected during the 1985 Fall Semester provided information which was very similar in quality and nature to the instructional system studied in the

Fall of 1984 during the Data Base Phase. Although different classes were held during these semesters, it seems that the instructional system remains the same in its effect on students and other involved personnel.

The data gathered has been analyzed to determine the contingencies and congruencies by studying the nature of the interactions, instruction, and problems in using one-way video and two-way audio to mediate instruction of these classes; to identify the issues, attitudes and concerns of the principal groups involved; and to posit possible improvements that could be implemented to improve the system. A second purpose of the anlaysis is to identify aspects of the evaluation techniques that should be improved and/or used as a model for future evaluations.

# PART I

## THE EVALUATION FINDINGS

### I. Data Collection

According to the evaluation model data were collected from all participants in the project at three different stages. Antecedent data, that is data pertaining to conditions obtaining prior to the first day of classes, were collected from all the instructors, Extension, Audio-Visual Services and Community College personnel as well as from a sample of students.

These data were gathered through the use of Questionnaires (see Appendix B) and personal interviews. In the case of students, most interviews were conducted by telephone. This procedure--questionnaires followed by interviews--was used through each data collection stage. Additionally, course outlines were collected and analyzed.

Transaction data, that is, data concerning the day to day activities and behaviors of all personnel involved were collected in a number of ways. A questionnaire was administered to all parties following the midterm point. In addition, numerous lectures were observed either live or on tape. Instructors were also asked to complete a weekly form reporting the prior week's happenings and the subsequent week's plans (see Appendices). As well, a technical log was kept by AV Services (Appendix I). Attendance records were also kept by volunteers from the student population at each site.

Outcome data was collected from all of the usual sources by questionnaire and interview as well as through an analysis of class marks and final grades. A sample of students was interviewed after the classes were concluded.

## II. Findings

In the remainder of this Part the findings will be reported with respect to the Antecedents, Transactions, and Outcomes. In each instance, where possible and appropriate, the findings will refer separately to Instructors, Students, Extension (Faculty of Extension, Extra Session Degree Credit Division), AV Services, and Community Colleges. Comparisons between "intentions" and "observations" will be made when this will assist the explanation but most of this evaluative discussion of the relationships and congruencies will be in Part III.

### A. Antecedents

#### 1. Instructors

1.1 Selection. In general the instructors of these classes were not experienced in the delivery of televised courses. Two instructors had some experience with distance education and were interested in accepting this current opportunity. Of the other two instructors, one felt like a "draftee" while the other was a late replacement for the scheduled instructor who had become ill.

1.2 Planning and preparation of class. Instructors generally indicated that their planning/preparation time was adequate and that administrative and technical support was satisfactory. However, some instructors were concerned with lead time necessary in terms of requesting permission to use certain visual material and in the preparation of new materials. There was some concern with the resources and support

system necessary to make instructional decisions, e.g., libraries.

1.3 Support. Although support from Extension and AV Services was available the instructors remarked that assistance had to be sought out. There was general dissatisfaction with the availability of information about the delivery of off-campus classes by electronic or telephonic means. On the other hand the instructors' expectations, i.e., the class, its delivery and students, seemed to be no different (other than the ever present camera) than for on-campus "normal" classes. They generally expected the students to be basically the same and other than basic technical breakdowns expected the class environment and culture to be the same as an on-campus class.

When asked to what extent AV Services would provide on-going assistance, there was a spread of ideas ranging from considerable to minimal. However, when asked the same question concerning their Department or Faculty all instructors predicted a minimal role.

1.4 Contact with students. No instructor met with on- or off-campus students in a systematic way prior to the class beginning, but all planned to at least meet the off-campus students during the semester. Planning for classroom meetings was very similar to normal plans any instructor might make; lectures, class discussions, films, etc. The instructors anticipated a fair amount of interaction between students and them-

selves and between student and other students. They, however, believed this to a lesser degree for the off-campus students.

1.5 Assignments/test distribution. Plans for assignment and test distribution and return were adjusted to take into account the off-campus students. Emphasis was placed on support by Department staff and/or Extension to assist with this aspect. Feedback plans to students involved more extensive written material as well as in person and telephone meetings.

2. Students

2.1 Registration. Students, both on- and off-campus, became aware of these classes in the expected manner. On-campus students used counsellors, newsletters and the University calendar to make their class choices. Off-campus students relied more heavily on community college advertisements and friends. Most off-campus students were aware that the classes were being televised while only a few of the on-campus students knew this fact. Most students had not been in televised classes before and very few had even spoken to other students who had been in such classes.

Both on- and off-campus students were enrolled in these classes primarily to fulfill program requirements. Although, a number indicated that they were enrolled in their particular class because of work advancement opportunities.

2.2 Benefits and limitations. When asked what they considered to be the benefits of the use of

television in transmitting these classes, students on- and off-campus acknowledged the convenience for the off-campus student in terms of less travel, availability of classes, etc. Some concern was expressed when considering the disadvantages of such a system. A common fear was the possibility of a marked decrease in interaction between students, and between students and instructor. Generally students were unsure as to the long term and personal effects the use of this technology would have on their experiences in these courses.

Students generally felt that the instructors/community college personnel should provide more information before the class begins concerning the technology used and some of the potential effects of the technology. Some students indicated that they may have thought twice about taking a televised class. In addition, both on- and off-campus students did not see the need to prepare themselves with respect to the technological aspects of these courses. Their concerns prior to the commencement of classes were to obtain the texts, find the room, etc.

2.3 Expectations for instructors. On-campus students expected the instructor to be available in the manner which is usually customary on-campus, i.e., before, during and after class. Off-campus students indicated that they would like to see the instructor in person at least once a month, if not more often.

Student expectations concerning the instructional process were consistent both on- and off-campus. All

students expected the instructor to lecture in a manner to which most students had become accustomed. As well, very few students expected any difficulty in receiving assistance, advice and/or further information as a result of the use of the technology.

2.4 Student relationships. On- and off-campus students agreed on the expectation that there would be considerable student to student interaction with limited student to professor interaction. All students indicated that they would likely rely most heavily on other students' notes and recollections if they were to miss a class.

2.5 Texts and materials. On-campus students did not see any unusual problems when asked about how they would get texts and other materials necessary for the class. Off-campus students had a variety of concerns and ideas. Some expected that the Community College would make the texts and materials available while others expected the instructor to have these items sent to the off-campus location for the first class and others expected to have to travel to Regina to buy the texts at the University bookstore.

2.6 Evaluation. Students in all locations did not expect to be evaluated any differently than they have been evaluated in the past by University instructors. All expected exams, essays and other normal assignments.

3. Extension

3.1 Philosophy. Extension's expectations for these classes reflects the desire of the University of Regina to reach as many students as possible through its extension programs. The personnel in Extension who are involved in this project see a need being met. Sites where only a few students desire particular classes and/or where qualified instructors are not available may now be serviced through this T.V. project.

Although Extension realizes that many of the students in the remote sites view this approach as 'second best', that is, they prefer live instructors, Extension believes that many students are being satisfied by this program. Students in isolated communities, far from major centres, where instructors are either hired locally or sent out from the University, can now receive quality instruction with minimal travel and expense.

3.2 Effect of the technology. The members of Extension who were questionned and interviewed expected that the technology might inhibit discussion and interaction. They also expected that the instructors would take a while to 'get used' to the technology in terms of relaxing in front of the camera and using the blackboard and overhead in a manner which would allow them to be seen in the remote locations. They worried about signal reception, size of the television receiver, blurring of overheads and boardwork as well as

the students' ability to get used to the telephone technology. Generally it was expected that the students would react positively but with reservations. Positively, in that the class was now available in a reasonable location. Reservations were related to the length of the sessions and lack of interaction between the instructor and students--particularly the off-campus students.

3.3 Instructional considerations. The ability to project oneself, clear enunciation and an accepting personality were seen to be important characteristics of an instructor teaching one of these classes.

The preplanning done by AV Services, the instructors and the Department Heads and Deans involved was viewed as being satisfactory as was the amount of historical information regarding these kinds of classes.

3.4 Planning considerations and expectations. A concern was raised regarding the time available to Extension to do its planning. This was caused by the summer closure of the community colleges from July 15 to August 19. This had some effect on timetabling, scheduling and advertising.

Extension personnel expect their role to be one which supports the activities of the instructor. Reflecting this is the expectation that Extension will respond, if asked, to arrange meetings between the students and the instructor, or arrange for texts and other materials to be sent to the remote locations,

etc. In particular, Extension expects to be asked to assist if problems arise. Extension expects participants to 'cope or call'.

Extension expected AV Services to provide high levels of ongoing technical assistance. They also expected the community college to become the "instructor's hands in the community."

4. Audio-Visual Services

4.1 Anticipated problems and effects. The main objective here was to provide adequate and sufficient facilities and equipment for the successful transmission of these classes. Few problems were expected in AV Services' relationship to Extension, the instructors, the students and the community colleges but some concern was expressed when questionned about the hardware and technical personnel.

As is always the case, when dealing with technical hardware there was some worry concerning breakdowns, replacement parts, quality of transmission, etc. Additionally, there was a concern about the personnel manning the equipment. The concern was related to their ability to remain tuned in to the instructor and maintain a quality transmission signal as well as perform appropriate camera work.

AV Services expected the technology to have both negative and positive effects. Negative effects were related to the intrusion and distractions caused by the equipment and environment itself as well as the poor quality of transmission, i.e., poor color, framing and

focus and extraneous noises.

Positive effects were expected to relate to the instructor's heightened awareness of speaking habits and use of audio-visual aids.

AV Services expected that students would be looking for an 'entertainment style' from their instructors due to of the use of the technology.

4.2 Meetings with participants. Meetings with instructors and others involved were looked forward to by the AV personnel as opportunities when the equipment could be demonstrated and explained. They also hoped to resolve some perceived problems and reassure instructors that this new form of class delivery will present few new or different problems. As well, AV Services hoped to support the instructors by observing and providing advice and assistance as it might seem necessary. However, there was a concern expressed about the extent of involvement in timetabling these classes. Having little involvement meant that AV Services had less than the desired amount of time to prepare for the more difficult technical and legal problems posed by some classes.

5. Community Colleges

5.1 Objectives. The community colleges' objective for this project was to offer classes that otherwise would not be available to students in their areas.

5.2 Expectations. They expected problems to arise in two areas concerning the technology. First, the hardware may not provide adequate reception, color,

audio signal, etc. Secondly, they were concerned about the camera work. Poor camera work would not allow students at the remote site to see overheads and items on the chalkboard properly and, these factors might, therefore, interfere with the learning process.

There was a general indication that the preplanning which needed to be done by the parties involved in the delivery of the class had been done. It was felt that for this group of classes the planning was superior, or at least more advanced, than for off-campus classes in the past.

The community college personnel expected the off-campus students to be highly motivated and generally accepting of the technology. They assumed that the students' expectation of the class to be 'normal' and they expected their own role to be one of facilitation. Arranging rooms, hardware, delivering and distributing materials were all seen to be within the range of their activities.

5.3 Instructional approach. When asked about a preferred instructional style none were indicated except by one community college person who suggested that the best style would be a clear concise lecture while the poorest style would be any kind of group participation. However, in general, it was expected that the students, in the remote locations, would not participate as much in class discussions because of the technology.

B. Transactions

Transaction data was collected in a variety of ways during the semester: questionnaires, interviews, weekly reports, a log of technical events, and observations and analysis of both on- and off-campus classes--on tape and live. (All classes were recorded on videotape and stored; both for use in this evaluation and for review by students and instructors.)

1. Instructors

Instructors reported on most of the areas concerning the transactions in their class through the questionnaires, interviews and the weekly report forms. These primarily focussed on their relationship with the support network, the technology and their students.

1.1 Support and resources. Generally the instructors were satisfied with the support they received from the various groups involved in the project: Extension, community colleges, their own department heads and support workers, and AV Services. However, library resources and their availability frequently was raised as a problem. Other resources such as textbooks and duplicated handouts were also a concern due to the lead time necessary for proper duplication and distribution as well as the potential problems with use of copyright materials.

1.2 Planning. Three instructors indicated that the planning and preparation for these classes took more time than that normally devoted to a 'regular' class. These instructors indicated an average prepara-

tion time of about six (6) hours a week. The other instructor indicated that the preparation for this class was basically the same as for other classes in terms of the number of hours spent in preparation in that at least 4-5 hours were spent in preparation per week; but sometimes this was less if the film used that week was longer than normal.

This extended preparation time reported by most instructors was attributed to the extended class time (3 1/2 hours) and to the need to have duplicated materials ready for early distribution to the off-campus locations.

1.3 Instructional aids. Audio-visual aids were reported to be used frequently. Films, overheads, video and the blackboard were the typical aids used. Other than one professor's activity in gaining copyright permission, most instructors indicated that no special arrangements were made to use these audio-visual aids other than some help from AV Services on format and size of print.

1.4 Effect of the technology. The instructors reported that there were a number of 'intrusions' by the technology. Principally these 'intrusions' centered on equipment malfunction and delays in communication with the off-campus students. The tempo of the classes was slowed down because the delay in telephoning from the off-campus sites broke the continuity of the discussion.

When asked how they used the positive aspects of the technology two instructors had no response. Another indicated that it demanded more organization and one stated that the technology was used to create and engage the students in group work. When asked how they were compensating for the negative effects of the technology answers such as "accept it" and "try to see the humour in it" were provided. The instructors also individually indicated that they slowed the pace in order to include the off-campus students in the discussions; asked students to call in with problems; and spoke directly to the students both on- and off-campus so as to minimize the negative effects.

1.5 Student meetings. At the time the transactions questionnaire was distributed--mid-term--three instructors indicated that they had met with the off-campus students. These meetings were to identify and deal with specific off-campus problems, add the personal touch to this technologically mediated system and to try to discover how the class was being received by the students at the off-campus locations.

1.6 Class format and interactions. Another area of investigation was the classroom behaviour and interactions of the instructors and students. The information reported in this section was gathered through observation, and through the questionnaires and interviews conducted with the instructors.

Although instructors had their own personal versions of a typical class, generally the classes were

very similar. Each centered on a lecture by the instructor (or a guest). There was some attempt at student input either through question and answer or through some type of group work, e.g., cases, discussions, etc.; and in at least two classes a film was regularly shown.

In all cases instructors generally taught the classes in a manner consistent with their plans for that evening. There was decreasing use of the overhead projector over the length of the semester. However, the quality of the transmission caused some concern and this may account for this reduction. The level of interaction amongst the students and between the students and the professors was in all but one case seen to be acceptable but at a lower level than expected.

1.7 Observations of class sessions. A research assistant and the principal evaluators observed 15 of the 51 classes in order to record the interactions between the instructor and students (Table 2). To a lesser degree there were observations of the student-student interactions. The observations took place in three ways: by viewing the video tape of a class; by attending the class on-campus; and by attending the class at the off-campus site.

Table 2

Classes Observed "Live" and on Video

| Class | Week of September 9 | 16 | 23 | 30 | October 7 | 14 | 21 | 28 | November 4 | 11 | 18 | 25 | December 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HIST 100 | | V | | | | V | L MJ | | | | | L O | |
| ADMN 200 | | V | | | | V | | | | L MJ | L O | | |
| PSYC 210 | | V | | | | V | | | L MJ | | | L O | |
| SW 414 | | V | | | V | | | | | L W | L O | | |

Key:
L live
V video
MJ at Moose Jaw
W at Weyburn
O on-campus (Regina)

When the principal evaluators attended a class on-site they distributed a discussion guide (Appendix F) before the class commenced and asked the students to complete it some time during the class or at the break. Following the class a short discussion was held to clarify the answers provided and to receive expansions of their answers as well as additional information.

The primary purpose of the discussion and the completed guide was to secure information which did not lend itself to the questionnaire format--open-ended questions and to test the degree of reliability of the answers being received by the questionnaire techniques being used.

The reporting form used (Appendix E) provided for indications of the instructor being on task, student activities, and interruptions. In addition, it provided a means of recording when these activities took place during the entire period of the lesson.

The reporting form was used in the following manner. Questions by students were recorded as either those solicited by the instructor, interruptions of the instructor when he/she was on task, or those asked at breaks during or after the class. Time spent in discussion with off-campus and on-campus students was recorded separately. This included comments about the handouts being received by the off-campus students and both on- and off-campus group discussions of the topic under study. Technical and other problems which occurred during the class were noted.

It is appropriate to indicate some specific observations with respect to these individual classes and the group of classes.

CLASS A. The class was a lecture format with few questions being asked of the students and few being presented by the students--either the on- or off-campus students. The majority of all questions took place at the "breaks." Discussion, specific and non-topic related, averaged 15 minutes for the four classes observed.

CLASS B. This class employed a variety of instructional approaches: lecture, discussion groups, case studies, etc. There were an average of 12 questions

per class. These resulted from solicited and interruptory questions and from those asked at the breaks. On-campus questions exceeded those from the sites at approximately a ratio of 3:1 despite deliberate attempts to have the off-campus students participate.

CLASS C. Primarily a lecture approach to the class on-campus was used in this class. In the classes observed no comments or questions were directed to the other sites and none were initiated--not even during the breaks. There was, however, quite an active relationship between the instructor and the on-campus class with respect to unsolicited questions and comments and subsequent discussion.

CLASS D. This class employed a variety of instructional approaches--particularly the use of guest lecturers. Efforts were made to include the off-campus students in all activities of the class. The effects of the efforts were apparent in that, on average, thirty minutes of each class was devoted to questions and comments. The off-campus contributions representing a third of this time.

The group of classes. It is obvious that the format dictates the response of the students. If a lecture--little participation; if a variety of approaches--considerable participation; if remote sites are contacted regularly and/or early in the class--there is likely to be more contact during the class; if they are not contacted--they do not initiate contacts.

If the remote centres were encouraged to call in at the beginning of the class to report attendance, or technical problems, or to ask questions about assignments, etc. they were prepared to respond. There was also a tendency for the sites to participate more during the class if they reported in at the beginning. However, the other side of this is that the process frequently took up to 10 minutes to hear from all the sites.

With respect to reporting in for either attendance or problem-solving the pattern for the four classes ranged from doing this for almost every class to hardly ever doing it at all.

In the pilot study it was found that as the semester progressed there were fewer questions and interruptions. This pattern of reduced involvement was not present in this evaluation. In fact, no pattern of any kind could be established.

Initially the response time of the sites when specifically questioned or called upon was quite slow. This interval became shorter as the semester progressed.

In one class the instructor knew (or had available) the names of all of the students--on- and off-campus. The instructor would call upon students by name and this seemed to have an effect on increasing the number of questions and comments. However, in this class guest speakers were used frequently and this may have had an effect upon this increased participation.

In one class there was a group discussion of a case study in most class meetings. At one site there was only one student. She became a member of one of the on-campus discussion groups. However, the sound of the other campus discussion groups often made it difficult for the student to hear her own group and her contributions were heard by all the other on-campus groups.

Viewing the video tapes or observing at an off-campus site made it very, very clear that it was often difficult, if not impossible, to hear and understand the questions or comments raised on-campus. It was also difficult to hear the contributions from the remote centers at the other sites or on-campus. Similarly, it was difficult to make out overhead projections easily and after a few erasures much of what was subsequently written on the blackboard was difficult to read because of the residual chalk dust.

The opportunity to observe the classes off-campus and to conduct discussions at these sites elicited additional findings.

Many students audio tape the lecture portion of the classes and make notes later. This tends to make the class less fatiguing. The matter of fatigue and boredom is a common issue for those students who get the class via television. Frequently students begin to drift out--literally and/or figuratively after the second hour has passed (about 9:30 p.m.). Similarly, when there is a prolonged comment and discussion

on-campus or with some other site the same thing happens, to a lesser degree, among those not involved with the instructor.

In every observed setting, a large portion of the class was absent. In some instances, the majority was absent. This situation existed regardless of the attendance "reported" to the instructor. Some of the physical absences were compensated for by the students' picking up the class at home on a television set with the necessary converter.

Students at the off-campus sites were almost all of the opinion that because of the difficulty to see instructional aids--overheads and the chalkboard--the instructors should make this information available in advance and as a handout. Many felt that some of the problems of boredom would be overcome if students had an outline of the evening's class. This, it was felt, might keep the student and the instructor on track for the 3 1/2 to 4 hours.

Finally, the students at the off-campus sites would like to have regular and frequent contacts with someone from the community college. Many experienced feelings of isolation from the college after the first class session.

2. Students

2.1 Technological impact. Students, both on- and off-campus, felt that it was important that they know that these classes were to be televised before they enrolled in the class. However, the students did not

feel it necessary that they know much about the technology being used in presenting the classes.

When asked about the impact the technology had on the classes, on-campus students indicated that other than some waste of time and some loss of continuity the technology had little or no impact on the class. Off-campus students, on the other hand, felt that the technology had considerable impact on the class. Generally, it was felt that the delivery system was awkward in that technical problems and breakdowns interrupted the class and that there was some discontinuity involved when an off-campus student wished to phone in. The time lag involved caused some disruption in flow of thought and conversation, reduced spontaneity and proved cumbersome. Also, some off-campus students felt out of touch and were intimidated by the communication process. They also felt that the technology used contributed to a boring style of teaching. Other negative effects reported by off-campus students were: difficulty in concentrating on a small TV screen for such an extended period of time and lack of coordination between camera work and the content of instructor's lecture.

2.2 Technology, instruction and learning. Overall, students did not see the technology as having a direct effect on their learning. No strong feelings in either a positive or negative direction were expressed. A few students indicated that it did not really matter what went on in the class as they were

prepared to study hard on their own anyway. When asked, in this connection, if the instructor was using the technology to advantage in his/her instructional approach many students indicated that they were not sure. This was particularly the case for off-campus students. Those students who did indicate one way or another, pointed out that those instructors who were able to use the technology to some advantage were aware of the technology and had a relationship with the technicians. This was reflected in the instructor asking the technician if overheads were clear, board-work was visible, etc. Those instructors, the students reported, who did not use the technology to their advantage seemed to ignore the system. The students felt this led to boring, unstimulating lectures.

2.3 Benefits. On-campus students did not see personal benefits to themselves in having the classes televised other than some indication that a wider range of views and opinions were present in the class. Off-campus students, however, almost overwhelmingly saw distinct personal benefit in having the classes televised. The primary point made here by the students was that if these classes were not televised they (the students) would not have been able to take them. Other benefits were related to being able to tape the sessions and watch them at a later date; and for those who discovered how to do it, being able to watch the lectures at home without having to travel at all.

2.4 Disadvantages. Both on- and off-campus students agreed that the disadvantages of this system were related to the isolation and the technical communications system. The isolation was reflected by a number of students who indicated that the lack of personal contact between themselves and the instructor and other students had an effect on their motivation to complete the class. When asked to what extent they felt that the people in the other sites were part of the class, a significant number of students replied that they did not feel that the students at the other sites were part of their class. In fact, one student indicated that they are places--"Yorkton"-- rather than people.

Small group work, discussion involving many class members, and other typical interactive teaching/learning strategies were hampered by having students in different geographical locations. The communication system repeatedly was cited as being intimidating and somewhat inefficient. Off-campus students often had difficulty in hearing on-campus students who had entered into discussion between themselves or with the instructor. The demands of phoning in, getting up in the classroom, missing a few minutes of the instructor's lecture, asking an 'old' question and disturbing others in class, were reported as being definite disadvantages to the off-campus student.

2.5 Instructor-student relationship. As would be expected, students on-campus felt they had a closer

relationship to the instructor than did off-campus students. In fact, many off-campus students reported no relationship at all with the instructor. On-campus students reported that their relationship to the instructor was typical of other classes they had taken and that the technology had little or no effect on this relationship. On the other hand off-campus students felt this relationship to be of lower quality than that enjoyed with other instructors in other classes and that the technology had a profound effect on this relationship. An explanation offered by the students was related to the lack of face-to-face communication between off-campus students and the instructor.

2.6 Outcomes. Although some students both off and on-campus reported that their personal objectives for the class had changed since the beginning of the class, most acknowledged that their objectives had remained the same and that they were being met through these classes.

A series of questions specific to the off-campus student was developed to assess the transaction particular to these students. These students indicated that special roles had evolved for different members of class at each centre. The phoner, the attendance-taker, the discussion leader were all roles which seemed to appear in each of the different off-campus location. Some, such as attendance-taker, were required but others came into being because the students felt them to be necessary. Off-campus students almost

unanimously agreed that watching a televised lecture was much more difficult, in this particular two-way situation, than being a student in a 'live' lecture. They also agreed that it was considerably more tiring to take this type of class than a 'normal' class.

3. Extension

3.1 Objectives. Extension personnel saw their goals for this project being met. A sufficient number of students enrolled in the classes, there was good faculty commitment and there was a feeling of workability of the project; these were cited as indicators of some success. Concerns centered on the number of off-campus students (lower than wished for) and the site selection (not as remote as hoped for). However, these were also seen as objectives for future semesters. Subsequent classes would benefit from these early attempts at this method of class delivery.

Hindrances to meeting objectives were seen to center around the university's relationship with the community colleges and the inability/unwillingness to use all the air time available. Community colleges, according to Extension, wish to respond to specific felt needs in their community while the university would like to establish classes from a program need perspective. These differing points of view were seen to be an obstacle in making the program a long term success.

In addition, Extension felt a concern in relation to the amount of air time available and the amount

used. Two hundred free hours have been allocated and according to Extension, this "developmental" time has not been used.

3.2 Problems. Extension did not consider the hardware involved in this project to be a problem but did focus in on the skills/lack of skills of the technicians. Liaison with instructors, AV Services, Community College and students was not seen to be a problem. Extension also thought that the technology was not having any negative effect on the student, both on- and off-campus, as they had received no complaints to date. As well, Extension reported that there were few technical problems and the solutions to the technical problems were generally satisfactory. AV Services, the instructors, the Department Heads/Deans involved and the community college personnel were all rated as performing reasonably satisfactorily in support of this program.

3.3 Extension's role. The personnel at Extension who were involved in this program reported that they maintained continuing contact with all the parties contributing to this project. This included the instructors, AV Services, the community colleges, students as well as the evaluation team.

Extension's role in facilitating meetings with students and the delivery of texts and materials to off-campus sites was reported as being generally limited to paying the bills. Meetings would be arranged for by the instructors and Extension would pay

for the instructors' travel as well as for some refreshments. The individual departments were relied on to do the actual mailings, etc. in support of distributing materials to off-campus students while Extension's role again would be limited to paying for the shipping and mailing charges. Extension staff is made available to assist in these activities. Extension believes it has a need to be kept informed of what is taking place relative to contacts and relationships with the off-campus students.

4. Audio Visual Services

4.1 Objectives. AV Services reported that their goal of transmitting normal classroom instruction with minimal changes was generally being met.

4.2 Problems. When asked to identify and discuss problem areas the following were cited; hardware--minor deficiencies due to funding, i.e., third camera, VCR, time base corrector, etc. However, no significant malfunctions had occurred in this area to the time of this data collection (transactions). Liaison with Extension, students and instructors was not reported as an area of concern, however a desire to be kept informed of problems and individual needs was expressed. During the semester AV Services personnel monitor the system, meet with technicians when necessary and are available to 'coach' instructors.

4.3 Effect on instruction. AV Services viewed this system as a positive influence in that it forced the instructor to engage in extra and more advanced

planning. Negative influences were reported to be in the area of time taken to report in and to identify and correct technical problems particularly at the off-campus sites.

AV Services rated the level of difficulty involved in communicating from off-campus sites to the on-campus classroom as easy. However, they indicated that interaction was infrequent. The Director of the unit also indicated a good level of satisfaction with the quality and reliability of the technical equipment. (A log of technical problems is included in this report in Appendix I).

4.4 Facilities. In AV Services' opinion, the room on-campus is well-suited for a televised classroom and as a learning centre. The riser for the instructor compensates for the overhead cameras and the acoustics do not pose a problem. The white walls should be covered to prevent certain transmission difficulties and it was believed that the instructors would like different furniture and a more flexible layout of the furniture. This, however, was felt to not be possible as this room is being used at other times. In any case, it was felt that it is satisfactory as presently used.

5. Community Colleges

5.1 Areas of concern. Community college personnel identified a number of areas of concern.

They cited technological problems as one area of concern. They believed that on-campus students com-

ments during class were often not being transmitted properly or adequately; therefore, off-campus students missed parts of the class and/or lost the continuity of the instruction.

Another concern was liaison with instructors. Insufficient texts, late and missing materials and very little communication were all mentioned as problems.

Finally, recruitment and retention of students was mentioned. Recruitment did not appear to be a problem because there were a number of students interested in attending classes. However, retention did seem to be a problem for these classes. The community college people indicated that they felt the dropout rate was greater than normal.

Liaison with students, AV Services, Extension and the program evaluators were not reported as problem areas. In fact, the relationship with Extension was reported by one community college as being excellent.

The community colleges' liaison people described their role as centering on trouble-shooting if the equipment failed, delivering assignments and supervising exams. If any role is played in accomodating a student/instructor meeting it is nothing more than to arrange for a meeting space.

Negative effects of the technology were identified as: inhibiting interaction, poor audio transmission, and slow phoning procedures.

C. Outcomes

Through the use of questionnaires, interviews, obser-

vation of classes and analysis of marks and grades given, outcomes for this project were identified. Participants' perceptions of outcomes and the evaluators' report of various outcomes are reported in this section.

1. Instructors

1.1 Planning and preparation of class. The instructors believed that the information that they received prior to their class was not particularly valuable. A comment made by one instructor was that no information relevant to instruction was received. There was some concern regarding the availability of instructional materials because lead time, dollars available, and copyright problems limited the materials that could be used. Library resources were also a concern.

With respect to planning time, all instructors agreed that this type of class required more time for planning when compared to the planning needs of other classes that they have taught.

1.2 Contact with students. All four instructors met with their students, or attempted to meet with their students sometime during the semester. The minimum contact was once only, in Regina, and the maximum was three times at certain sites. The main reason given for the meeting was to humanize this highly technical process in which all were involved. One instructor was available 'on air' on three Saturday mornings, but very little use was made of this opportunity. Another instructor had a luncheon at home and

about a third of all the students attended. The Social Work class, perhaps the most fortunate, was able to have a 'field instructor' available at one or another of the off-campus sites for most classes.

1.3 Effects of the technology. The instructors generally felt that the technology affected the delivery of the class in that it seemed to slow the whole process down and that it contributed to a sense of isolation felt particularly by the off-campus students. Three out of four instructors indicated that they changed their normal teaching style because of the technology. They indicated that they slowed the process down while generally turning to more formal and structured presentation or group processes. As one instructor indicated, the learning experiences moved from 'participative experiential' to 'consultative directed'.

The instructors reported the following as ways of compensating for the negative effects of the delivery system: showing active concern for the student, working around the negative effects, using more small group discussions and having patience and a sense of humour. There were very few responses from the instructors to the question regarding how they had used the positive effects of the delivery system but one instructor indicated that the use of small groups was suited to the system.

1.4 Instructor/student interaction. The instructors indicated different levels of interaction

between themselves and the off-campus students. The levels of interaction were spread all across the range with one instructor indicating considerable interaction and another indicating minimal interaction. The other two instructors were somewhere in the mid-range of interaction. The results were basically the same when the instructors were asked to report on the level of communication between students.

1.5 Audio-Visual aids. All instructors used audio-visual aids in their teaching. Three instructors indicated that they used these aids during every class and one instructor indicated occasional use. The types of aids most commonly used were film, overhead projector, video, chalkboard and flipcharts. Special arrangements had to be made for the films, in terms of copyright permission, setting up projectors, etc., while special attention needed to be paid to the composition and content of overhead transparencies. Also, it was felt that the technicians needed to be aware of and/or instructed on how and when, and for how long, to focus on the overhead projection or chalkboard.

1.6 Unanticipated problems. Unanticipated problems were experienced by three instructors. These were, as expected, generally related to technical breakdowns and support problems, i.e., marker had a baby, doors locked, etc.

1.7 Student evaluation. None of the instructors altered their evaluation schemes for this class. None

could identify any one common occurrence which required a change in their instructional plans. Most taught the way they planned and evaluated in their usual manner.

2. Students

2.1 Benefits and limitations. Many students, both on- and off-campus mentioned the surprise they felt when it was discovered that the class was to be televised. They stated that this fact should be prominently advertised so that students could decide for themselves if they wished to be involved in this type of class.

The overwhelming response by off-campus students to a question referring to personal benefits was the opportunity to take the particular class in which they were enrolled. They stated that if the class had not been televised there would have been no class available. On-campus people were not as unanimous in their identification of personal benefits from this class. Some indicated that the larger number of students from different geographic locations provided more ideas and opinions than otherwise might be the case in a 'normal' university class. Others identified the benefit to the off-campus students of not having to travel.

Isolation, lack of the personal touch, discontinuity and slowness of proceedings were commonly seen as disadvantages by both off and on-campus students. According to the off-campus students, inappropriate camera work and the lack of spontaneous questions and discussions were seen as problems.

2.2 Personal goals. When asked to identify at least three personal goals or objectives they had for this class the students most often replied with the following categories: to fulfill program requirements, to master the content knowledge and to satisfy a personal interest. Other less often cited goals were, job preparation, experience a TV class, get a good mark and to be intellectually challenged. Virtually all students indicated that their own personal goals had been reasonably well met.

2.3 Assignments/test feedback. Satisfaction with feedback on assignments and tests was spread out all over the scale. On-campus students were generally satisfied although more students in one class were dissatisfied than satisfied. (This may have been due to the instructor's marker being hospitalized in the middle of the semester.) Off-campus students were split in their opinion. About fifty-four percent of the off-campus students that responded to the questionnaire found the feedback they received to be satisfactory while the other forty-five percent of the respondents found the feedback to be unsatisfactory.

As expected, the students in Regina did not find accessing materials/resources to be much of a problem. One class sold out of textbooks very quickly, but few other problems surfaced. On the other hand the off-campus students were mixed in their response to this question. Some found it very difficult to access materials; others did not. This may be related to

various students capabilities at using libraries and searching out materials as an analysis of the data did not find particular sites or classes to stand out as problem areas.

2.4 Missed classes. Off-campus and on-campus students made up for classes which they missed in somewhat different ways. Generally on-campus students caught up by getting other students' notes or by talking to the instructor. Although off-campus students also asked other students for their notes, many also reported being able to review video tape recordings that had been made of the lecture. A few indicated that they stayed at home and taped the lecture for review at their own leisure. These students also indicated that they felt that they had not missed the class nor should they be considered absent when they watched at home.

2.5 Expectations of instructors. When asked if the instructor had taught the class in the manner expected, those students who could decide held opposite views. As many said "yes" as said "no." Interestingly enough forty percent of the respondents said that they were not sure if the class had been taught in the manner they had expected. Of those who did have an opinion, one group of students indicated that the instructor's use of films, charts, overheads and blackboards, etc. was good or very good. The other group disagreed. The most common complaint from those who were dissatisfied was the seeming lack of coordina-

tion between the instructor and the technician who moved the camera off of the information on the board or overhead too quickly. Also, the students were generally satisfied with the way in which the questions and class discussion were handled by the instructors.

2.6 Instructor/student interaction. The students also reported the amount of interaction they had with (a) the instructor and (b) other students. There seemed to be somewhat more interaction between instructors and on-campus students than with off-campus students, however the majority of students reported little or very little interaction between students and instructors. Interaction amongst students seemed to be quite high for both groups although a number of off-campus students reported very little interaction.

2.7 Class rating. When asked for an overall rating of the class very few of the on-campus students selected a rating beyond the midpoint indicating a reasonable level of satisfaction. The off-campus students were, however, much more spread out in their opinions. Sixty-four percent of the students rate the class from the midpoint to Excellent while thirty-four percent chose poorer ratings--all the way to Very Poor chosen by 4 students.

Virtually all of the students who attended the on-campus lectures indicated that they would take another course like this. Off-campus the reaction was much more mixed. Sixty-five percent of the students indicated that they would take another class such as

this while twenty-three pecent said they would not. The remaining eleven percent said, "maybe."

3. Extension

3.1 Goals.The questionnaires and interviews with Extension personnel revealed that after the semester Extension's goals were reported to be reasonably well met. Off-campus involvement was seen to be good and much information was learned and experience gained.

Extension identified a number of items which hindered their ability to achieve their objectives in this project. The various complications arising from the funding sources and the need for appropriate AV expertise and facilities were seen as obstacles. A basic problem was getting all participating groups to agree on a series of classes to be offered in any one particular semester. Deans, instructors, community colleges, etc. need to be consulted. Another obstacle identified was the different approach taken by the community colleges, i.e., reacting to community needs while Extension attempts to be proactive in its approach. As well, in this regard, the distribution and collection system for materials, assignments and tests was problematic. Finally, the use of the particular communication system was seen to be a problem.

Regardless of whatever problems were encountered Extension personnel felt that the greatest assistance to them in carrying our this project was the support they received from all the people involved.

When asked if they could identify major problems

in specified areas Extension personnel identified the phone linkups and delays as being a problem as well as the quality of the off-campus classrooms and the monitors used. The technicians, it was felt, needed more specific training. Dropout rates and failures, estimated at between 20-30 percent were also identified as a problem.

Generally, Extension saw the effects of the technical system on the delivery of the classes as being positive.

3.2 Liaison with other participants. Liaison with instructors, AV Services, community colleges and students was viewed as excellent and posed no problems. As well, Extension rated the performance of AV Services, the instructors, the Deans/Department Heads involved and the community colleges as quite satisfactory. In the future, the Extension personnel project that both AV Services and the community colleges will need to make significant changes in order to ensure continuing interest in the programs.

Although considered satisfactory for this stage of the project it was felt that the facilities for the students would have to be improved. There ought to be, Extension asserts, tables and chairs in the on-campus room as well as better monitors and phone linkups in the off-campus classrooms.

Extension professed a 'hands-off' attitude towards the participants in this project and in keeping with this philosophy usually only reacted to requests and

concerns. In this manner they responded to all parties in the project. Instructors had questions and requests concerning exams and assignments, AV Services discussed technical problems and the community colleges were used to facilitate the invigilation of exams, delivery of assignments, etc. and to contact students regarding cancelled classes.

Extension played a role in organizing meetings between important participants in this project. They report organizing pre- and post-session meetings and brought the instructors together with the AV Services personnel. As well, Extension assisted with professor-student meetings by providing some funding.

4. Audio Visual Services

4.1 Goals. AV Services reported that they met most of their objectives for this semester. Budget restrictions, however, prevented some objectives, relating to the technical system, to be completely fulfilled.

4.2 Technical system. Problems that surfaced were related to TV reception in the remote locations as well as the abilities of the technicians to perform appropriately and quickly.

AV Services reported that the technical system had both positive and negative effects both on- and off-campus. On-campus the positive effects were related to the instructors being better prepared, and in providing more explanations when poor AV materials were used. Off-campus positives were related to the ability to

offer these classes to small remote centers.

Negative effects on campus were related to the loss of class time due to technical problems and communication lapses. Off campus the negative effects centered around the transmission of sound. Not enough on-campus class discussion was transmitted and too much hallway and incidental noise was transmitted.

AV Services defined their role in the delivery of the class in terms of designing and modifying the technical system as well as coaching the instructors.

The on-campus classroom was considered suitable for this phase of the project. It was suggested that the walls be refinished to stop buzz from the projection of the white walls. Off-campus classrooms on the other hand, were in some locations, not well suited. Swift Current was identified as having the best accommodations while Estevan had the worst.

AV Services suggested that the ability to communicate from off-campus sites to the on-campus classroom was easy, but slow. They also suggested that this type of communication was relatively infrequent.

Anticipated problems such as building rumble, air conditioning noise and electrical noise were handled without much problem. Other anticipated problems such as soft speech and outside noise are still problems. Unanticipated problems were mainly off-campus or transmission occurrences. Monitors were often found unplugged, moved or de-tuned. As well, high white levels in video caused sound and video transmission

problems. These problems have yet to be solved.

5. Community Colleges

5.1 Concerns. Community college personnel identified a number of problems relating to specific areas of the project. They related a number of problems concerning camera work and interruptions, as well as some problems related to the delivery of assignments and examinations. They also reported a problem related to retention of students--the number of students enrolled who subsequently dropped out of the classes (see Table 1).

5.2 Functions. The community college person in each area performed basically similar functions. They, for the most part, attended the first few classes, supervised exams, and attended to the distribution of texts, materials and assignments. In this regard, a problem described by the community college people was the late arrival of materials or materials not returned as promised.

5.3 Technical system. Community college personnel stated that the effects of the technology were positive in their centers due to good equipment and better production. A disadvantage discussed, however, was the difficulty in seeing chalkboard work.

6. Other Outcomes

Information concerning attendance, enrolments, grades and class averages was also collected. Volunteers were solicited at the first class in each of the locations. Their task was maintaining attendance

records at their particular site. Although complete information was not received the indications in the data which were received, are that on-campus classes had a reasonably high attendance record. Off-campus classes experienced, at least according to the students reporting this information, an equally high attendance rate.

Information concerning enrollments, pass/fail/-incomplete statistics and withdrawals was also collected. These are represented on the following table.

Table 3

Enrolments, Passes, Failures, and Withdrawals by Class and Location

| | ADMN 200 | SW 414 | HIST 100 | PSYC 210 |
|---|---|---|---|---|
| ON-CAMPUS | | | | |
| Enrolled | 39-100% | 26-100% | 13-100% | 37-100% |
| Passed | 22-56.4 | 22-84.6 | 6-46.2 | 32-86.5 |
| Failed | 7-18.0 | 0- 0.0 | 4-30.8 | 2- 5.4 |
| Incomplete | 0- 0.0 | 1- 3.8 | 0- 0.0 | 3- 8.1 |
| Withdrew | 10-25.7 | 3-11.5 | 3-23.1 | 0- 0.0 |
| OFF-CAMPUS | | | | |
| Enrolled | 57-100% | 55-100%* | 32-100% | 21-100% |
| Passed | 32-56.1 | 51 | 25-78.1 | 14-66.7 |
| Failed | 10-17.5 | 1 | 4-12.5 | 4-19.0 |
| Incomplete | 1- 1.8 | 4 | 1- 3.1 | 0- 0.0 |
| Withdrew | 14-24.6 | 1 | 2- 6.3 | 3-17.3 |

*Note: Some students had completed the class but had not been "officially" enrolled by the end of the semester.

Overall Administration 200 had the highest on- and off-campus enrollment as well as the highest on- and off-campus dropout rate measured in both absolute terms and as a percentage of enrollment. The on-campus History class had the highest failure rate while the Psychology class had the highest off-campus failure rate.

Other than the Psychology class (on-campus with-

drawal was zero) the on-campus sections experienced a higher withdrawal rate than the off-campus sites. Although in the Administration 200 case this difference was minimal--25.7% as opposed to 24.6%.

Class average of passing grades was also an outcome of interest. These data are displayed on Table 4.

Table 4

Average Mark of On-Campus and Off-Campus Students*

| | ADMN 200 | SW 414 | HIST 100 | PSYC 210 |
|---|---|---|---|---|
| On-Campus | 65.64 | 78.86 | 69.17 | 73.00 |
| Off-Campus | 73.44 | 71.20 | 75.00 | 71.57 |

*Only include grades of students who passed the course.

Administration and History had lower on-campus class averages while Social Work and Psychology's class averages for the on-campus students were higher. The greatest absolute difference in on- and off-campus class averages was in the Administration class where there was a 7.8% difference. Although comprehensive statistical procedures were not generally used in analyzing these data it was found that the Administration class averages were the only ones which were significantly different at the .05 confidence level.

In this Part the findings of the evaluation study have been presented. The three phases of data collection (Antecedent, Transactions and Outcomes), have provided an overall description of the intent, procedures and outcomes of this class delivery project.

## PART II

## THE EVALUATION MODEL AS A MODEL

I. Rationale

All the principals and participants engaged in this project wanted to know if the off-campus delivery of the classes would be comparable to on-campus classes. Delivery in this context was seen from the point of view of the content presentation and student achievement. Achievement was seen as the level of grades achieved in these classes. Another aspect of the delivery system notion had to do with how well instructors were able to use the technology to deliver the classes. All the principal units involved were also asking what outcomes can be achieved using this delivery technology.

The Stake model is designed to ask and answer these kinds of questions. It identifies conditions present, procedures engaged in and outcomes. The model focuses evaluation activities by comparing contingencies, congruencies, intentions and actual situations.

This model is also valuable when the evaluator wishes to collect data from a broad base, thus describing the program as fully as possible--a holistic approach. The model allows for evaluation and judgment at the beginning of, during, and at the end of the program. It is appropriate for both formative and summative evaluation.

II. Description and Discussion of the Model

A detailed description of the Stake Countenance Model is available in Appendix A. It is sufficient at this point to indicate that the model considers the evaluation process from two perspectives--description and judgment. In the description

matrix the "intended" antecedents (conditions) are evaluated in respect to the intended transactions (activities) from the perspective of the logical contingency between the two. Likewise the contingency between the intended transactions and intended outcomes is evaluated. The same process is followed with the "observed" antecedents, transactions and outcomes. An additional evaluation is now added--that of the congruency between the intents and observations.

Stake then recommends that the description matrix and its components be compared to a standard--either absolute or relative. Following comparison, the final evaluation act is that of judgment of the antecedents, transactions and outcomes.

This model is one of the "classics" from the program/curriculum revival of the 1960s. It has been used extensively for evaluations of all types and sizes. Consequently it has been discussed fully in the literature of the field. A summary of the major advantages would state that the model calls for formal evaluation--the kind of evaluation which has the greatest potential to improve teaching and learning; provides a full description of the program being evaluated; requires a broad base for data collection; allows continuous evaluation; provides for both intended and unintended outcomes; and allows evaluation to measure the match of what is intended and what is done.

The limitations of the model are generally agreed to be the following: intents are often not fully known initially; it is not always easy to separate antecedents and transactions; one can seldom go back to collect data which were missed or subsequently found to be important; the breadth of the data

collection often obscures the contingencies and congruencies; there is a very heavy reliance upon the evaluator's data collection ability; appropriate standards for comparison are often unavailable; and finally, the Countenance Model is a concept not an evaluation model, per se.

This evaluation is seen to be a modified Stake model because of the final two limitations noted above. This model does not have the judgment matrix. It was decided that there were not appropriate standards to be used for comparison. In any case, a careful analysis of contingencies and congruencies would provide an appropriate base for making judgments.

The evaluators of this program are convinced that a careful, consistent, continuous collection of antecedent, transaction, and outcome intents and observations with attention to the extent to which they support each other does, in fact, become an evaluation model, per se.

III. Findings

In this section the problems and advantages of the model will be discussed. From a consideration of these aspects questions will be posed related to the desirability or appropriateness of using this model in evaluating distance education programs.

A. Problems

1. <u>How often to employ a data collecting technique</u>. In this evaluation the instructors completed a weekly report on what had transpired at the previous class and what was planned for the next class (Appendix D). The report was to indicate the content, the instructional mode or modes, the student activities, out-of-class activities,

and technical problems experienced. It can be generalized that this form appeared to become quite pro forma. It did not change to any extent from plan to actual class and from the class to the report of the class. Nor did it change very much from week to week. In the evaluation it was important to get a clear picture of what was planned and what happened in order to determine congruency between intents and actions.

It appears that if you ask for the same information in the same way too often you may begin to get answers which are repetitive rather than descriptive.

In a similar fashion, the questionnaire may have been used too often. There was some resistance to completing the questionnaire distributed at the time of the final exam--a few students actually refused to complete it after a demanding three hour examination.

Although the interview technique was used as often as the questionnaire it did not meet this "end of the semester" resistance. However, the interviews tended to be conducted at a time which was convenient to the interviewee.

2. A limited focus. There is a tendency to concentrate upon and analyze the answers to questions as if they merely provided content relating to the question. If one does this, as happened from time to time in this evaluation, there is a tendency to see the answers as specific answers and to lose sight of the range of the answers; or how they may or may not apply to specific classes and/or sites.

3. Size of the sample. As is indicated clearly in Table 1 the size of the classes ranged over a wide spectrum. Serious problems can be seen to exist when trying to determine what is a representative response and what is acceptable as representative. The settings are so unique that no single answer or average is consistently correct. However, a response by class, by remote site and by the on-campus group is essential for each class; even if the number of students at a site is very small, i.e., one to three.

4. Similarity of settings. There is an assumption, which may be incorrect, that all the off-campus sites remain basically the same from class to class. It is also assumed, but can neither be supported nor denied by the data, that the on-campus site remains the same for each evening or class, for each group of students and week by week. There must be differences but the data collection functions as if there were none.

5. Effect of the evaluation. When the evaluation intrudes and asks questions there is a likelihood that this will stimulate some to think about what they are doing, feeling, and planning. Consequently, when this happens it may result in changes in practices or attitudes or plans which would not normally occur.

6. Actions which are not "intents." In this model it is important to know what are "intents" and "observations." "Observations" are primarily a consideration or description of what has been put in place, what has happened, and what the outcomes happen to be in relation to what the intents

were. In a program which extends over 4 months and which regularly is evaluated, it is to be expected that many events will take place as "responsive" events. Such developments affect both the contingency between plans and actions as well as the congruency between these events.

7. Unintended events/effects. This model depends upon intents and actual events. The data collection does not provide an opportunity to "back up" for events or effects which occur but which were not anticipated or intended. In effect, these events/effects become part of the experience and may need to be evaluated even though they were not originally part of the evaluation plan. This has the potential to be very important if the unintended events/effects influence subsequent instructional decisions.

B. Advantages of the Model

1. Variety of data collection formats. This model provides for the collection of data from all parties involved in the project from a relatively unlimited variety of forms. In this evaluation the data collection approaches were the following: questionnaires, interviews, observations, descriptive reports, grades, and class materials.

2. Wide-ranging activity. This model is designed to operate in a wide range of settings. In this instance where there are four classes, offered in up to six settings, with two institutions (the University and four community colleges) involved it is evident that the model can operate. The combinations of factors and influences

which could disrupt the evaluations are numerous but all parts of the evaluation but one (the resistance of some students to complete the final questionnaire) were completed, and were completed on time.

3. Formative and summative evaluation. Another advantage of the model is the opportunity to provide formative evaluation (evaluation which happens during an event and affects subsequent actions or decisions) and evaluation which is summative (at the end of an event, process, or product for the purposes of review or judgment). This evaluation can identify numerous instances where the evaluation itself caused subsequent activities (e.g., camera operator's presence, consideration of alternative instructor/student interactions, planning for the use of different instructional activities) which resulted from the ongoing evaluation process. Part III will indicate that the model is very effective in providing the basis for a summative evaluation.

4. Willingness to participate. The willingness to participate in this evaluation may be a factor of the evaluation itself (Halo or John Henry effects for example). It is more likely the extent of the broad base of persons and procedures. This is an obvious advantage of the model. Most participants, again with the exception of some resistance to the final student questionnaire, were willing to answer questions, enter into discussions, fill out forms, etc.

5. Evaluation and judgment. Part I of this report has shown that the model has the capacity to generate a

large quantity of data. Data which provides opportunities to evaluate the contingencies which follow from plans, events, and outcomes; and the relationships between intents and actual activities engaged in.

The Part which follows, discusses the evaluation, draws conclusions and makes recommendations which have resulted from the judgment-making process of the model.

C. Questions Raised by this Evaluation

1. How do you compensate for editing to fit? On a few occasions it became apparent that responses given to the evaluators were substantially different from those which were given to the deliverers, i.e., Extension and AV Services. A case in point, one of the principal evaluators was at an off-campus site engaged in an observation of a class. The Assistant Dean of Extension was in attendance at the same class making a video tape of the aspects of the delivery system of these classes.

At the beginning of the break the evaluator asked a student if she felt this was a good way to take a class. The reply was "No" and the student went on to indicate aspects of the technology which made this system a poor learning experience. Moments later the Dean interviewed the same student for the video tape. Her video tape response was that the television and two way audio was a good way to take a class and that the technology didn't affect the quality of the learning experience.

During off-campus discussions students were quite critical of the quality of camera work, picture quality and adequacy of the sound. However, the Head of AV Services

did not hear the same criticisms from the same sites. To the contrary, his information was that the situation was satisfactory.

This lack of fit between the response to the evaluators--in questionnaires, interviews, discussions, etc.--and to Extension and AV Services is not surprising. The one party is evaluating (many feel this is synonymous with finding fault) while the others make the decisions of what is available and how it is to be available. The question which this lack of congruence raises has to do with the reliability of the answers received by the evaluators. It is felt that the follow-up interviews using questions from the questionnaire did provide a satisfactory reliability check because answers remained essentially the same.

2. How to treat "new" intents? In this evaluation model it is important to secure all of the intents with respect to antecedents, transactions and outcomes before the classes begin. During the course of the evaluation it became evident that there were new intents being inserted by the participants. Some were intents which were not identified previously; possibly overlooked. Others were the result of events which transpired during one or more classes. Still others were the result of increased confidence in using or working within the medium. All, however, were not original intents. The dilemma posed to the evaluator is what to do with them now that they exist. The evaluators have dealt with all of these as if they were part of the "transactions" even if they appeared to be more likely "antecedents" or "outcomes."

3. What degree of intervention? A recurring question had to do with the extent of intervention which the evaluators might exercise. Following the observations there was a tendency to want to share them with the instructors. Particularly if the instructor had appeared very effective or not effective. Comments or suggestions might have had quite an impact on subsequent presentations. Evidence of this (although it might have been coincidence) was apparent on one occasion where one of the evaluators told the Head of AV Services that the camera had stayed still on the face of the lecturer for long periods of time. Following the next class there were complaints from the students off-campus that the camera had moved from long shots to close-ups on far too many occasions. On-campus students complained of the noise of the cameras--they were moving all over the place after an eight week period of relative inaction.

In order not to have an influence upon the planning for a class the evaluators and the research assistant did not forewarn the instructor of their intention to be present for on- or off-campus class sessions. We have no way of knowing what effect, if any, our presence had upon any portion of that class.

4. How present should the evaluators/evaluation be? This question flows naturally from the previous comments. It was the decision of the evaluation team to be as low-profile as possible. The evaluators are colleagues of the instructors and as such felt it was important to maintain as much distance between the evaluators and instructors as

possible during the period of the evaluation. Consequently, one research assistant looked after the weekly log and did the majority of the interviews. Another assistant sat in on the classes observed on campus. As soon as the telephone connection was made, the evaluators, when they were observing off-campus, alerted their colleague of their presence at the remote site. It is not possible to determine from this evaluation if presence has an affect or not.

5. Was the data collection too easy? This model calls for broad based data from many sources. In this evaluation, data collection, of all types, was very easy. The sites were relatively close together, were cities on major communication routes, had a long history of participation in Extension's programs, and were represented by some of the larger community colleges in the province.

This is an evaluation of a particular system of delivery of distance education and it is necessary to question if good data would be as readily and easily available if the sites were "remote."

## IV. Conclusions

The modified Stake model has met the proposed expectations for this evaluation. It is reasonable to assume that this model would be effective in subsequent evaluations where there is interest in evaluating intentions and actual activities engaged in but where there may or may not be standards for comparison and/or judgment.

This model generated a high level of interest, cooperation and participation. It generated a large body of data concerning the initial expectations, the nature of the conduct of the

classes, and the final outcomes of a relatively large number of stake holders.

The data collected was both quantitative and qualitative permitting the opportunity to generalize for the total group of classes and students as well as identify the specific and unique cases and instances.

A small evaluation team (two principal evaluators and two research assistants) was able to collect the large body of data with relative ease. All four were engaged in the project on a part-time basis with one of the research assistants only working a total of 40 hours.

The model designed for and employed in this evaluation seems well suited to the evaluation of distance education programs. Data can be collected by mail, through assignment delivery systems, by telephone, and on video tape. The only aspect which would need to be reviewed would be the "on site" observations, if the sites were truly remote.

# PART III

# EVALUATION:

## Discussion, Conclusions, Recommendations

In this Part the evaluation will take place. Initially, in the Discussion section, the findings will be dealt with from the points of view of aspects of the model and the delivery system. In the Conclusions section a number of aspects will be drawn together and evaluated. Finally, a number of recommendations will be stated based on the findings and the evaluation conclusions.

### I. Discussion

In the discussion which follows there will be generalizations which may be inaccurate and possibly unfair. The problem lies partially with the difficulty of generalizing from four very different classes taught by four different instructors to a variety of student groups located in different settings. For example, two of the instructors used only one or two instructional approaches while the other two used a variety of approaches in their classes.

#### A. Intentions

Throughout this project and in its evaluation there is a high degree of logical continuity between the phases of the model.

When the original, expected antecedents are identified and are compared to the transactions intended there is a high degree of logical relationship. When any of the participants are asked what they intend to do in order to deliver the class or what the students expect the class will be like, there is a great deal of similarity between

intended antecedents and intended transactions. Instructors intend to teach a typical, normal lecture-type class which is the same as they would teach to any other typical or normal class in their department or discipline. The students, whether on- or off-campus, expect a typical lecture-type class.

Instructors make an effort to plan for typical outcomes. The students do not expect the class to be very much different--even though some are receiving the class via television. This follows naturally because Extension goes to some extent to make the point with the instructors that they shouldn't, or don't need to, plan to approach or teach the class differently.

Some interesting intentions or expectations on the part of the students were that they expected technical problems, particularly poor picture reception and sound; expected the class would be primarily a lecture format; that the instructor would be a clear, precise speaker and would be dynamic; and that this class would be much like any other class.

There is little or no evidence that for any of the participants (instructors, students, Extension, AV Services or community colleges) there is any lack of logical contingency between antecedents, transactions and outcomes.

B. Observations

In this phase of the evaluation one first looks for evidence of contingency between antecedents, transactions and outcomes. Then an attempt is made to determine the degree of congruence which exists between "intents" and

"observations." In an "ideal" situation all six aspects would be a single unit. There would be no difference between plans, processes and outcomes intended and observed.

There were few surprises. Instructors planned, taught and evaluated pretty much as they had intended. Students attended, listened, took notes, and behaved as they expected they would. Proof of the similarity of these classes to a typical class is shown by the fact that there are no marked differences between the participation (questions and discussion) of the on-campus and off-campus students. For both, the experience was essentially the same except for the technical aspects which are discussed in section D below.

An interesting observation made by an off-campus student makes the point of the real difference between receiving the class in person or by television when the student stated ". . . if I had to choose between travelling to Regina for the class or watching it on television, I'd choose television."

The findings indicated that at the end of the class the students still hope that the instructor of a class of this type would be ". . . dynamic, organized and have good communication skills . . . ."

The evaluators of this project, as instructional specialists, are concerned that although the intentions and actual experiences were logically related, that there was not more of an attempt to plan an experience which would utilize the technology in more innovative pedagogical ways.

One would expect that the instructional experience would be different because of the media.

Before leaving a discussion of intents and observations some comment is warranted concerning achievement of the students. The students expected that they would be evaluated in the same manner as they would be for any university class. And they expected that the marks awarded would cluster in the 65-70% range. In this project the evaluation approach was similar to normal procedures and the averages for the four classes fell within the 66-79% range.

C. The Support System

The support system is made up of all the participants engaged in delivering these classes: Faculties, Departments, instructors, Extension, AV Services, Sasktel and the community colleges. To a degree which the evaluators consider is remarkable, all of the participants worked well together and worked continuously to do whatever was felt to be necessary in order to deliver the classes to the six sites.

There are a few aspects which warrant a brief discussion.

Students, both those on- and off-campus, felt that there was insufficient discussion and explanation of the technology involved. They felt that they should have the essential aspects explained to them before the class begins and demonstrated at the first class session. There was a feeling that those "delivering" the system did not give sufficient time and effort to explaining it to those who

were expected to make the system work.

There were many concerns about class materials and resources. Often insufficient time was allowed for materials to arrive at the remote centers. Frequently, instructors referred to handouts which had not arrived. A general rule seemed to be that everything took longer to arrive than one would hope or expect. The lack of resources off-campus was cited by both instructors and students as a serious weakness of the system. One student reported, in an interview, that there was only one text on the subject in the local regional library.

A concern was expressed that those responsible for delivering the system do not visit the sites to experience the system when it is in operation. Consequently, they do not experience the picture and sound quality, the phoning mechanics, the length of the session, the learning environment, etc.

The community colleges are generally satisfied with the system except for the quality of the presentation from a visual and auditory perspective. The concern is not with the class session and its content but rather the way it appears and sounds via television. The colleges would also like to see more live contacts between the instructors and the off-campus students.

This matter of liaison identifies another concern. All the non-instructional participants of the support system have expressed a willingness to provide assistance to the instructors but as a general rule the instructors don't ask for help. For example, there was little liaison,

by most of the instructors, with AV Services after the early stages of the class. It may be that the offers to assist need to be more obvious and the instructors need to be encouraged to seek help from the other support system participants.

The questionnaires and interviews produced a long list of suggestions for changes which might be put into effect. Most suggestions were one-of-a-kind; however, one idea was mentioned a number of times. It was that all the materials could be sent to the community colleges by means of a computer network.

D. Technical System

The unique approach of television delivery and two-way audio communication is what makes this project different from other approaches to distance education which this institution has employed previously. The technical system is the dominant dimension when one looks at the total delivery system. It is, therefore, not surprising that this aspect initiated the most concerns, the largest number of conclusions (see next section) and the greatest number of recommendations (concluding section of this Part).

There was a wide-spread feeling among all the categories of participants in this project that the technical system was satisfactory and that it improved, in all its aspects, as the semester progressed. It was also felt that this is the area where many changes can likely be easily accommodated and that such changes would make the most obvious improvement to the total system. The evaluators are in agreement with the essential point of these feelings

with the caveat that they are not sure that the technical changes would have more impact than the instructional changes which are discussed and recommended later in this Part.

1. Problems with the system. Problems were evenly distributed throughout the semester. They were also evenly distributed between SaskTel, the University of Regina and the community colleges. The only major breakdowns, i.e., those which entailed cancellation to even one site, were because of illness or SaskTel problems. SaskTel problems related to faulty equipment, repairs resulting from damage or maladjusted equipment. University of Regina problems generally were attributable to human error, e.g., switches not switched, transparencies poorly made, doors locked, and personnel unable to get to the University. The only equipment malfunction was a factory error in a camera and a worn out connector on a film projector. Problems at the community colleges seemed to focus on poorly tuned receivers and missing or damaged equipment.

2. Cameras. It is crucial that Extension and AV Services understand that it is the camera operators who deliver the class to the off-campus student. In the operator's hands is the opportunity to improve or spoil the message the instructor is giving. The operators need to see themselves as part of the instructional team and also place themselves in the position of the off-campus student. To come to this state of understanding it will be necessary for operators to have training as operators and instructional facilitators. They will need coaching and they will

need to be monitored. A possible solution might be to hire an instructional person, train him/her in camera techniques and then have this technician monitor and coach the other operators.

If this type of training were present a number of the current problems would likely disappear or be reduced to an acceptable level; problems such as: having the cameras stationary for periods which are too long, moving the cameras too much (thus becoming a distraction to both on- and off-campus students), not staying on an overhead long enough, remaining focussed on notes long enough to assure that they have been copied, concentrating too long on a shot of heads of students or their note-taking when the instructor is speaking.

It is the evaluation team's judgment that if the operators were instructionally aware they would become more "present" and attentive. There was evidence that sometimes the operators were paying attention to other monitors in the control room (e.g., the World Series, the National) rather than to the class. This situation improved greatly as the semester progressed.

Presence at the "breaks" needs to be maintained on many or most occasions. Too often at the break, the camera was set at some "shot" of the room and the sound was turned down. This leads to two problems of alienation or frustration for the off-campus students. They receive this static, silent picture on their screen which conveys a message that they are no longer a part of the class. Many students expressed this feeling of being "closed down" or

"shut out." The other problem is that if the sound and camera are shut down reasonably early in the break, there is no opportunity for the off-campus students to ask questions or engage in a discussion with anyone at any other site.

3. Audio. The technical delivery of the instructors' voice is satisfactory to very good. Unfortunately, it seems very difficult to pick up and transmit the questions and discussions which originate in Regina and which come via the telephones. Some technical solution can surely be found to overcome this problem.

Another audio problem could be easily solved by having someone close the doors of the classroom. Possibly an automatic door closer could be fitted. Random noises caused by others in the hallways, appears to be easily transmitted off-campus. This is not a frequent or persistent problem but it is one which could be solved very easily.

4. Telephones. The opportunity to have audio contact is an excellent feature of this system, but it is not being used to its full advantage or potential.

Students want to ask the spontaneous question as well as the one which is deliberate. In each case they look for almost immediate feedback. This system is not giving the students these opportunities--despite the claims that this is a feature of the system. For an off-campus student to ask a question he/she has to get to the telephone, dial, wait for the instructor to complete the contact (sometimes it is not easy to secure the instructor's attention), and

then ask what is now an "old" question which may have lost its relevance. By the time the answer is provided the student may be temporarily out of the flow of the class. Asking a question is not easy. These difficulties appear to result in relatively few off-campus questions. Very few questions being raised became the pattern in the classes of this evaluation.

A simple change in the location of the telephone or the number of telephones available might have partially alleviated the reticence to call-in. In some settings it was necessary to get up, leave your desk or table and walk across the room to get at the telephone, and in some instances, it was impossible to see the television screen when using the telephone; either because of the physical location of the equipment or the resultant "feedback" through the television set.

5. Instructional aids. The standard chalkboard does not appear to be a particularly good instructional aid for television instruction. It provides a poor background for the picture of the instructor, has a limited area of usefulness for written work and retains residual chalk unless it is cleaned frequently and properly.

In this series of classes the television image of the projected overheads was frequently unsatisfactory. They were often difficult to see when the lighting was left on; even in those instances where they were well constructed. This may be due to the level of lighting which was provided for the cameras. When the classroom lighting was turned down the instructor became a dark mass or a voice coming

from somewhere off-camera.

6. The off-campus setting. Many technical problems experienced at the off-campus sites were blamed on AV Services or SaskTel. This was not warranted. The real problem was most often an inability to tune-in the picture and sound which was being delivered to the television set. A member of the class who had been trained would have alleviated many problems. So would separate equipment for these classes which was tuned daily by someone on the community college staff.

7. The stay-at-homes. Those students who pick up the class at home become a unique part of the technical system because they are in the delivery system but are not a part of the instructional system. The Outcome Questionnaire asked those students who could pick up the class on their home television sets on channel 28 to indicate how many actually stayed at home for some or all of the classes. Thirty percent of the respondents indicated that they had taken advantage of this option. The provision of a two-way communication system seems an expensive way to deliver instruction to so large a percentage who deliberately do not avail themselves of the two-way communication opportunity.

However, the "stay-at-homes" have some compelling agruments in support of their decision: much more comfortable, eliminates the need for a babysitter, saves time, eliminates having to go out on wintry evenings, finds it much easier to pay attention for the whole class, and provides the opportunity to tape it and replay it.

E. Instructors and Instruction

The instructors report that they didn't find this approach to be as difficult as they had anticipated that it might be.

1. Planning. Instructors indicate that there are difficult needs in preparing to teach via this approach. There is no doubt about this issue. Preparation does need to be more extensive than for classes which are delivered in the conventional university fashion. It is also necessary for materials to be prepared and distributed earlier and consideration has to include the timelines for delivery of materials to and from students. This evaluation indicates that a part of this planning also needs to include instructor orientation by some or all of these personnel: former instructors who have used this system, Extension, AV Services and the community colleges.

2. Using the medium. As noted in the introduction to the Part, the instructors did not find the system to be as difficult as they had expected it to be. However, the evaluators are of the opinion that the instructors may not have used or exploited the system to the extent possible. Two instructors almost ignored the system and its potential. The others employed some instructional procedures which did use the medium, e.g., guest experts could be heard in many centres, a single student in one centre could be part of a group at another site, etc., but, generally, the declared advantages of the medium were under-utilized. Increased liaison with former instructors, with the students in the off-campus sites, with AV Services and with

instructional specialists would likely have suggested alternative activities and approaches.

The predominant instructional mode was the lecture. Much of the negative reaction to the instructional approach voiced by the off-campus students related to the effects which the lecture produces: long periods of looking at a relatively stationary speaker, hearing a monologue-type presentation, and focussing on a single, limited image. Many off-campus students expressed the opinion that the instructors would lecture less if they were to sit down and view an early class session, in a single viewing session. there was the suggestion that instructors should be "sensitized" to the experience the students must go through.

Another suggestion to instructors which would improve the use of the medium was to repeat the questions and answers of students so that the students in other centres could understand the substance of what was going on.

The off-campus students frequently expressed, in all the data collection approaches, that it was relatively easy to become bored because of the "sameness" of what they were looking at and hearing. The camera limits and focuses the field of vision of the off-campus students. They cannot place the instructor in a wide a field of vision (the classroom) which allows for a variety of visual images; one of which is the instructor. As a result, viewing the image on the television set for long periods of time is a more demanding and fatiguing experience than viewing the same experience at the on-campus site. This problem is compounded when the class is 3 to 3 1/2 hours in length, at

night, at the end of a work day.

Instructors need to assume that levels of interest, attention and fatigue will be different for those off-campus; therefore, breaks and variations in activities and changes in verbal and visual presentation must be more frequent. However, there is an inherent Catch 22 present: the instructor needs to use a variety of instructional aids to heighten and retain interest but if the aids (primarily the chalkboard and overhead projector) are not reproduced well on the receiving television set, then the students' experience becomes frustrating and boring.

In this evaluation the instructors reported that they found that the delivery system of the class had a tendency to force them to slow the pace of the presentation and that this resulted in a change or adaptation of their teaching style. The evaluators are not convinced that the change was a change in instructional style. Pace is an aspect of all instructional approaches but a particular pace is not an approach, per se. This instructional medium requires a variety of approaches.

F. Students

On-campus and off-campus students had different experiences in this project. The on-campus student reported a normal university experience with a few minor exceptions: the technical system intruded to the extent that the cameras made some noise, the telephones flashed, clicked and interrupted, and the pace of the class was somewhat slower because of the need to interact with the off-campus students. Relationships with the instructor,

access to resources and materials, and all other aspects of these classes were virtually normal for these students.

Off-campus students, on the other hand, had experiences very different from the normal university class, even if compared to a traditional off-campus class. These students were being instructed over a medium which restricted and focussed their field of vision and limited their ability to interact with other students and the instructor. Generally, in their day-to-day lives, it delivers fast-moving entertainment which usually does not demand a high level of concentration--certainly not for three and one-half hour blocks. Despite these limitations the students were generally satisfied with the experience because they felt the advantages easily outweighed the disadvantages. They were saved the cost and inconvenience of travel and they received a class which would not normally be available off-campus.

Although the off-campus students were satisfied with the content they received, were able to meet personal objectives, such as personal growth, program credit, etc., they were generally not satisfied with the transmission of the class--it was difficult to see and hear and to interact. They felt bored, isolated and out of the mainstream of the class. These feelings, it seems, were not as profound amongst the off-campus students who interacted with one another and who performed functions for one another, such as coffee maker, phoner, etc.

It is appropriate at this point to discuss the number of students necessary to make a class available at an

off-campus location. In addition to cost and hardware factors the pedagogical factors ought to be considered. From the experiences of this evaluation it was found that a number of students preferred to stay at home, watch the telecast with no opportunity to interact and be perfectly happy with the credit they received for completing the class. On the other hand, a number of students who could receive the telecast at home, preferred to come to the central location to participate in the class. These students who came to the central location valued the interaction with other students at that location. It seems that the minimum number of students may depend on the kind of experience the student wants and is willing to accept in order to receive credit. Therefore, with sufficient information and all other areas remaining equal, the "stay at home" minimum could be one or two students; but for an "instructional" experience the number likely needs to be more than three.

Using the same information, the technology becomes the limiting factor in determining the maximum number of students per site. Only about ten to twelve students in a seminar or classroom setting can view the normal-sized television sets used in this project. As well, the single telephone available at some sites was inadequate for the number of students at some sites. It appears that there schould be at least one telephone for every five students. The conclusion which must be drawn is that the maximum size is most directly related to the availability of telephone hook-ups.

Another factor to be considered here is the feeling of belonging by all the students in the class, both on- and off-campus. The more the on-campus students feel they are part of a total class, i.e., recognizing and accepting the off-campus students as being there and deserving of thought and consideration, the less the on-campus students will dominate the class. Also, the size of the campus class may be a factor in the relationship between the instructor, the on-campus students and the off-campus students. When the on-campus group is relatively small the off-campus students seem to be more integrated into the class than when the on-campus group is quite large. In these instances the off-campus group tends to be ignored. For many off-campus students the following statement reflects their experience. "I felt completely alone in the class. there was no one to care what I was doing and if I was doing it. I couldn't go and talk with the professor to find out those little things that so often come up in classes."

G. Instructor/Student Interaction

Student questionnaires and interviews indicated that the on-campus students felt that they were in contact with the instructor, both during the class and outside of class, if this was their need or wish. This feeling of relationship was not shared by the off-campus class members.

It is not correct to assume that the way a class is presented on-campus to a "live" class will work equally well if it is presented the same way via television to an off-campus class. For example, limited or few overt interactions may be acceptable when the instructor and

students are in relatively close proximity. In this setting some communication can result from body language and facial responses. These incidents of interaction are not possible when the majority of the class are at some remote location and it is not appropriate to plan an instructional approach that leaves interaction and response primarily to the on-campus class and the chance that one of the off-campus sites will respond.

There is evidence from this evaluation that when the off-campus sites are requested or encouraged to participate they do so readily. Often when there is an established routine for reporting attendance, television reception quality and asking questions about assignments, materials, etc. it seemed to generate more participation from and by the off-campus sites. This was noticed during the observations at the off-campus sites and in the analysis of the videotapes of the classes.

With little or no interaction between instructor and students it is difficult to determine the level of communication and understanding. One way to increase interaction is through questioning and discussions. This was achieved to a degree in two of the classes. Another way is with assignments and feedback. This type of system, in which reliance must be placed on the efficiency with which assignments can travel to a central location, be evaluated, returned to the sender, reviewed by the student and then discussed with the instructor, involves a process which likely is too long to result in good quality communication or understanding.

H. General Discussion

A number of items require discussion in a general sense. Although some might have been included in previous sections (e.g., technical, students, etc.), it was felt more appropriate to highlight them here and some do not lend themselves to easy categorization.

1. A reader might wonder at the absence of reference to the literature on distance education. The principal evaluators decided that this evaluation should refer to and relate to the University of Regina project only. There was never any suggestion that this project should be compared to any other. In fact, the modification of the Stake model was made partially because it was felt that there was not an appropriate referent to use as a standard; either "absolute" or "relative" to use Stake's terminology.
2. Even after the completion of this evaluation it does not seem possible to draw many conclusions with respect to optimal numbers. It is known that the off-campus class needs enough students to allow for a support system. The minimum is likely four students. No conclusion is made with respect to number of sites. There must be a best number or range but this evaluation does not have the data for such a conclusion.
3. The present site for the on-campus classroom is not a good environment from an instructional point of view. The room is much too large (75 desks) for the size of these on-campus classes (or for almost any other Extension night class). Partially due to the size,

there is far too much chalkboard space and thus no permanent space at the front of the room for chalkboard substitutes such as screens, flip charts, corm boards, etc. There is a platform across the front of the room which effectively isolates the instructor from the class from both a height and contact perspective. It is not possible to have graduated levels of lighting which means that if the instructor does leave the podium to use an overhead projector the correct illumination is difficult to achieve. It needs to be noted again that the classroom is situated in a heavy traffic area which results in extraneous noise if doors are not closed during the telecast.

4. If the primary purpose is to deliver the classes off-campus using television this could be easily achieved by video taping regular classes or classes taught with this purpose in mind. Then the classes could be available to any number of remote sites and to classes of any size. Obviously this project expects more. The ability to communicate from instructor to sites, the sites to the instructor, and from one site to another is what provides the justification of the network which is provided. However, the technology can only work to the extent it is utilized. Instructors and students must want to use and actually use the options which are available in order to get the maximum effect of the technology. In this project the use of the two-way audio technology hardly warranted its availability.

5. The data indicates that there is considerable evidence of frustration and boredom on the part of the off-campus students. One would expect that this would result in a large number of "drops" and "withdrawals." The data do not support this expectation. Approximately twelve percent of those enrolled withdrew. This compares favorably with other off-campus classes offered by Extension. This tendency to stay with the class is likely due to the fact that any type of local class is better than no class and better than having to travel a distance to a class.
6. In this evaluation there is a great deal of congruence between how Extension, the instructors and the students thought the class would be taught and how it was actually taught. These three parties did not expect the instruction to be much different from any typical or normal university class. That is, it would not be much different because it was being televised. On the basis of the evaluation model being employed, one would be pleased with such a high degree of congruence. However, this finding is disappointing to the evaluators of this project. They feel that the medium is different enough to provide, demand perhaps, a wide range of instructional decisions and instructional approaches. All of the participant groups could have had broader expectations; become more involved in using the support system; in offering assistance to other parts of the system; and in trying to exploit the advantages of the system.

7. A more varied approach to instruction is the result of coming to know other methodologies, having tried them out, having been coached in their use, and having a resource to turn to when assistance is needed. To simply exhort instructors to do things differently is not helpful. Consequently, in the conclusions and recommendations of this evaluation there is a clear directive for an instructional handbook along with a plan of instruction, monitoring and coaching for all instructors using the two-way television approach to teaching.
8. One wonders if the group of students who stay at home and take the class should be viewed negatively or positively. An earlier section of this Part indicates why they follow this practice. Should their practice be condoned? Are they in some way reducing the possibility of developing a sense of "the class" at the community college site? Is it cost-efficient for the system to have a two-way telephone system which a number of students cannot, or choose not to, use? (Is this much different from those who can telephone and do not?) On a more positive note it can be seen that this practice is not followed by many who could, because they want the experience of being part of a class. Another positive aspect is that the option of getting the class at home provides more flexibility to the system.
9. Off-campus students soon determine what is expected of them. They soon know if it really makes any difference

if they participate actively or otherwise. However, if they realize that they are to participate using all the technology and then find that they cannot ask spontaneous questions, or get immediate feedback, they soon develop frustration with the system and ignore it. There is insufficient data to conclude how effective on-site tutors might be but it seems pedagogically sound to have such people present to facilitate group discussions, case study sessions, assignment interpretation and the like. If they could also act as markers, many of the problems of feedback would be reduced.

10. A final observation. It would seem that until the two-way communication potential is made more operational that these classes should be restricted to students who have already successfully completed some university classes. To take one's first class in this system as it presently operates, would be a very formidable challenge for a student unfamiliar with the university lecture style of instructing and the expectation that the student is a relatively independent learner.

II. Conclusions

A. Intentions and Observations

On the basis of the findings and the discussion it can be concluded that:

1. this delivery system allowed the participants to plan and carry out plans which are basically consistent with "normal" university procedures.
2. the relationship between intentions and outcomes for all participants was very close. Participants generally got what they wanted.
3. the participants in this project hesitated to plan for procedures which go beyond a "normal" university class and which would take advantage of the technology used in this system.
4. students were willing to overlook problems (boredom, transmission difficulties, etc.) to take advantage of the availability of the class, as well as the savings in time and travel by participating in this system.
5. the plans and activities concerning student evaluations and the outcomes related in terms of student achievement, were consistent with past university experience with Extension classes.
6. the intention of having students off-campus achieve as well as on-campus students was attained. Off-campus students seemed to be no different in their achievement than on-campus students.

B. Support System

1. There was a high level of willing cooperation; the participating agencies have overcome any system related

obstacles which would inhibit cooperation in support of this project.

2. The system which distributed assignments, tests and materials did not consistently meet the needs of the instructors or the students.
3. Supplementary resources, e.g., textbooks, journals, etc. are difficult to access at the off-campus sites.
4. Although the ethic of cooperation was readily apparent, instructors did not feel it necessary to ask for extensive instructional assistance.

C. Technical System

1. The technical system carried the instruction to the off-campus site in a manner which allowed students to have an acceptable learning experience.
2. The system is designed so that problems are identified and corrected as quickly as possible.
3. The hardware worked; when problems arose they were normally due to human errors.
4. The systemhas a number of elements which have been identified as needing improvement; the telephone communication system, camera work, maintenance of off-campus monitors and some aspects of video transmission.
5. The camera operators were able to operate the camera equipment in a technically correct manner, however they were not able to use the cameras so as to complement/enhance the instruction provided by the instructor.
6. The technical system can be used to increase or decrease the feeling of isolation felt by the off-campus students.

7. The audio transmission system is very good when the instructor's voice is being transmitted. It is not adequate for transmitting on-campus student questions or discussion.
8. The telephone system is not being used to advantage by either the instructors or the students. It is simply too disruptive to use.
9. Classroom set up both on- and off-campus has an effect on the quality of learning experience had by the students.

D. Instructional Aids
   1. The standard blackboard is difficult to use by the instructor (making sure informations is large enough, in the right area, etc.) and is difficult to transmit.
   2. Overhead projection, the way it was used in these classes, is generally unsatisfactory.

E. The Off-Campus Setting
   1. Most problems concerning the off-campus setting were due to lack of appropriate preparation for the class, e.g., monitors not available or not tuned, telephones in awkward, difficult to reach positions, etc.

F. The Stay-at-Home
   1. Some students are not interested in the telephone hookups and may not be hampered in their achievement by the lack of interaction with the instructor during the class period.
   2. Personal convenience (avoiding travel, babysitter costs) seem to overcome, for some students, the advantages of being in a classroom with other students and a

telephone hookup to the instructor. Perhaps these students may have felt that the benefits gained by going to the classroom were outweighed by the disadvantages of the system itself.

G. Instructors and Instruction

1. Selection of instructors is crucial to the successful offering of these classes.
2. The instructors were able to present a class which was comparable to other university classes they have instructed.
3. It was time consuming for instructors to plan for this type of class and it is necessary for most instructors to receive assistance, technically and pedagogically in order to plan appropriately.
4. The early preparation of classroom materials (texts, assignments, etc.) and their distribution system are crucial to the instructional success or failure of this type of system.
5. The communication system was only used by the instructors to deliver basic instruction. They did not attempt to use it to its fullest extent to enhance/complement the instruction, particularly through the appropriate use of the medium as an integrated part of the instruction.
6. The lecture as the single instructional strategy for a 3 1/2 hour televised class is inappropriate and contributes to boredom and a lack of motivation.
7. A variety of instructional strategies and approaches are needed to take advantage of the medium and to

maintain student interest and attention.

8. In order to be effective, as it is mediated through television, the instruction must be a visual experience.

H. Students

1. Off-campus and on-campus students have different experiences in this situation and should be considered differently when planning for these classes.
2. Off-campus students accepted and appreciated the convenience and opportunity of receiving classes in this manner.
3. The maximum number of students per site is determined by the hardware available. In the situation under consideration (1 TV set, 1 telephone), 10-12 students would be the maximum recommended.

I. Instructor/Student Interaction

1. The more interaction between students and other students, and students and instructor, the less isolated the off-campus students feel.
2. A set routine requiring input from off-campus students increases the amount of interaction and heightens the feelings of relationship.

J. General

1. The model used in evaluating the Television Project is appropriate for use in evaluating technical and instructional systems identical to, and similar to the ones used in the project by the Faculty of University Extension of the University of Regina.

III. Recommendations

Based on the findings and discussions previously presented the following are put forward as recommendations to be considered when offering this type of program in the future. The recommendations are presented in categories. The first will deal with the support system, followed by the technical system, instructors and instruction, students, interactions, and finally general recommendations.

A. The Support System

1. One agency, Extension, the instructor's department or the instructor, should have the sole responsibility for the distribution (mailing) of materials and assignments to the off-campus sites.
2. One agency should be identified as bearing the material distribution costs.
3. The community colleges should accept and be responsible for the distribution of assignments, materials and exams at the off-campus locations.
4. A minimum number of resource materials, to be determined by the individual instructor, should be continually available at the off-campus location.
5. Extension should take a more active approach to monitoring these classes. Extension's experience with the arranging and delivery of these types of classes suggests that a more proactive stance be taken. Meetings should be scheduled to deal with and anticipate problems, advice should be provided for experienced as well as inexperienced personnel and specific expectations should be communicated to all participa-

ting groups.

6. Technical and pedagogical assistance should be provided to the instructors so that the available technology may be used to pedagogical advantage.
7. Support groups, such as department personnel, Extension and AV Services should be brought together with the instructors on a regular basis. These regular meetings would encourage further use of the available support services.
8. Extension should assist instructors in recognizing the differences between this instructional environment and a 'normal' university class.
9. Extension should provide opportunity for new instructors to meet and talk with instructors who have had successful experience with this instructional approach.

B. The Technical System

10. Technicians should man the cameras during the breaks as the breaks should be used as a time for personal interaction between the instructor and the off-campus locations.
11. The community colleges should be responsible for the television equipment availability and maintenance at their off-campus location.
12. Sponge erasers which do not leave a chalk film or residue should be used for these classes in order to avoid poor transmission of chalkboard information.
13. More microphones should be installed, or different microphones should be used, in order to better pick up and transmit the question, discussion and conversations

of on-campus students.

14. White spaces on the walls of the classroom should be covered or repainted to avoid the buzz which is transmitted when the camera includes these spaces in its field of vision.
15. In order to reduce hallway noises and other sounds which disturb the off-campus students it is recommended that a "studio classroom" be used.
16. A team of experts in television production and instruction should design a more appropriate classroom as the on-campus transmission site.
17. This team should also design the off-campus classrooms.
18. An attempt should be made to have the cameras move more silently.
19. A telephone communication system should be provided which is easier to use, is more convenient, is faster and is less noisy.
20. Telephone equipment should be installed which is capable of allowing several lines to be connected at one time, something like a conference call.
21. Provision should be made to allow off-campus sites to call other sites directly. This would allow for more options for class groups as well as provide the opportunity for informal exchanges at the breaks.
22. Camera operators should be encouraged to watch and listen to the proceedings of the class as if they were taking the class.
23. So as not to distract the camera operator, other monitors or radios should not be operating in the

control room.

C. Instructors and Instruction

24. A study of the group dynamics at the off-campus sites should be undertaken. There were some indications in this evaluation that groups at the off-campus locations organize themselves differently as a social group and that this has an impact on how the class is experienced.

25. Instructors should attempt to attend a class at an off-campus location to experience a session from the students' point of view. This visit should be made either before the instructor has begun to teach (in a previous semester) or very early in the semester in which he or she is teaching.

26. Instructors should establish an order of calling-in to be used at the beginning of each class in order to have each of the off-campus sites report. This should be done within a minimum period of time.

27. Transparencies and other similar audio-visual aids (e.g., slides) should be duplicated and sent to the off-campus locations so as to be available during class discussions of their content.

28. Individual class outlines should be distributed to the off-campus locations prior to the particular session.

29. Instructors should ensure that all students, on- and off-campus have supplementary materials available if they are to be used during a particular class. It is unfair and pedagogically unsound to refer to materials to which some students do not have access.

30. Adequate planning and preparation time should be ensured for the instructor. Assignments to these classes should be made at least two or three months before the beginning of the semester in which the instructor will teach using this system.
31. Instructors should use the expertise of AV Services in the development of audio-visual aids, e.g., overhead transparencies, slides, use of films, recordings, etc.
32. Rear projectors, slides, and other alternative aids should be used more extensively and be very well prepared in order to create a more visual experience for the student.
33. Instructors need to ensure that all students can hear, understand and are able to participate in the instructional activities entered into during the class, e.g., repeating questions asked by on-campus students.
34. Instructors should personally meet students at the off-campus locations prior to, or early in, the semester to help personalize and humanize the relationships in this unique instructional process.
35. Instructors should solicit more student input. The student perception is that the larger number of students from varied areas of the province with varied experiences and backgrounds is a benefit of this instructional approach.
36. Opportunities should be provided throughout the class periods for students--particularly off-campus students--to discuss the topic with each other and with the instructor. This would break up the long classes

and would decrease the sense of isolation which is felt at the off-campus sites.

37. Instructional assistance (help with planning and instruction in instructional techniques) should be made available to instructors as soon as they are appointed to teach the class. Regular instructional monitoring and coaching should be a part of the system for as long as the instructors feel that such activities would be of benefit to them.

38. Instructors should receive some instruction concerning on-camera appearance, i.e., clothing, body movement, voice, eye contact, gestures, etc.

39. Only instructors who are willing to and capable of using the technology as an instructional tool should be chosen to teach in this system.

D. Students

40. Students who indicate a desire to enroll in these classes should be informed before classes begin, of the technology being used and some of the implications of its use.

41. Class size should be considered for both on- and off-campus sections. Large on-campus sections may inhibit and isolate the off-campus students as well as be so demanding on the instructors that they fail to pay sufficient attention to the off-campus students. Very small off-campus classes may not provide the group support it seems is necessary for students to maintain interest and motivation in these types of classes.

42. Extension should consider alternative uses of the time

available for classes in order to avoid instructional periods longer than 2 1/2 to 3 hours.

43. Specific activities need to be engaged in which will encourage a feeling of belonging amongst the off-campus students. These activities could be as simple as having the instructor speak to a different off-campus site alone for a few minutes each class; this might also be done at the break, before or after the class period.

44. Off-campus groups should be organized so that important tasks will be attended to by the group itself. A discussion leader, boredom breaker, materials distributer, etc. should be encouraged by either the instructor or the community college liaison person. Unstructured groups do not seem to be as motivated or attentive as structured groups.

45. On-campus students should be encouraged to sit in front of the cameras so that they may more easily ignore the cameras' motions and presence.

E. General

46. To effectively test this system classes should be offered at more remote sites than those which are used at present.

47. A handbook should be devised with accompanying training sessions which would prepare instructors and technicians to be able to take advantage of the instructional opportunities which are available when using this type of technology.

# APPENDIX A

## The Stake "Countenance" Model

# STAKE'S COUNTENANCE MODEL[1,2]

## Background

Stake sees man's activities as being complex and any measurement of man's activities must take this into account. therefore, Stake's model is wide-ranging and holistic. He has designed it so that it provides a means for collecting and analyzing as much data as is feasible.

After Scriven's contribution to the theory of evaluation and the number of innovative programs of the 60's, there was a need for explicit procedure or frameworks to carry out valid evaluation. Stake's model was created in response to this need. In addition, Stake's model can employ many theoretical constructs (i.e., objectives, goal-free, criterion-referenced, etc.) and can include a wide range of evaluation instruments.

## The Model

Stake sees evaluation as being either formal or informal--informal being highly subjective and casual while formal evaluation is dependent upon empirical measurement (i.e., structural visits, standardized testing, etc.). Although Stake sees a place for informal evaluation (i.e., preliminary needs assessment, qualitative evaluation, etc.), his model concentrates on formal evaluation. In this light, he defines the two essential acts of evaluation as being

---

[1]Stake, Robert E. "The Countenance of Educational Evaluation" Teachers College Record, LXVIII (1967), 523-40.

[2]This summary and description was prepared by Denny Quigley, a graduate student at the University of Regina, 1984-85.

description and judgment (Stake, 1976). According to Stake, a complete evaluation will "fully describe and fully judge" (Stake, 1976). Using this concept, Stake divides evaluation data into two dimensions. One dimension separates data into descriptions and judgments; the other classes data into antecedent, transaction and outcome[1] (Mackay, 1971). these two dimensions make up the data matrices. As can be seen from Figure I, the description matrix is subdivided into intents and observations and the judgment dimension is subdivided into standards and judgments. Intents are those goals or objectives that were intended and observations are what was observed. Evaluation then becomes a matter of finding logical relationships along these two dimensions (see Figure II) and decided the degree to which these relationships exist.[2]

Role of the Evaluator

Under Stake's model, the evaluator has been given the responsibility of making judgments. To do this, the evaluator relates his observations to a set(s) of standards and decides whether or not the standards have been met. These comparisons can take the form of "absolute comparison," in which comparison is made to standards set out by national institutions, experts or other reference groups and/or of "relative comparison" in which comparison is made to similar or alternate programs. On the basis of these comparisons, the evaluator then makes judgments and recommendations. (See Figure III)

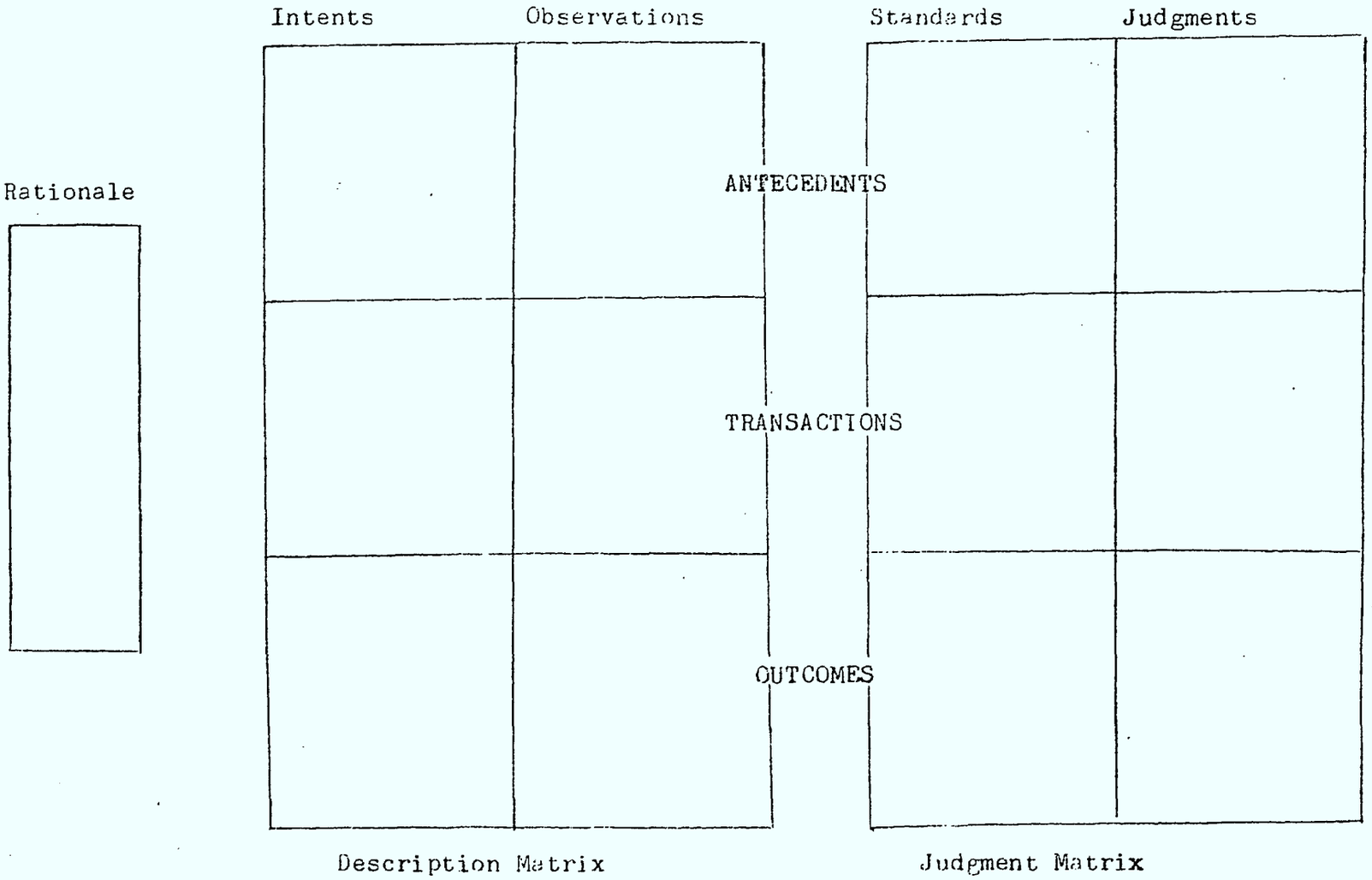
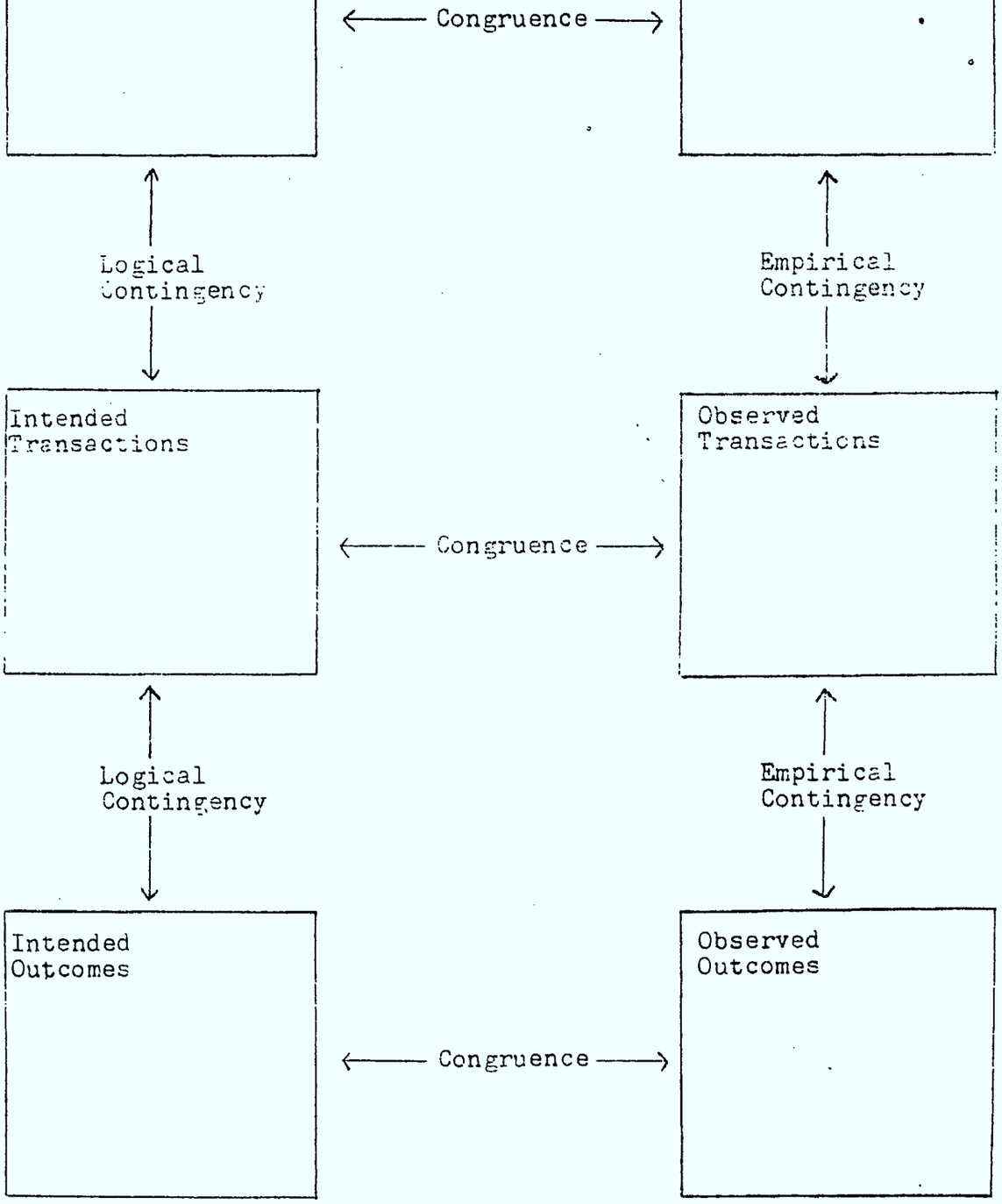



Figure 1: A Layout of Statements and Data to be Collected by the Evaluator of an Educational Program

Source: Worthen and Sanders, 1973, p. 113.

Figure II: A Representation of the Processing of Descriptive Data



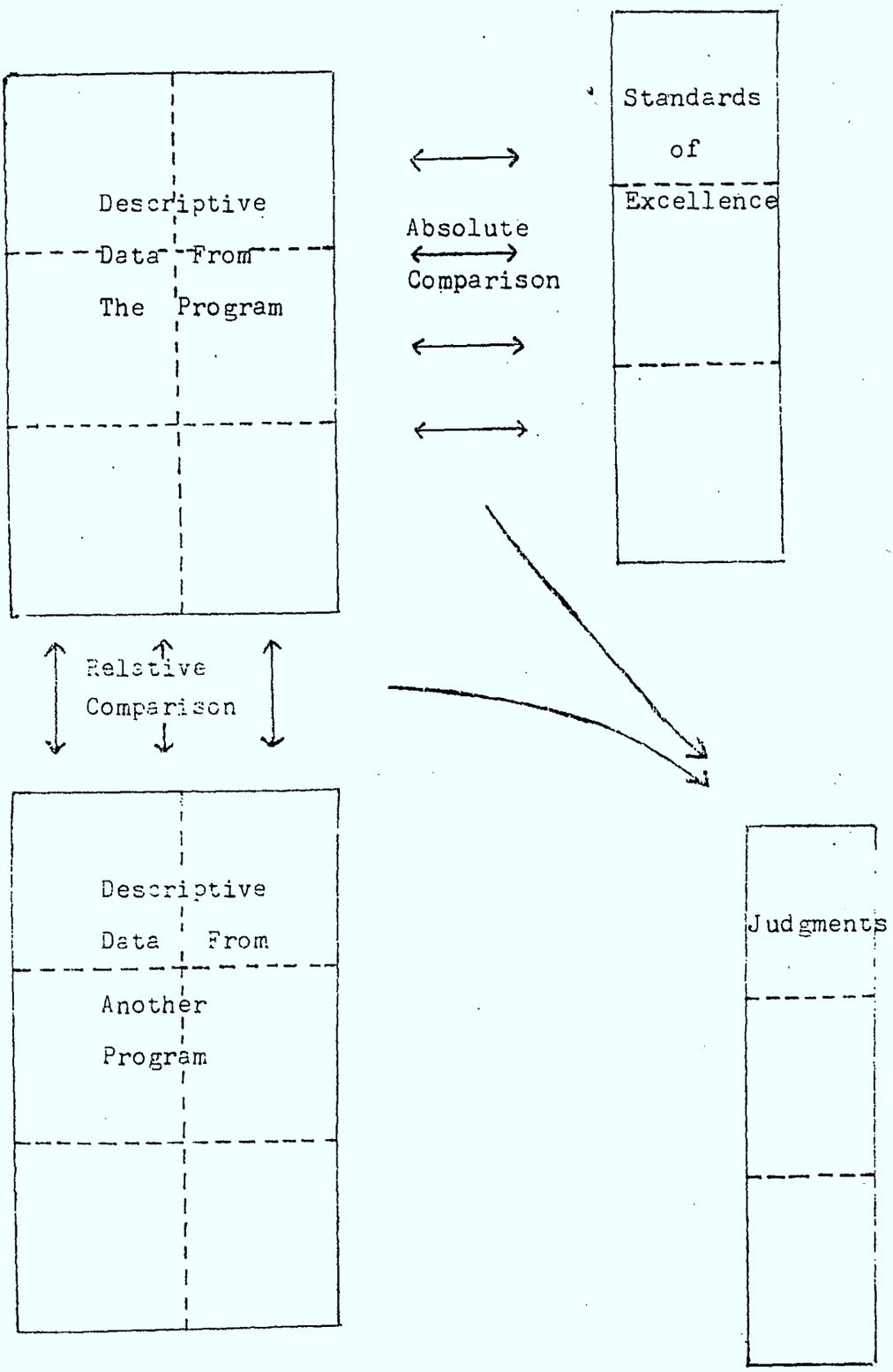



Figure III: A Representation of the Process of Judging the Merit of an Educational Program.

---

Source: Adapted from Worthen and Sanders, 1973, p. 121.

Strengths

The strengths or contributions of the countenance model can be listed as follows:

1. The model provides a framework which allows for evaluation and judgment at the beginning, during and at the end of the program. Stake sees this framework as a means to "stimulate not subdivide" (Worthen, 1973, p. 112). That is, it forces the evaluator to evaluate in ways that might be overlooked.
2. The model calls for a broad base for data collection. The descriptive measures include as many data collection procedures as possible. Recall that Stake bases his model on a holistic approach and feels that, as much as possible, the program should be described as fully as possible. This type of approach will:
   (a) be unlikely to miss important events
   (b) allow for other systems of evaluation to be used (i.e., Scriven's goal-free evaluation, objective evaluation, etc.).
3. The model allows for evaluation of innovative programs through relative comparison.[3] Stake feels that if standards do not exist then they must be estimated. These standards should be determined prior to evaluation.
4. The countenance model can be used for both formative and summative evaluation.
5. Stake stresses the importance of a variety of skills such as a team approach rather than a single evaluator. He sees a place in the evaluation process for not only measurement specialists but also social scientists, psychologists, etc.
6. Attention should be given to what the client actually wants

prior to designing the actual evaluation. This includes identifying the audiences that will likely be involved and including their needs in the data gathering and reporting.

7. The model is sensitive to local needs. As mentioned above, standards can be selected that are relevant to the program and to the conditions in which it must operate. As well, it can be modified to provide useful information to those concerned.
8. Because Stake does not expect complete congruency between intents and observations he allows for unintended outcomes to be included and evaluated.

Weaknesses

The limitations of Stake's model can be listed as follows:

1. The model relies heavily on the observational abilities of the evaluator. If the evaluator is not well-trained, he/she may miss important details or events. This can undermine the underlying philosophy of the model.
2. Because the model calls for more than one set of standards on which to judge the program, this could result in conflicting evaluations of worth. That is, there may be disagreement between participants and experts regarding the worth of the program. This may have an impact on the final evaluation.
3. A problem may arise when the evaluator(s) has (have) a limited budget and/or limited time. This may force evaluators to be selective in their observations and important relationships may be missed or not fully investigated because of it.
4. Some critics feel the model is too unstructured and it is

difficult to apply the matrices. They feel there is a certain overlap in boundaries and in the concepts of contingency and congruency.

5. It may be difficult, if not impossible, to obtain specific intents for each stage of the evaluation. Even though Stake does not insist upon a statement of goals and objectives in behaviouralistic terms, it may still be difficult to obtain valid intents.
6. Because such a wide collection "net" is thrown, a very large amount of data may be collected. This may make the resulting analysis a Herculian taks. This could limit the degree to which contingencies and congruencies are determined and examined.
7. As mentioned above, the evaluator has considerable latitude in the collection and judgment of data. This may result in evaluator bias through the determination of instruments and procedures used, standards selected and judgments derived.
8. The team approach can be expensive and difficult to administer. This limitation may effect the quality of the observations gathered or the evaluations made.

## NOTES

[1]Antecedent data are observations and judgments collected on conditions prior to the program. Transaction data are collected while the program is carried out and outcomes are data collected after the program is completed.

[2]Stake classifies these "relationships" into contingencies and congruencies. For example, if we were to look at the observational column, the evaluator would determine if there was logical contingency between what he observed as being intended and what he observed as transpiring. In the expressed intents of a transaction and the expressed intents of the outcomes of the program.

Proceeding horizontally, the evaluator would look for congruencies between what was intended and what transpired. Stake feels that not only is it unlikely that complete congruence will occur, but also, it is not all together desirable to have complete congruency. The reader is referred to Worthen and Sanders (1973) for a complete description of Stake's Countenance Model.

[3]*Ibid*.

## REFERENCES

MacKay, D. and Maguire, T. Evaluation of Instructional Programs, Alberta Human Resources Research Council, 1971.

Worthen, B. and Sanders, J. "The Countenance of Educational Evaluation," Educational Evaluation: Theory and Practice, Belmont, Cal., 1973.

# APPENDIX B

## Antecedent Questionnaires

Professor
Student
Extension
Audio Visual Services
Community Colleges

TELEVISION PROJECT

ANTECEDENT QUESTIONNAIRE

PROFESSOR'S FORM

FALL 1985

NAME _____

CLASS _____

1. Describe how you became the instructor of this class.

_____

_____

_____

2. How would you rate the pre-planning for your class by:

| | UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|---|
| a. Extension | 1 | 2 | 3 | 4 | _____ |
| b. AV Services | 1 | 2 | 3 | 4 | _____ |
| c. Your Department Head/ Dean | 1 | 2 | 3 | 4 | _____ |

Comments or additional information _____

_____

_____

3. Rate the availability of information about the delivery of off-campus classes by electronic or telephonic means.

1 2 3 4 _____

Comments, etc. _____

_____

_____

4. Rate the quality of the support system (Departmental, clerical, library, colleagues, etc.) available to you for <u>planning</u> your class.

1 2 3 4 _____

Comments, etc. _____

_____

_____

. . . /2

5. Rate the quality/availability of the resources and support system available to you to assist in making <u>instructional</u> decisions concerning the class.

| UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | _____ |

Comments, etc. _____

_____

_____

6. Rate the extent to which you feel you were able to play a part with respect to determining the timetabling or scheduling of the class.

1 2 3 4 _____

Comments, etc. _____

_____

_____

7. Rate the availability of instructional materials so far in the planning stage.

1 2 3 4 _____

Comments, etc. _____

_____

_____

8. How much time did you have to plan the class? (Days, weeks, months).

_____

_____

9. Rate the amount of time you had in which to do your planning.

1 2 3 4 _____

Comments, etc. _____

_____

_____

10. Rate the quality/extent of technical support, assistance, advice, etc. which you received from AV Services so far.

| UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | _____ |

Comments, etc. _____

_____

_____

11. Have you talked to others who have taught in '84-'85 using this delivery system?

_____

12. List what you feel are the desirable/appropriate characteristics for the instructor of the class (education and experience(s)).

_____

_____

_____

_____

_____

13. Before you meet the students, you likely have some opinions about what they will be like. List what characteristics you feel will be exhibited by your students.

_____

_____

_____

_____

14. What do you think will be the student's expectations?

_____

_____

_____

_____

15. As you are getting ready for the class, what do you feel are the appropriate/necessary/desirable knowledge or prerequisites which students should possess?

_____

_____

_____

_____

. . . /4

16. Have you met with the students yet? If not, do you plan to meet with them before the class begins? (Describe, if appropriate, how you contacted/will contact them)?

If you have included an early meeting with students, what are/were the primary objectives of the meeting?

How is/was the session to be organized and planned?

17. How many lessons/sessions have you planned so far?

To what extent have you prepared AV materials and resources?

18. What do you expect to be the nature of the on-campus setting? Describe it please.

the nature of the off-campus setting?

19. How do you plan to evaluate? (What activities, value, how often, when, etc.)?

. . . /5

20. Describe simply, but in some detail, what you expect will be the typical structure of a lesson/session. Normally, what do you intend to do? For how long? For what purpose(s)? What do you expect the students to do? How will they participate? Etc.

21. In what ways do you think the technical equipment might affect, particularly the delivery of the class, positively and/or negatively?

on-campus

off-campus

22. How do you intend to compensate for the negative affects?

on-campus

off-campus

23. With a check mark, indicate the extent to which you expect your Department/Faculty or Extension to assist you during the semester with respect to:

| | Considerable | | | Minimal |
|---|---|---|---|---|
| instructional planning | | | | |
| delivery of the class | | | | |

24. Indicate the extent to which you expect on-going assistance from AV Services.

| Considerable | | | Minimal |
|---|---|---|---|
| | | | |

. . . /6

25. How do you anticipate that you will deal with equipment breakdown - total or partial breakdown?

_____

_____

_____

26. What are your plans in the event of your absence (planned)?

_____

_____

_____

your absence (unexpected) _____

_____

_____

student absences _____

_____

_____

27. Do you have a specific plan which you are going to follow in order to determine what the needs of the students are? Yes _____ No _____
If yes, describe the plan.

_____

_____

_____

_____

28. Indicate the degree or extent to which you feel the students will interact.

| | to a considerable degree | to a minimum degree | hadn't thought of this |
|---|---|---|---|
| with you? | _____ | | _____ |
| with each other? | _____ | | _____ |

29. What feedback techniques (e.g. questions, surveys, discussions, informal conversations, etc.) do you intend to employ during individual lessons?

_____

_____

_____

at the mid-point and end of the class? _____

_____

_____

. . . /7

30. How do you intend to have the off-campus assignments delivered?

_____

returned? _____

31. How do you intend to deal with take up or discuss assignments for the on-campus students?

_____

_____

the off-campus students? _____

_____

32. Before the class commences, what are your objectives for the class?

_____

_____

33. What objectives do you have for the assignments? _____

_____

_____

for the tests? _____

_____

TELEVISION PROJECT

STUDENT QUESTIONNAIRE

FALL 1985

This questionnaire is designed to identify and describe your expectations and concerns BEFORE you begin this course. Because the course is unusual, in that it is being televised, we expect that you will have some thoughts about the course.

CLASS _____ LOCATION OF CLASS _____ MEETING DAY _____

1. How did you find out about this class? _____

_____

_____

2. What are your personal objectives/expectations for the class? _____

_____

_____

3. What do you anticipate to be the benefits of a class transmitted by television?

_____

_____

The disadvantage? _____

_____

4. In what ways do you think the technical equipment might affect the delivery of the class - positively and/or negatively?

_____

_____

_____

5. What do you expect the professor/Extension Department to do before the class begins to prepare you for a class delivered by television?

_____

_____

_____

6. What do you think you need to do to be prepared for this class?

_____

_____

_____

. . . /2

7. Do you feel well prepared to take this class? Why? _____

_____

_____

8. What do you expect will/should be the minimum number of personal contacts (face to face) between you and the professor during the whole of the class?

CONTACTS 0 1 2 3 4 More than 4

Comments _____

_____

_____

9. How do you expect the instructor to teach this class? _____

_____

_____

10. In an instructional sense, how do you expect the professor to use the technology, i.e. TV, telephone, etc., in teaching the class?

_____

_____

_____

In an instructional sense, how do you expect this class to be taught differently from other classes you have taken?

_____

_____

_____

11. Rate your expectation of the difficulty in receiving assistance, advice and/or further information because of the use of the television and the telephone?

Not too difficult Very difficult

1 2 3 4

12. What characteristics would you expect of a professor who is successful in teaching through the use of TV?

_____

_____

13. Do you expect that viewing the professor on TV and using the telephone to communicate during the lectures will be difficult? Why?

_____

_____

_____

14. How do you expect to receive texts and other materials? _____

_____

_____

15. How do you expect to submit your tests and assignments? _____

_____

_____

16. How do you expect to receive feedback on your tests and assignments?

_____

_____

_____

17. Rate your expectations of the level of difficulty in accessing materials/resources necessary to complete assignments.

| Not too difficult | | | Very difficult |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

Comments _____

_____

_____

18. Indicate the extent to which you feel you will, during the lectures, interact with the

| | A lot | | | Not much |
|---|---|---|---|---|
| Professor | 1 | 2 | 3 | 4 |
| Other students | 1 | 2 | 3 | 4 |

19. If you are absent from a lecture, how do you expect to catch up?

_____

_____

_____

20. How do you expect to be evaluated? _____

_____

_____

21. I am an _____ on-campus student

_____ off-campus students

(Please check one of the above)

TELEVISION PROJECT

FALL 1985

This questionnaire is designed to identify and describe your expectations and concerns BEFORE you offer these courses.

1. What are Extension's objectives in offering these classes?

_____

_____

_____

2. Aside from cost factors, identify what you consider to be the major problem(s) in the following areas:

   a. Technology - hardware _____

   _____

   personnel _____

   _____

   b. Liasion with instructional personnel _____

   _____

   c. Liasion with AV Services _____

   _____

   d. Liaison with community colleges _____

   _____

   e. Recruitment and retention of students _____

   _____

   f. Liasion with students during class _____

   _____

   g. Program evaluation _____

   _____

3. In what ways do you think the technical equipment might affect the delivery of the class - positively and/or negatively?

   on-campus _____

_____

_____

_____

   off-campus _____

_____

_____

_____

. . . /2

4. What do you expect would be the students' reaction to this type of program delivery?

_____

_____

5. From your point of view, how would you rate the pre-planning of/or for these classes?

| | UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|---|
| by AV Services | 1 | 2 | 3 | 4 | _____ |
| by Professors | 1 | 2 | 3 | 4 | _____ |
| by Department Head/Dean | 1 | 2 | 3 | 4 | _____ |

6. Rate the availability of information that you have now about the delivery of off-campus classes by electronic or telephonic means.

1 2 3 4 _____

Comments, etc. _____

_____

_____

7. Rate the extent to which you feel you are able to play a part with respect to determining the timetabling or scheduling of the class.

1 2 3 4 _____

Comments, etc. _____

_____

_____

8. Rate the amount of time you have in which to do your planning.

1 2 3 4 _____

Comments, etc. _____

_____

_____

9. Rate the quality/extent of technical support, assistance, advice, etc. which you received from AV Services <u>during</u> your <u>planning</u> period.

1 2 3 4 _____

Comments, etc. _____

_____

_____

10. List what you feel are the desirable/appropriate characteristics for the instructor of the class (education and experience(s)).

11. What do you think the students' expectations would be of these classes?

12. What role do you expect to play in facilitating meetings of professors and others before the classes begin?

13. What do you feel to be the primary purposes of such meetings?

14. What do you expect would be the nature of the on-campus setting? Describe it please.

15. What do you expect would be the nature of the off-campus setting? Describe it please.

16. What role do you expect to play in providing on-going support to professors? Describe.

. . . /4

17. Indicate the extent to which you expect on-going assistance from AV Services.

Considerable ——— Minimal

18. What kind of instructional methods do you expect will be most satisfactory with this technology?

_____

_____

most unsatisfactory _____

_____

19. What role will you have in facilitating the distribution of textbooks, assignments, marks, etc. between students and professors?

_____

_____

_____

How do you think this interchange will be handled?

_____

_____

_____

20. Describe the role(s) you expect the community colleges will play in the delivery of these classes?

_____

_____

_____

TELEVISION PROJECT

AUDIO-VISUAL/SERVICES QUESTIONNAIRE

FALL 1985

This questionnaire is designed to identify and describe your expectations and concerns BEFORE you offer these courses.

1. What are Audo-Visual Services' objectives in offering these classes?

_____

_____

_____

2. Aside from cost factors, identify what you consider to be the major problem(s) in the following areas:

   a. Technology - hardware _____

   _____

   personnel _____

   _____

   b. Liasion with instructional personnel _____

   _____

   c. Liasion with Extension _____

   _____

   d. Liaison with community colleges _____

   _____

   e. Recruitment and retention of students _____

   _____

   f. Liasion with students during class _____

   _____

   g. Program evaluation _____

   _____

3. In what ways do you think the technical equipment might affect the delivery of the class - positively and/or negatively?

   on-campus _____

_____

_____

_____

   off-campus _____

_____

_____

_____

. . . /2

4. What do you expect would be the students' reaction to this type of program delivery?

_____

_____

5. From your point of view, how would you rate the pre-planning of/or for these classes?

| | UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|---|
| by Extension | 1 | 2 | 3 | 4 | _____ |
| by Professors | 1 | 2 | 3 | 4 | _____ |
| by Department Head/Dean | 1 | 2 | 3 | 4 | _____ |
| by Community Colleges | 1 | 2 | 3 | 4 | _____ |

6. Rate the availability of information that you have now about the delivery of off-campus classes by electronic or telephonic means.

1 2 3 4 _____

Comments, etc. _____

_____

_____

7. Rate the extent to which you feel you are able to play a part with respect to determining the timetabling or scheduling of the class.

1 2 3 4 _____

Comments, etc. _____

_____

_____

8. Rate the amount of time you have in which to do your planning.

1 2 3 4 _____

Comments, etc. _____

_____

_____

9. Rate the quality/extent of technical support, assistance, advice, etc. which you received from Extension <u>during</u> your <u>planning</u> period.

1 2 3 4 _____

Comments, etc. _____

_____

_____

10. List what you feel are the desirable/appropriate characteristics for the instructor of the class (education and experience(s)).

11. What do you think the students' expectations would be of these classes?

12. What role do you expect to play in facilitating meetings of professors and others before the classes begin?

13. What do you feel to be the primary purposes of such meetings?

14. What do you expect should be the nature of the on-campus setting? Describe it please.

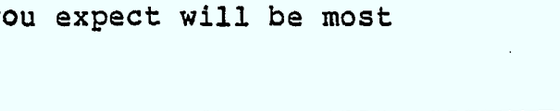
15. What do you expect would be the nature of the off-campus setting? Describe it please.

16. What role do you expect to play in providing on-going support to professors? Describe.

. . . /4

17. Indicate the extent to which you expect on-going assistance from Extension.

**Considerable** **Minimal**



18. What kind of instructional methods do you expect will be most satisfactory with this technology?

_____

_____

most unsatisfactory _____

_____

19. Describe the role(s) you expect the community colleges will play in the delivery of these classes.

_____

_____

_____

TELEVISION PROJECT

COMMUNITY COLLEGE QUESTIONNAIRE

FALL 1985

This questionnaire is designed to identify and describe your expectations and concerns BEFORE you offer these courses.

1. What are the Community Colleges' objectives in offering these classes?

_____

_____

_____

2. Aside from cost factors, identify what you consider to be the major problem(s) in the following areas:

   a. Technology - hardware _____

   _____

   personnel _____

   _____

   b. Liasion with instructional personnel _____

   _____

   c. Liasion with AV Services _____

   _____

   d. Liaison with Extension _____

   _____

   e. Recruitment and retention of students _____

   _____

   f. Liasion with students during class _____

   _____

   g. Program evaluation _____

   _____

3. In what ways do you think the technical equipment might affect the delivery of the class - positively and/or negatively?

   on-campus _____

_____

_____

_____

   off-campus _____

_____

_____

_____

. . . /2

4. What do you expect would be the students' reaction to this type of program delivery?

_____

_____

5. From your point of view, how would you rate the pre-planning of/or for these classes?

| | UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|---|
| by Extension | 1 | 2 | 3 | 4 | _____ |
| by Professors | 1 | 2 | 3 | 4 | _____ |
| by Department Head/Dean | 1 | 2 | 3 | 4 | _____ |
| by Community Colleges | 1 | 2 | 3 | 4 | _____ |
| by Extension | 1 | 2 | 3 | 4 | _____ |

6. Rate the availability of information that you have now about the delivery of off-campus classes by electronic or telephonic means.

1 2 3 4 _____

Comments, etc. _____

_____

_____

7. Rate the extent to which you feel you are able to play a part with respect to determining the timetabling or scheduling of the class.

1 2 3 4 _____

Comments, etc. _____

_____

_____

8. Rate the amount of time you have in which to do your planning.

1 2 3 4 _____

Comments, etc. _____

_____

_____

9. Rate the quality/extent of technical support, assistance, advice, etc. which you received from Extension <u>during</u> your <u>planning</u> period.

1 2 3 4 _____

Comments, etc. _____

_____

_____

. . . /3

10. List what you feel are the desirable/appropriate characteristics for the instructor of the class (education and experience(s)).

11. What do you think the students' expectations would be of these classes?

12. What role do you expect to play in facilitating meetings of professors and others before the classes begin?

13. What do you feel to be the primary purposes of such meetings?

14. What do you expect should be the nature of the on-campus setting? Describe it please.

15. What do you expect would be the nature of the off-campus setting? Describe it please.

16. What role do you expect to play in providing on-going support to professors? Describe.

. . . /4

What role do you expect to play in providing on-going support to Extension? Describe.

_____

_____

_____

What role do you expect to play in providing on-going support to AV Services? Describe.

_____

_____

_____

What role do you expect to play in providing on-going support to students? Describe.

_____

_____

_____

17. Indicate the extent to which you expect on-going assistance.

| | Considerable | Minimal |
|---|---|---|
| from AV Services | ——— | ——— |
| from Extension | ——— | ——— |

18. What kind of instructional methods do you expect will be most satisfactory with this technology?

_____

_____

most unsatisfactory _____

_____

19. Describe the role(s) you expect the community colleges will play in the delivery of these classes.

_____

_____

_____

# APPENDIX C

## Transaction Questionnaires

Professor
Student
Extension
Audio Visual Services
Community Colleges

TELEVISION PROJECT

TRANSACTION QUESTIONNAIRE

PROFESSOR'S FORM

FALL 1985

NAME _____

CLASS _____

This questionnaire is designed to identify and describe your experiences since these courses began.

1. How would you rate the support for your class by:

| | UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|---|
| a. Extension | 1 | 2 | 3 | 4 | _____ |
| b. AV Services | 1 | 2 | 3 | 4 | _____ |
| c. Your Department Head/ Dean | 1 | 2 | 3 | 4 | _____ |
| d. Community College | 1 | 2 | 3 | 4 | _____ |
| e. Support System (clerical, library, etc.) | 1 | 2 | 3 | 4 | _____ |

Comments or additional information _____

_____

_____

2. Rate the availability of instructional materials, etc.

1 2 3 4 _____

Comments, etc. _____

_____

_____

3. How much time do you spend planning these classes?

_____

_____

. . . /2

4. Is this more, less than or the same as other classes you teach?

More _____ Less _____ Same _____

Comments, etc. _____

_____

_____

5. Have you met with off-campus students face-to-face?

Yes _____ No _____

If yes, why and how did you arrange the meeting?

_____

_____

_____

_____

6. Describe the typical course of events for your classes; what happens from 7:00 to 10:30 p.m.?

_____

_____

_____

_____

_____

_____

7. In what ways has the technical equipment affected the delivery of the class?

on-campus _____

_____

_____

_____

off-campus _____

_____

_____

_____

. . . /3

8. How have you compensated for the negative effects?

9. How have you used the positive effects?

10. Indicate the degree or extent to which you feel the off-campus students have interacted.

| | to a considerable extent | | to a minimum |
|---|---|---|---|
| with you? | | | |
| with each other? | | | |

11. Describe how assignments have been delivered to, collected from and return to off-campus students.

12. Have you used AV materials (film, overhead transparencies, slides, etc.)?

Yes _____ No _____

Describe _____

. . . /4

13. If yes, did you have to make special arrangements because of using the T.V. Describe.

_____

_____

_____

_____

14. So far in teaching this course, have any unanticipated problems occurred?

Yes _____ No _____

Describe. _____

_____

_____

_____

**TELEVISION PROJECT**

**TRANSACTION QUESTIONNAIRE**

**STUDENTS**

**FALL 1985**

INSTRUCTIONS:

Please answer the questions from your experience in this class so far this semester.

Indicate which class you are answering in relation to: (circle)

Soc. Work Admin. Hist. Psych.

PART ONE

**ALL STUDENTS: BOTH THOSE ON-CAMPUS AND OFF-CAMPUS PLEASE ANSWER QUESTIONS 1-25.**

TECHNOLOGY:

1. Did you know before the semester commenced that this class was being televised? (check)

   yes ___ no ___

2. Do you feel that you should have known ahead of time that this class was to be televised? (check)

   yes ___ no ___ doesn't matter ___

3. If YES, how do you think you should have been made aware that it was to be televised?

   _____

   _____

   _____

4. How much information about the technology (cameras, T.V., speakers, phones, etc.) do you feel you should have had prior to the first class? (check)

   none ___ a little ___ some ___ quite a bit ___

5. If you answered "a little," "some," "quite a bit," indicate what information you feel you should have received.

   _____

   _____

   _____

6. Indicate the extent of impact or effect that the technology (T.V., phones, speakers) has had upon your learning. (check)

   none ___ some ___ considerable ___

7. If you answered "some" or "considerable" in what ways.

   _____

   _____

   _____

8. Indicate advantages or benefits to you to having the class televised. (Provide as many answers as you can.)

i. _____

_____

ii. _____

_____

iii. _____

_____

(Use reverse side, if necessary.)

9. From your perspective, indicate disadvantages or problems related to having the class televised. (Provide as many examples as you can.)

i. _____

_____

ii. _____

_____

iii. _____

_____

(Use reverse side, if necessary.)

RELATIONSHIPS

10. To what extent do you socialize or interrelate with other members of the class: (check)

| | to a considerable degree | | little or no contact |
|---|---|---|---|
| before class begins | \|--------\| | \|--------\| | \|--------\| |
| 11. at the break(s) | \|--------\| | \|--------\| | \|--------\| |
| 12. after class concludes | \|--------\| | \|--------\| | \|--------\| |
| 13. out of class | \|--------\| | \|--------\| | \|--------\| |

14. To what extent do you feel that the people in the other centers are a part of your class? (check)

not a part — to a considerable degree

|--------|--------|--------|

15. Indicate the level of the quality of the relationship or contact you feel you have with the professor of this class. (check)

high level — low level — none

|--------|--------|--------| --|--

16. Compared to other classes you have taken how would you rate the quality of this relationship or contact with the professor? (check)

higher ___ the same ___

lower ___ not applicable (first class taken) ___

17. Is this quality affected by the technology? (check)

yes ___ no ___ not sure ___

18. If "yes," how is it affected?

_____

_____

_____

LEARNING

19. At this time, compared to the beginning of this class, are your objectives: (check one)

different ____ the same ____

20. Do you feel that your objectives are being met? (check)

yes ___ no ___ not sure ___

21. To what degree has the technology affected your learning? (check)

| | to a considerable degree | | | little or no effect |
|---|---|---|---|---|
| positively | \|--------\| | \|--------\| | \|--------\| | |
| negatively | \|--------\| | \|--------\| | \|--------\| | |

22. In what ways?

_____

_____

_____

INSTRUCTION

23. Is the professor using the technology to advantage in his/her instructional approach? (check)

yes ___ no ___ not sure ___

24. If "yes," indicate how it is being done.

_____

_____

_____

25. If "no," indicate how it is not being done.

_____

_____

_____

## PART TWO

**NOW ANSWER EITHER THE QUESTIONS WHICH ARE FOR ON-CAMPUS (A to F) OR OFF-CAMPUS (I to VIII) STUDENTS.**

**A to F TO BE ANSWERED BY ON-CAMPUS STUDENTS ONLY.**

A. Which class(es) are you taking? (check)

____ Social Work
____ Admin.
____ History
____ Psych

B. Rate the classroom (E 1.7) as an area conducive to taking a class. (check)

good poor

|--------|--------|--------|

C. Does the presence of the technology affect you in any way? (check)

not at all ___ only a little ___

to some extent ___ considerably ___

D. If you answered "to some extent," or "considerably," indicate how you are affected.

_____

_____

_____

E. To what extent do you think the professor is teaching only to those off-campus? (check)

most of the time ___ often ___

as much as seems necessary ___ infrequently ___

F. Do you feel that the professor teaches differently or does things differently because s/he is on-camera? (check)

yes ___ no ___ not sure ___

**I to VIII TO BE ANSWERED BY OFF-CAMPUS STUDENTS ONLY.**

I. Which class(es) are you taking? (check)

____ Social Work
____ Admin.
____ History
____ Psych

II. In which location do you attend class? (check)

____ Swift Current
____ Yorkton
____ Moose Jaw
____ Weyburn
____ Estevan

III. Indicate the level of the quality of the relationship or contact you feel you have with the community college. (check)

high level low level none

|--------|---------|--------| --|--

IV. Identify any special roles class members have taken on to assist the class.

_____

_____

_____

V. How would you compare watching the professor on television with a face-to-face situation. (check)

harder easier

|--------|--------|--------|

VI. more tiring more interesting

|--------|--------|--------|

VII. To what extent is contacting the professor by phone during class a problem? (check)

to a considerable degree little or no problem

|--------|--------|--------|

VIII. To what extent do you think the professor is teaching only to those on-campus? (check)

most of the time ___ often ___

as much as seems necessary ___ infrequently ___

TELEVISION PROJECT

TRANSACTION QUESTIONNAIRE

EXTENSION FORM

FALL 1985

This questionnaire is designed to identify and describe your experiences, attitudes and concerns since these televideo classes began.

1. Describe how well your objectives in offering these classes have been achieved so far?

2. Identify what kinds of hindrances you have had in achieving your objectives.

3. What kinds of things have assisted you in achieving your objectives?

4. Aside from cost factors, identify what you consider to be the major problem(s) in the following areas.

   Technology (hardware)

   5. Technical personnel (student assistants)

. . . /2

6. Liaison with professors _____

_____

_____

7. Liaison with AV Services _____

_____

_____

8. Liaison with community colleges _____

_____

_____

9. Retention of students _____

_____

_____

10. Liaison with students _____

_____

_____

11. Program evaluation _____

_____

_____

12. How is the technical equipment affecting the delivery of classes?

<u>on-campus</u>

positively _____

_____

13. negatively _____

_____

14. don't know _____ (check)

<u>off-campus</u>

15. positively _____

_____

16. negatively _____

_____

17. don't know _____ (check)

18. Have you attended any on-campus classes? (check) Yes _____ No _____

19. off-campus classes? (check) Yes _____ No _____

20. If "yes" in either case, describe how you think the students are reacting to the effect of the technology (cameras, phones, t.v. set, etc.).

on-campus _____

_____

_____

off-campus _____

_____

_____

21. From your point of view, how would you rate the performance of each of the following with respect to their role in the delivery of these classes. (check)

| | UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|---|
| AV Services | 1 | 2 | 3 | 4 | _____ |
| 22. Professors | 1 | 2 | 3 | 4 | _____ |
| 23. Department Heads/ Deans | 1 | 2 | 3 | 4 | _____ |
| 24. Community Colleges | 1 | 2 | 3 | 4 | _____ |

Comments or additional information _____

_____

_____

25. How well does the classroom setting meet your expectations?

| | UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|---|
| On-campus | 1 | 2 | 3 | 4 | _____ |
| 26. Off-campus | 1 | 2 | 3 | 4 | _____ |

Comments or additional information _____

_____

_____

. . . /4

27. Do you have a continuing role or contact with the following?

Professors (check) Yes _____ No _____ Only slightly _____

If yes, describe _____

_____

_____

28. AV Services (check) Yes _____ No _____ Only slightly _____

If yes, describe _____

_____

_____

29. Community Colleges (check) Yes _____ No _____ Only slightly _____

If yes, describe _____

_____

_____

30. On-Campus Students (check) Yes _____ No _____ Only slightly _____

If yes, describe _____

_____

_____

31. Off-Campus Students (check) Yes _____ No _____ Only slightly _____

If yes, describe _____

_____

_____

32. Rate the level of communication between off-campus sites and the on-campus classroom. (check)

| UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | _____ |

Comments or additional information _____

_____

_____

33. Rate the extent of technical problems. (check)

NONE ——— MANY NOT SURE ———

34. Rate the solution of any technical problems. (check)

UNSATISFACTORY ——— SATISFACTORY NOT SURE ——— NO PROBLEMS ———

35. What role are you playing in arranging meetings of professors during the semester?

with AV Services _____

_____

_____

36. with students _____

_____

_____

37. What role are you playing in the distribution/collection of materials to/from off-campus students?

_____

_____

_____

_____

TELEVISION PROJECT

TRANSACTION QUESTIONNAIRE

AUDIO-VISUAL SERVICES

FALL 1985

Please complete this questionnaire from your experience with the televideo classes this fall.

1. Identify how well your objectives have been met in regards to these classes this fall. (check)

   Almost all met _____ Most met _____

   Some met _____ Few met _____

2. If "some met" or "few met", identify reasons why.

_____

_____

_____

_____

3. Aside from cost factors, identify what for you have been the major problem(s), if any, in the following areas this semester. (Check none or list problem(s)).

   Technical hardware - None (_____) _____

_____

_____

_____

_____

4. AV personnel - None (_____) _____

_____

_____

_____

_____

5. Liaison with instructor during class time - None (_____) _____

_____

_____

_____

_____

. . . /2

6. Liaison with instructors outside of class - None (_____) _____

7. Liaison with Extension - None (_____) _____

8. Laison with Community Colleges - None (_____) _____

9. Laison with students during class time - None (_____) _____

10. The evaluation - None (_____) _____

11. In what ways do you think the technical equipment is affecting the delivery of the classes?

On-campus - positively _____

. . . /3

12. On-campus - negatively _____

_____

_____

_____

13. Off-campus - positively _____

_____

_____

_____

14. Off-campus - negatively _____

_____

_____

_____

15. What role are you playing in assisting the delivery of the classes now?

_____

_____

_____

16. Rate the quality of the on-campus classroom in terms of its suitability for these classes. (check)

Well suited _____ Adequate _____

Less than desirable _____ Unsuited _____

17. If "less than desirable" or "unsuited", explain the weaknesses.

_____

_____

_____

18. Rate the quality of the off-campus classrooms. (check)

Well suited _____ Adequate _____

Less than desirable _____ Unsuited _____

19. If "less than desirable" or "unsuited", explain the weaknesses.

_____

_____

_____

20. Rate the level of difficulty involved in communicating from off-campus sites to the on-campus classroom. (check)

Difficult — Easy

21. Rate the frequency of interaction from off-campus sites to the on-campus classroom. (check)

Frequent — Infrequent

22. Identify the kinds of problems that have occurred with the delivery of the classes, how they have been dealt with and by whom?

Anticipated problems - _____

23. Unanticipated problems - _____

24. Rate the reliability of the technical equipment. (check)

Reliable — Unreliable

25. Rate the quality of the technical equipment. (check)

Good — Poor

26. Rate the extent to which you think the signals are being "pirated". (check)

None — Much

Don't know _____

27. Rate the degree to which you consider "pirating" to be a problem. (check)

No problem — Serious problem

28. Have you visited any off-campus sites? (check)

Yes _____ No _____

29. If yes, have you visited any during class time? (check)

Yes _____ No _____

30. If yes to question 29, for what purpose?

_____

_____

_____

31. If yes to question 29, what did you find out?

_____

_____

_____

_____

TELEVISION PROJECT

TRANSACTION QUESTIONNAIRE

COMMUNITY COLLEGE FORM

FALL 1985

This questionnaire is designed to identify and describe your experiences since these courses began.

1. Aside from cost factors, identify what have been the major problems in the following areas, so far.

   a. Technology - hardware _____

   _____

   personnel _____

   _____

   b. Liasion with instructional personnel _____

   _____

   c. Liasion with AV Services _____

   _____

   d. Liaison with Extension _____

   _____

   e. Recruitment and retention of students _____

   _____

   f. Liasion with students during class _____

   _____

   g. Program evaluation _____

   _____

2. Describe your activities/responsibilities on the evening of a class?

_____

_____

_____

_____

3. Describe your role, if any, in delivery and returning assignments, tests, handouts, etc.

_____

_____

_____

_____

. . . /2

4. What role, if any, did you play in facilitating meetings of professors and others?

5. Describe your role, if any, in providing on-going support:

to Professors:

6. to Extension:

7. to AV Services:

8. to students:

9. In what ways do you think the delivery of these courses is being affected by technical equipment?

Positively

Negatively

. . . /3

10. Please comment about these courses and their delivery and our evaluation.

11. Which location are you in? (check)

Moose Jaw _____

Weyburn _____

Estevan _____

Swift Current _____

Yorkton _____

12. For which courses are you, personally, the contact person? (check)

Social Work 414 _____

Administration 200 _____

History 100 _____

Psychology 210 _____

# APPENDIX D

## Reporting Form Indicating Activities of Previous Class and Plans for the Next Class

TELEVISION PROJECT - FALL 1985

PROFESSOR'S WEEKLY REPORT

WEEK ENDING _____

COURSE: _____

Please answer the questions in this column by considering
THIS WEEK'S SESSION
(i.e. the one you just taught).

1. Content Outline - Please describe or attach an outline of the content you did teach in the last session.

2. Please describe how this content was delivered, i.e. lecture, question and answer, group work, etc.

3. Please describe how the students participated in the session, i.e. extensive discussion, questions, etc.

on-campus _____

off-campus _____

Please answer the questions in this column by considering
NEXT WEEK'S SESSION
(i.e. the one you are about to teach).

1. Content Outline - Please describe or attach an outline of the content you intend to teach in the next session.

2. Please describe how you intend to deliver this content.

3. Please describe how you anticipate the student's participation in the session.

on-campus _____

off-campus _____

. . . /2

4. Were there any out-of-class activities this week? If so, describe them.

student activities _____

_____

_____

_____

_____

professor's activities _____

_____

_____

_____

_____

4. Do you plan any out of class activities this week? If so, describe them.

student activities _____

_____

_____

_____

_____

professor's activities _____

_____

_____

_____

_____

5. Were there any technical problems? If so, describe them and how they were dealt with.

_____

_____

_____

_____

_____

_____

_____

6. Additional comments.

# APPENDIX E

## Class Observation Form

| TIME | INSTRUCTOR ON TASK | STUDENT ACTIVITIES ON | STUDENT ACTIVITIES OFF | INTERRUPTIONS ON | INTERRUPTIONS OFF | TECHNICAL PROBLEMS ON | TECHNICAL PROBLEMS OFF | COMMENTS, EXPLANATIONS, EXPANSION & DESCRIPTIONS |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
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| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| QUESTIONS | ASKED ON | | | | | | | |
| | OFF | | | | | | | |

# APPENDIX F

## Discussion Guide With Off-Campus Students

TELEVISION PROJECT
OFF-CAMPUS DISCUSSION GUIDE

1. Other than the technology, how is this class similar/different when compared to other classes you have taken at the University of Regina?

2. Describe any problems/concerns you may have in the following areas:

   Technical

   Registration procedures

   Texts and Resources

   Tests and Assignments

   Dealing/Meeting with Professor

   Relations with the Community College

3. What instructional activities does your professor do in this class that you find beneficial?

4. What other or different instructional activities would you like your professor to do with you in this class?

5. Do you have any suggestions or comments concerning your class, the technical system, the University, etc. that you would like to make?

# APPENDIX G

## Outcome Questionnaires

Professor
Student
Extension
Audio Visual Services
Community Colleges

TELEVISION PROJECT

OUTCOME QUESTIONNAIRE

PROFESSOR'S FORM

FALL 1985

NAME _____

CLASS _____

This questionnaire is designed to identify and describe your experiences now that this course is over.

1. Was the information available prior to the class about this type of class valuable to you during the semester? Yes _____ No _____

2. Rate the availability of instructional materials, etc.

| UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | _____ |

Comments, etc. _____

_____

_____

3. Compared to other classes you have taught, did planning for this class take?: (check)

more time _____ less time _____ about the same amount of time _____

Comments _____

_____

_____

_____

4. Did you meet with off-campus students face-to-face?

No _____ Yes _____ If yes, how often _____

5. If yes, why and how did you arrange the meeting(s)?

_____

_____

_____

. . . /2

6. Identify what kind of contact, if any, there should be between the instructor and students involved in a televised class, before, during and after the semester.

Before: _____

_____

_____

During: _____

_____

_____

After: _____

_____

_____

7. How should this contact be organized and for what purpose?

Before: _____

_____

_____

During: _____

_____

_____

After: _____

_____

_____

8. Overall, in what ways did the technical equipment affect the delivery of the class?

on-campus _____

_____

_____

9. off-campus _____

_____

_____

10. Did you do anything differently from your normal teaching style because the classes were televised? Yes _____ No _____

If yes, please identify what differences and why.

_____

_____

_____

. . . /3

11. How did you compensate for any of the negative effects of the delivery system?

_____

_____

_____

12. How did you use any of the positive effects to enhance the delivery system?

_____

_____

_____

13. Indicate the degree or extent to which you feel the <u>off-campus</u> students interacted.

| | to a considerable extent | to a minimum |
|---|---|---|
| with you? | _____ | |
| 14. with each other? | _____ | |

15. Did you use AV materials (film, overhead transparencies, slides, etc.)?

No _____ Yes _____ If yes, how frequently? _____

Describe _____

_____

_____

_____

16. If yes, did you have to make special arrangements because of using the T.V.? Describe.

_____

_____

_____

_____

17. What kind of additional instructional materials would you suggest would be needed/used if you were to teach such a class again?

_____

_____

_____

_____

18. Did any unanticipated problems occur?

Yes _____ No _____

If yes, describe. _____

_____

_____

_____

19. List what you now think are the desirable/appropriate instructional characteristics or competencies for an instructor of a televised class.

_____

_____

_____

_____

20. Did you alter the way you evaluated students in this class from the way you evaluate regular on-campus classes? Yes _____ No _____

21. If yes, in what way and for what reasons?

_____

_____

_____

_____

22. What, if any, was the most common occurrence which required a change in your instructional plans?

No single occurrence was common _____ (check).

_____

_____

_____

_____

23. Comment on any aspect of this system which you feel needs attention by another instructor who may be teaching a televised class.

_____

_____

_____

_____

24. Comment on any different instructional activities which could be effectively used with this delivery system.

_____

_____

_____

_____

25. What information or training do you feel you would have liked to have received prior to, or during the class, for example?:

instructional techniques; specify _____

_____

_____

camera operation; specify _____

_____

_____

instructional aids, development and/or use; specify _____

_____

_____

other; specify _____

_____

_____

TELEVISION PROJECT

OUTCOME QUESTIONNAIRE

STUDENTS

Please answer the following questions based on your experience in one televideo class this fall.

Circle the name of the class(es) which you were enrolled in. (If more than one, please indicate which <u>one</u> is the basis for the following answers).

SOCIAL WORK ADMINISTRATION HISTORY PSYCHOLOGY

PART A

The following questions are to be answered by ALL STUDENTS - BOTH THOSE ON CAMPUS AND OFF CAMPUS.

1. Now that you have completed the class, how do you think this type of class should be advertised? (What information should the advertisement contain)?

_____

_____

_____

_____

2. Now that you have completed the class, what do you believe to be the benefits of a class transmitted by television?

_____

_____

_____

_____

3. The disadvantages?

_____

_____

_____

_____

. . . /2

4. Identify at least three personal goals or objectives you had for this class.

1. _____

_____

2. _____

_____

3. _____

_____

4. _____

_____

(Others may be written on the reverse side of this page).

5. Indicate to what degree your personal goals or objectives were met. (check)

| Fully met | | | Not met |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

6. Rate the degree of satisfaction you had with the way you received feedback on your tests and assignments. (check)

| Satisfactory | | | Unsatisfactory |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

7. Rate the level of difficulty in accessing materials/resources necessary to complete assignments. (check)

| Not too difficult | | | Very difficult |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

Comments _____

_____

_____

8. If you were absent from a lecture, how did you catch up?

Not absent _____ (check)

_____

_____

_____

. . . /3

9. Did the instructor teach the class in the manner you expected? (check)

Yes _____ No _____ Not sure _____

10. In an instructional sense, how should an instructor use the technology, i.e. T.V., telephone, etc. in teaching the class?

_____

_____

_____

_____

11. What characteristics would you expect of a professor who was successful in teaching through the use of T.V.?

_____

_____

_____

_____

12. Indicate how satisfied you were with the instructor's use of films, charts, overheads, blackboards. (check)

| Very good | | | Very Poor |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

Comments _____

_____

_____

13. Indicate how satisfied you were with the way questions and discussions were handled. (check)

| Very good | | | Very Poor |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

Comments, if any _____

_____

_____

14. Indicate the extent to which you, during the class times, interacted with the: (check)

| | | A lot | | | Very little |
|---|---|---|---|---|---|
| | Professor | 1 | 2 | 3 | 4 |
| 15. | Other students | 1 | 2 | 3 | 4 |

. . . /4

16. Indicate how satisfied you were with the class overall. (check)

Excellent Very Poor

1 2 3 4 5 6 7 8 9 10

17. Explain your answer.

_____

_____

_____

_____

18. Would you take another class that was televised? (check)

Yes _____ No _____

19. Explain your answer.

_____

_____

_____

_____

PART B

The following questions are to be answered by OFF-CAMPUS STUDENTS ONLY.

A. In which location do you attend class? (check)

_____ Estevan

_____ Moose Jaw

_____ Swift Current

_____ Weyburn

_____ Yorkton

B. Rate the difficulty in receiving assistance, advice and/or further information because of the use of the television and the telephone. (check)

Not too difficult Very difficult

1 2 3 4

C. Based on your experience, how should you:

receive tests and other materials _____

_____

_____

D. submit tests and assignments _____

_____

_____

E. receive feedback on your tests and assignments _____

_____

_____

F. Indicate the level of satisfaction you experienced with regard to: (check)

| | Very good | | | Very Poor |
|---|---|---|---|---|
| picture quality | 1 | 2 | 3 | 4 |
| G. sound quality | 1 | 2 | 3 | 4 |
| H. background noise | 1 | 2 | 3 | 4 |
| I. call-in procedures | 1 | 2 | 3 | 4 |
| J. camera work | 1 | 2 | 3 | 4 |
| K. format/organization of classes | 1 | 2 | 3 | 4 |
| L. overall technical quality | 1 | 2 | 3 | 4 |

Comments or explanations of any of the above ratings.

_____

_____

_____

_____

_____

_____

M. Did you watch any of the classes on T.V. in your home? (check)

Yes _____ No _____

N. If yes, what were the advantages and disadvantages? (Comment particularly on interactions).

Advantage _____

_____

_____

Disadvantage _____

_____

_____

O. If no, what would you feel would be the disadvantages?

_____

_____

_____

P. What do you think should be the minimum number of personal contacts between an off-campus student and the professor during the whole of the class? (check)

None ____ 1 ____ 2 ____ 3 ____ 4 ____ More than 4 ____

Comments _____

_____

_____

_____

Q. Was the instruction appropriate for the medium? (check)

Yes _____ No _____

R. If yes, specifically how?

_____

_____

_____

S. If no, in what ways?

_____

_____

_____

T. If you could make TWO changes which would <u>improve</u> how these classes are presented, what would they be?

1. _____

_____

_____

2. _____

_____

_____

TELEVISION PROJECT

OUTCOME QUESTIONNAIRE

EXTENSION FORM

FALL 1985

Please answer this questionnaire based on your experience with the television classes this fall.

1. Describe how well your objectives in offering these classes were achieved.

_____

_____

_____

_____

2. Identify what kinds of hindrances you had in achieving your objectives.

_____

_____

_____

_____

3. What kinds of things assisted you in achieving your objectives?

_____

_____

_____

4. Aside from cost factors, identify what you consider to have been the major <u>problem(s)</u> in the following areas.

Technology (hardware) _____

_____

_____

5. Technical personnel (student assistants) _____

_____

_____

. . . /2

6. Liaison with professors _____

_____

_____

7. Liaison with AV Services _____

_____

_____

8. Liaison with community colleges _____

_____

_____

9. Retention of students _____

_____

_____

10. Liaison with students _____

_____

_____

11. Program evaluation _____

_____

_____

12. How did the technical equipment affect the delivery of classes?

<u>on-campus</u>

positively _____

_____

13. negatively _____

_____

14. don't know _____ (check)

<u>off-campus</u>

15. positively _____

_____

16. negatively _____

_____

17. don't know _____ (check)

. . . /3

18. Did you attend any on-campus classes? (check) Yes _____ No _____

19. off-campus classes? (check) Yes _____ No _____

20. If "yes" in either case, describe how you think the students react to the effect of the technology (cameras, phones, t.v. set, etc.).

on-campus _____

_____

_____

off-campus _____

_____

_____

21. From your point of view, how would you rate the performance of each of the following with respect to their role in the delivery of these classes. (check)

| | UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|---|
| AV Services | 1 | 2 | 3 | 4 | _____ |
| 22. Professors | 1 | 2 | 3 | 4 | _____ |
| 23. Department Heads/ Deans | 1 | 2 | 3 | 4 | _____ |
| 24. Community Colleges | 1 | 2 | 3 | 4 | _____ |

Comments or additional information _____

_____

_____

25. How well did the classroom setting meet your expectations?

| | UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|---|
| On-campus | 1 | 2 | 3 | 4 | _____ |
| 26. Off-campus | 1 | 2 | 3 | 4 | _____ |

Comments or additional information _____

_____

_____

. . . /4

27. Did you have a continuing role or contact with the following?

Professors (check) Yes _____ No _____ Only slightly _____

If yes, describe _____

_____

_____

28. AV Services (check) Yes _____ No _____ Only slightly _____

If yes, describe _____

_____

_____

29. Community Colleges (check) Yes _____ No _____ Only slightly _____

If yes, describe _____

_____

_____

30. On-Campus Students (check) Yes _____ No _____ Only slightly _____

If yes, describe _____

_____

_____

31. Off-Campus Students (check) Yes _____ No _____ Only slightly _____

If yes, describe _____

_____

_____

32. Rate the level of communication between off-campus sites and the on-campus classroom. (check)

| UNSAT-ISFACTORY | | | SATIS-FACTORY | NOT SURE/ NOT AN ISSUE |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | _____ |

Comments or additional information _____

_____

_____

33. Rate the extent of technical problems. (check)

NONE ——— MANY NOT SURE ———

34. Rate the solution of any technical problems. (check)

UNSATISFACTORY ——— SATISFACTORY NOT SURE ——— NO PROBLEMS ———

35. What role did you play in arranging meetings of professors during the semester?

with AV Services _____

_____

_____

36. with students _____

_____

_____

37. What role did you play in the distribution/collection of materials to/from off-campus students?

_____

_____

_____

_____

TELEVISION PROJECT

OUTCOME QUESTIONNAIRE

AUDIO-VISUAL SERVICES

FALL 1985

Please complete this questionnaire from your experience with the televideo classes this fall.

1. Identify how well your objectives were met in regards to these classes this fall. (check)

Almost all met _____ Most met _____

Some met _____ Few met _____

2. If "some met" or "few met", identify reasons why.

_____

_____

_____

_____

3. Aside from cost factors, identify what for you have been the major problem(s), if any, in the following areas this semester. (Check none or list problem(s)).

Technical hardware - None (_____) _____

_____

_____

_____

_____

4. AV personnel - None (_____) _____

_____

_____

_____

_____

5. Liaison with instructor during class time - None (_____) _____

_____

_____

_____

_____

. . . /2

6. Liaison with instructors outside of class - None (_____) _____

7. Liaison with Extension - None (_____) _____

8. Laison with Community Colleges - None (_____) _____

9. Laison with students during class time - None (_____) _____

10. The evaluation - None (_____) _____

11. In what ways do you think the technical equipment affected the delivery of the classes?

On-campus - positively _____

. . . /3

12. On-campus - negatively _____

_____

_____

_____

13. Off-campus - positively _____

_____

_____

_____

14. Off-campus - negatively _____

_____

_____

_____

15. What role did you play in assisting the delivery of the classes?

_____

_____

_____

16. Rate the quality of the on-campus classroom in terms of its suitability for these classes. (check)

Well suited _____ Adequate _____

Less than desirable _____ Unsuited _____

17. If "less than desirable" or "unsuited", explain the weaknesses.

_____

_____

_____

18. Rate the quality of the off-campus classrooms. (check)

Well suited _____ Adequate _____

Less than desirable _____ Unsuited _____

19. If "less than desirable" or "unsuited", explain the weaknesses.

_____

_____

_____

. . . /4

20. Rate the level of difficulty involved in communicating from off-campus sites to the on-campus classroom. (check)

Difficult ——— Easy

21. Rate the frequency of interaction from off-campus sites to the on-campus classroom. (check)

Frequent ——— Infrequent

22. Identify the kinds of problems that occurred with the delivery of the classes, how they were dealt with and by whom?

Anticipated problems - _____

_____

_____

_____

23. Unanticipated problems - _____

_____

_____

_____

24. Rate the reliability of the technical equipment. (check)

Reliable ——— Unreliable

25. Rate the quality of the technical equipment. (check)

Good ——— Poor

26. Rate the extent to which you think the signals are being "pirated". (check)

None ——— Much

Don't know _____

27. Rate the degree to which you consider "pirating" to be a problem. (check)

No problem ——— Serious problem

. . . /5

28. Did you visit any off-campus sites this fall? (check)

Yes _____ No _____

29. If yes, did you visit any during class time? (check)

Yes _____ No _____

30. If yes to question 29, for what purpose?

_____

_____

_____

31. If yes to question 29, what did you find out?

_____

_____

_____

_____

TELEVISION PROJECT

OUTCOME QUESTIONNAIRE

COMMUNITY COLLEGE FORM

FALL 1985

Please answer this questionnaire based on your experience with the televised classes this fall.

1. Aside from cost factors, identify what were the major problems in the following areas:

Technology - hardware _____

_____

personnel _____

_____

2. Liasion with instructional personnel _____

_____

3. Liasion with AV Services _____

_____

4. Liaison with Extension _____

_____

5. Recruitment and retention of students _____

_____

6. Liasion with students during class _____

_____

7. Program evaluation _____

_____

8. Describe <u>your</u> activities/responsibilities on the evening of a class?

_____

_____

_____

_____

9. Describe the role of the community college in assisting in the delivery of the classes (please include the title of the person who actually carries out the function) in relation to the following topics:

Delivery and returning of assignments, tests, handouts, etc.

_____

_____

_____

. . . /2

10. Any problems or concerns with this? (check)

Yes _____ No _____

Explain _____

_____

_____

11. Facilitating meetings of professors and others?

_____

_____

_____

12. Any problems or concerns? (check)

Yes _____ No _____

Explain _____

_____

_____

_____

13. In providing on-going support:

to Professors: _____

_____

_____

Comments _____

_____

_____

_____

14. to Extension: _____

_____

_____

_____

Comments _____

_____

_____

_____

15. to AV Services: _____

Comments _____

16. to students: _____

Comments _____

17. In what ways do you think the delivery of these courses is being affected by technical equipment?

Positively _____

18. Negatively _____

19. Please comment about these courses and their delivery and our evaluation.

20. Which location are you in? (check)

Moose Jaw _____

Weyburn _____

Estevan _____

Swift Current _____

Yorkton _____

21. For which courses were you, personally, the contact person? (check)

Social Work 414 _____

Administration 200 _____

History 100 _____

Psychology 210 _____

# APPENDIX H

## Class Outlines

History 100
Administration 200
Psychology 210
Social Work 414

HISTORY 100

TOPIC: Louis Riel and the Impact of the First World War on the Prairie West and Quebec

INSTRUCTOR: Mrs. M. McGovern

TIME: 7:00-10:30 Wednesday

TEXTS:
Robert Craig Brown and Ramsay Cook, **Canada 1896-1921: 1898-1921: A Nation Transformed**
Peter Charlebois, **The Life of Louis Riel**
Thomas Flanagan, **Louis 'David' Riel: Profit of the New World**
Joseph Howard, **Strange Empire**
John H. Thompson, **The Harvests of War: The Prairie West 1914-1918**
George Stanley, **Louis Riel: Patriot or Rebel?**

CLASS DESCRIPTION: The class will attempt to give students an appreciation of the historical controversies surrounding an individual in Canadian History (Louis Riel) and the impact of a major event (the Great War) on a special region in Canada.

WRITTEN ASSIGNMENTS: Two well-constructed essays (approximately 1,500-2,000 words in length, typed, double-spaced). There will also be a short written assignment to be handed in within the first week of the class. this will be worth 10 marks. Class time will be given to complete this assignment. In addition, there may be some in-class quizzes, as the class progresses.

The final examination will constitute 40% of the final grade.

**The final examination must be passed in order to pass the class.**

**HISTORY 100 IS NOT A SURVEY CLASS.** IT ATTEMPTS INSTEAD TO INTRODUCE STUDENTS TO THE STUDY OF HISTORY, AND TO THE PROBLEMS OF HISTORICAL INTERPRETATION, THROUGH THE EXAMINATION OF SIGNIFICANT THEMES AND TOPICS IN SOME FIELD OF HISTORY.

INSTRUCTOR: Mrs. M. McGovern

# HISTORY 100

## EVALUATION GUIDE

Term papers and examinations are evaluated on the following criteria:

content
form
style
organization of material

Term papers require good spelling. It is understood that on an examination, given the lack of the use of a dictionary, that some leniency will be granted. However, all papers should have good organization and grammatical construction.

## GRADING SCHEME

| | |
|---|---|
| Final Examination (2 1/2 Hours) | 40% |
| Essay (1,500-1,800 words) | 25% |
| Essay (1,500-1,800 words) | 25% |
| Quizzes, minor written assignments, classroom participation, etc. | 10% |
| | 100% |

NOTE: The final examination must be passed in order to pass the class.

C A M P I O N  C O L L E G E
University of Regina

CLASS: Development Psychology 210

LOCATION: Education Building 1.7

TIME: Thursday 7:00-10:20

OFFICE HOURS: Wednesday 9:00-11:30 a.m. or by appointment

INSTRUCTOR: Robert J. Moore, Ph.D.
Campion College
Room 318
Telephone: 359-1221/586-4242

TEXT: Bee, Helen. The Developing Child (4th Ed.)

SUPPLEMENTS: Handouts will accompany the lectures where appropriate

SUBJECT MATTER: This class will attempt to introduce you to developmental psychology. Discussion will focus on two major tasks: describing developmental sequences and processes and explaining the patterns observed. Attention will also be directed toward applied and practical concerns. To get an adequate sampling of the probable content of the class, consult the table of contents of the text. While all of these areas will be dealt with, lectures will tend to be selective in each area rather than comprehensive. Students are encouraged to pursue independent reading in areas of personal interest within the general framework of child development.

Developmental psychology is concerned with the description and explanation of changes in the structure and function of a bio-psychological organism that are a function of the interaction of the organism with a physical and social environment which, like itself, is in constant flux. Within this framework, three issues will be constantly in focus: first, the extent to which structure and function are influenced by "biological" and environmental factors; second, whether or not the organism is active or passive with respect to the world of objects and people around him; third, is the course of development continuous or discontinuous. An organismic-developmental attitude is assumed in which the individual is viewed as an active agent in development and not a passive, reactive structure subject to the whim of biology and circumstance.

ORGANIZATION: The class will be organized as a series of lectures. Films demonstrations, and guest speakers will be arranged to supplement lecture material. A number of opportunities will be available to study young children. Student suggestions and participation are welcome in all of these areas.

ASSESSMENT: Assessment will attempt to reflect differences in student motivation and interest. All students will be requested to complete three projects (40%) and a final exam (60%). Students who wish to achieve a higher grade may attempt to do so by submitting an optional essay on an approved topic in child development. The research projects will be due October 10th, 31st and November 21st, the optional essay the last day of lectures.

PROJECT ASSIGNMENTS

At the end of many of the chapters in Bee, H. The Developing Child (4th Ed.) are projects which provide an opportunity for the student to gain some direct experience with children in terms of the concepts and reaseach presented in the chapter.

Select any three projects that interest you throughout the text insuring that you select one from Chapters 1-5, one from Chapters 6-10, and one from Chapters 11-15, more or less.

Carry out the research in the manner described remembering to adhere to the ethics governing acceptable research. (See attached)

Write up your project in accordance with the attached format, where it is appropriate.

(Selected pages of the Class Outline)

UNIVERSITY OF REGINA
FACULTY OF ADMINISTRATION

ADMINISTRATION 200-15
Introduction to Administration and Organizational Behavior

Instructor: Jim Mason
Office: Ed. 4.58
Phone: Office: 584-4727
Residence: 525-8470

1985 Fall

COURSE SUMMARY:

Administration 200 is a survey course which provides an introduction to the nature of organization and management functions. It has been designed to expose the student to classical and contemporary theory and their context; and to some practical applications of that theory.

TEXT:

Mescon, Albert, and Khedouri, Management (New York: Harper & Row, Publishers, 2nd Edition, 1985.)

The text provides the reader with basic management concepts, their origins and present status, and suggests what the future might hold. It is well organized and easy to read.

Peters and Waterman, In Search of Excellence (New York: Harper & Row, Publishers, 1983.)

This text teaches by positive example. It is in large part a collection of critical incidents where things went right.

COURSE OBJECTIVES:

In general, our purposes are to:

(1) Foster an appreciation of the development of management thought and help you gain some meaningful insight into the process as it applies to all organizations.

(2) Develop a critical but constructive approach to the study and application of theory.

(3) Enhance our ability to read, analyze, evaluate, and synthesize the vast amount of literature in the field of administration.

(4) Discourage your sole reliance upon lectures as the source of information, encourage you to use your own initiative, and through discussion with others, broaden the learning process.

Items one through four are nominal objectives but I expect us to achieve something much more. Throughout our lectures and discussions I will attempt to present theory that is "grounded" -- that is, rooted in real world data, that has grown inductively out of systematic investigation of how organizations and managers behave.

It will be one of your tasks to relate the theories and concepts to your own practical experience. You say you have no relevant experience? That is simply not the case. For example, we have grown up with friends in different families, belonged to different groups or clubs, some of us have been employed or even managed people or things. I expect we will share those experiences and gain insight into their management.

I am firmly convinced that the best route to more effective management is better knowledge in the minds of practitioners (you) of the world they actually face. I believe it is my task and yours to prescribe; that is, to find better approaches to management. I believe that the best prescription comes from the application of conceptual knowledge about management and organization in a specific and familiar context. It is our purpose to gain an appreciation of the theory and its relation to context.

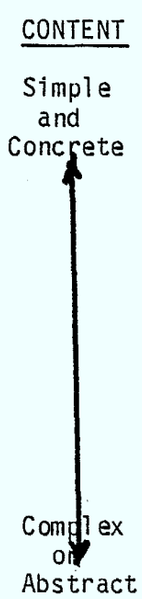
You will notice I have said nothing about your personal objectives or reasons for taking Administration 200. I assume your objectives fit in with those discussed above, and that if they do not that I will hear from you at an appropriate time. You see, I do not assume my particular set of objectives will be accepted unquestionably as either necessary or worthwhile. You should question the merits of much of what you will be directed to study in this course and those which may follow.

## HOW WILL I EVALUATE YOUR ACHIEVEMENT?

We will focus on the cognitive area ... that is, we will be concerned with knowledge and information, and intellectual abilities ... naming, listing, describing ... and problem solving for example. Let me illustrate. A number of people have developed classification schemes consisting of behaviors and abilities essential in learning (Figure 1).

Perhaps you have skimmed the textbook by now? Do not be misled by the nature of the material! We are not limiting our learning objectives to the simple factual learning illustrated by the top of the continuum of objectives of Figure 1. The straight memorize and regurgitate strategy many of us employed in high school simply will not cut it here. It is true that there will be a certain amount of memorization and then summarizing of concepts, but this is less important than developing and then demonstrating our understanding of the material and its application. We will practice in class by analyzing actual situations or "cases" and applying the concepts-learned from the text, and we will discuss our various experiences.

Figure 1




You will notice the way I will attempt to get at what you know and understand when you review a typical examination which has been included as Appendix 5 for your consideration. There are usually a few multiple choice or matching questions to relax you but the bulk of the exam will involve short paragraphs or essays and a case analysis. The case situation clearly tests your analytic ability, requires you to evaluate the theories studied andsynthesize them into a workable solution. A little thought should make this evaluation strategy fairly evident to you.

It is the short essay or paragraph which causes students the most difficulty. You will notice that the questions typically ask the student to compare and contrast two or more competing theories, and then relate the theories to either their own experience or discuss their application in today's changing world. The first part of the question tests comprehension; the second part application and analysis. To handle the first part well requires we know (or memorize) the various theories but also that we understand them well enough to appreciate their key dimensions and be able to compare them with other relevant theories.

TERMS AND DEFINITIONS USED IN EXAMINATIONS:

There are a number of key words used in examination questions that are often misused by professors and/or are too often ignored or confused by students under exam pressure. The following exercise has been prepared to assist you in understanding how I will determine how well you have achieved course objectives. Go through the terms first without any other reference and then review your answers in light of Appendix 1. We will go through the exercise later in the term and you should review it before each of your tests

FORMAL COURSE REQUIREMENTS:

There will be a mid-term, two written assignments, and a final examination. Each of these requirements will be weighted to arrive at a final grade. You must pass the final exam to pass the course.

| | |
|---|---|
| Mid-Term | 25% |
| Written Assignments | 30% |
| Final Examination | 45% |

The mid-term will consist of multiple choice or matching, essay questions and a case, and will be based upon the required reading and class notes and tapes. The questions are largely designed to show me whether or not you understand what you are reading, although there is also an element of memorizing "who-did-what".

The final examination emphasizes the integration of the individual parts of the course. The essay questions will be more general in nature and broader in scope. It is expected that the answers will emphasize comprehensiveness and the relationships among the term's subject matter and not merely detailed memorization. It is important to think clearly and to plan your answers in order to perform well under the time constraint. The tendency to "write-all-you-know" rather than answering the questions must be avoided.

The written assignments will consist of a case analysis and then a term paper. More will be said about the specific assignments. Analytical strength, coherent argument, logical arrangement are important qualities of good essays and case write-ups. There are four main causes of bad essays: lack of knowledge -- remedied mainly by attentive reading; the "write-all-you-know" tendency -- remedied by reading the questions carefully and then dealing with the relevant issues; lack of an analytical approach and of the power of logical arrangement -- remedied by developing the capacity to combine rigorous thought and imaginative perception; and slovenliness -- remedied by reading the completed essay carefully to check logic, facts, grammar, spelling, and punctuation. Students are reminded that plagarism is offensive to the marker of an essay and a waste of everyone's time.

CLASSES:

Their content is to provide a framework integrating the different aspects of the course, to put forth propositions and to pose the principal problems of the theory, to establish the basis on which critical and informed judgement can be made, and to offer some guidance in such matters as reading or the ways of considering specific problems. To mechanically take down every word is as much a mistake as to take down nothing. A record of the salient points of a lecture or readings, together with the problems and questions often is more appropriate than lengthy notes. Lectures should be supplemented by a great deal of reading. If you have problems arising from a class or reading, please talk with me as soon as possible. Since we have

5. Final Draft requires you pay particular attention to any instructions the professor has given you about the preparation of written assignments. If he wants it written in purple ink on brown paper, do it, even thought these colours do not go with your complexion. Failing specific advice, use the format from the Style Sheet. Type if possible, double spaced, or if not, write legibly and one ONE side of the paper only. Use 8 1/2 x 11 sheets.

COURSE SCHEDULE:

By now you are aware that we have to cover so much area in so short a time. Therefore, do not expect that we will go through each chapter point by point. Our text is well laid out and clearly written; I expect you to read on your own, and to take the initiative for your own learning. Study the assigned material before each class; review the questions at the end of each chapter; if you have any questions, jot them down and raise them with me or ask them in class. I expect you to take time to really master the material.

Lectures will focus on some important concepts and provide a perspective or some additional materials not found in the book, or to show the application of concepts and theories. We will use cases and experiential exercises to further our involvement in the learning process.

| Class Date | Topics |
|---|---|
| Sept. 11 | An introduction to the class and sites.<br>Skepticism about management education.<br>History of management thought.<br>Contemporary views of the manager's job.<br>READ: Chapter 1, 2, 3.<br>Mintzberg, "The Manager's Job: Folklore and Fact". |
| Sept. 8 | Management and the environment.<br>Direct and indirect-action environment.<br>Relating the organization to the environment.<br>Concepts of managerial and organizational responsibility.<br>VIDEOTAPE: The Chips are down.<br>READ: Chapters 3 and 4.<br>Halal, "Beyond the Profit Motive: The Post-Industrial Corporation". |
| Sept. 25 | Decision making?<br>Types of decisions and their limitations.<br>The nature of managerial decision making.<br>Matching the decision-making approach to the problem.<br>READ: Chapter 6 - skim Chapter 7.<br>Zeleny, "Managers Without Management Science". |

Oct. 2 — Planning: an academic framework and ... practice.
Setting objectives and tradeoffs.
Types of plans and processes.
READ: Chapters 8, 17.
Kudla, "Elements of Effective Corporate Planning".
Strauss, "Management by Objectives: A Critical View".

Oct. 9 — Organizing Jobs and coordinating units.
Job design
Job enlargement and job enrichment.
Choosing a design strategy.
Organizing the total enterprise.
READ: Chapters 9, 10.

Oct. 16 & 23 — Management and human behavior.
Motivation, Performance and Satisfaction.
Managerial assumptions.
Motivation and ethics.
READ: Chapters 11, 12.
Guion, "Gullibility and the Manager".

Oct. 27 — MID TERM EXAM

Oct. 30 — Power -- influence.
Leadership?
READ: Chapter 14, 15.
Tannenbaum and Schmidt, "How to Choose a Leadership Pattern."

Nov. 6 — Work groups.
Groups?
Cohesion!
Conflict management.
READ: Chapters 13, 16.

Nov. 13 — Organizational Change and development.
Process and reaction.
Organizational development.
READ: Chapters 20.

Nov. 27 — In Search of Excellence!
Eight Commandments...?
Have Read: Peters and Waterman, In Search of Excellence.

Dec. 4 — Productivity....
Managing your careers!
Impact of Equal Rights.
Quality of work life.
Sexual harrassment.
Read: Chapters 21.
Reynolds, "Women on the Line".

Dec. 8 FINAL EXAM.

ESSAY ASSIGNMENT:

Compare and contrast two "contemporary" author's views in an area of management theory of your choosing. Relate their concepts to current practice. Draw your own conclusions.

You may choose to search journals such as:

Academy of Management Journal.
The Academy of Management Review.
Harvard Business Review.
Business Quarterly.
Sloan Management Review.
Administrative Sciences Quarterly.

but your search is not limited to these periodicals.

Assignment due in my office November 20, 1985.

INSTRUCTIONS:

Make and keep a copy of your paper for yourself, submit the other.

Your paper must not exceed 10 pages (typewritten, with one inch margins, double spaced) including all tables, figures, and references. (It is to be on 8 1/2 x 11 white paper.)

Figures and tables should be placed close to the location where they are cited in the text. Each should have a title describing its content. Quotations continaing two or more sentences and four or more lines should be set off from the body of the text by indenting them five spaces. Explanitory footnotes (as oposed to citing references) should be numbered consecutively and placed at the bottom of the page on which they appear. They should be separated from the body of the text by a line one inch long, and separated by a double space should there be more than one per page.

Citations (or calling references) must be properly acknowledged. Books, journals and otherreferences should be cited in the text by enclosing in parentheses the author's surname and the year of publication. Example: (Jones, 1970), (Black and Smith, 1975). If a reference contains no author, use the first two or three words of the title (enough to locate the reference in the reference list) and the year. Example: (Advertising Age, 1971).

Appendices, if needed, should immediately follow the body of the paper and precede the references. The references, or bibliography, should include only those references cited in the text of the paper. This section should appear at the end of your paper. Note the form discussed in the Style Sheet, Appendix 4.

FACULTY OF SOCIAL WORK

SOCIAL WORK 414

CHILDREN'S SERVICES

Fall 1985 Semester

Otto Driedger
Florence Driedger

INTRODUCTION

"Children's Services" covers a broad range of services, issues and programs. The field is so large that a series of classes could be provided which would allow for much greater depth in covering the material and examining the issues. This class therefore, should be seen as an introduction to this subject area. We should be able to cover one or two areas in somewhat greater depth, and you can examine an area more closely in your project or paper.

The bibliography is quite extensive. The reason this is so is that you will have an opportunity to review the extent of the literature in this field. It should be used as a resource.

SPECIAL FORMAT

The format of teaching the class is experimental. Hopefully this will not be to disruptive. If there are problems, please identify them and we will do what we can to solve them. Swift Current, Moose Jaw, Estevan, Weyburn and Yorkton are part of the class. The video will be used in North Battleford and Meadow Lake for viewing a week later.

The process is being evaluated by two professors from the Faculty of Education (Orison Burgess and Cyril Keston) and by Les Senner, professor with the Faculty of Social Work. They will want a limited amount of time during class.

OBJECTIVES OF THE COURSE

1. Develop an understanding of children's needs and rights, and child welfare services.

2. Examine issues in the child welfare field, explore responses in society, and examine our own views on issues related to children.

3. Analyse problems or gaps in services and develop options designed to improve the quality of life for children.

4. Obtain a perspective on children's services, and develop our ability to work as social workers in this field.

APPROACHES

1. An adult education approach will be used. This approach implies that the focus will be on learning, not teaching. It will be helpful to receive feed back from you on how the format enhances or hinders learning.

2. Input by Professors: We will provide a suggested organization of the class for the Semester. We will take leadership in the class to assure focus in meeting

learning objectives. We will provide "mini lectures" when needed to cover material and provide a bibliography and information of other resources. Finally, we will assess the learning that has occurred.

3. Input by Student: Opportunity for involvement through reading, discussion, presentations and papers. The following work for the Semester is suggested:

20% (1) A short paper (3-6 pages) or a short presentation in class (5-10 minutes) on a current child welfare issue. The paper is due by Monday, September 30, (a week later for North Battleford and Meadow Lake).

25% (2) An annotated bibliography of books you read during the Semester. It is suggested that you read some "stories" in child welfare, as well as information books, or a log on your reflections on issues related to children's services during the Semester.

45% (3) Major paper on an area of your interest in child welfare. Due December 2 (last class).

10% Assigned by student to one (or more) of the above.

COURSE OUTLINE

1. Philosophical and historical perspective on children and services to children:
   - Children as human beings
   - Utilitarian views of children
   - Historical development of services

2. The concept of mandate:
   - Discussion of the concept
   - Sources of mandate in children's services
   - Importance of mandate in child welfare

3. Services/programs and policy in childrens' services:
   - The "continuum of service" concept (protection-prevention-quality of life)
   - Protection: principles, legislation, practice
   - Foster care: nature, role, standards, issues
   - Children's institutions: nature, role, standards, issues
   - Unmarried parents: services, options
   - Adoption: process, issues
   - Health
   - Family services including family life education
   - Homemaker services
   - Day Care services
   - Financial services (F.A., F.I.P., S.A.P., U.I.B.)
   - Labor
   - Education

4. Issues in children's services:
   - Violence: abuse/neglect, in children's literature and media
   - "Best interests" of the child
   - Cultural heritage
   - "Needs" and "Rights" of children vis-a-vis rights of parents
   - Service delivery: Who provides services? Public, private, voluntary, community, provincial.

5. Comparative:
   - Third world
   - "Children of War"
   - Quality of life" approach (Swedish example)

# APPENDIX I

## Technical Support System

Technical System
Control Room Log Book: Faults and Irregularities, 85F--from AV Services
Observations re Technical Faults and Irregularities --from AV Services
Proposal for a Classroom/Studio for Televised Credit Classes--from AV Services

# TECHNICAL SYSTEM DESCRIPTION

## Regina Classroom

The source classroom is equipped with two ceiling mounted, remotely controlled color video cameras with zoom lenses (JVC Model BY110 with HZ-110 MD lenses). The cameras have pan and tilt motors (Panasonic WV 7230B) to control movement. They are mounted approximately one-third and two-thirds of the way both from the front to the rear of the classroom and from side to side, i.e., one camera in the front left and one in the rear right as viewed from the front. There are two ceiling mounted microphones. One microphone is located at the front of the room in the middle of the ceiling above the platform. The other is located in the middle of the ceiling. Four speakers are equally spaced in the ceiling. Five extra flourescent fixtures were installed across the front of the room over the platform. A telephone selector was installed by the Saskatchewan Telephone Company (Sasktel) to provide the instructor with the ability to select which remote site to receive calls from. The outgoing audio for both phone and video is picked up by the microphones. The phone-in audio is received through the speakers. The hand set has been removed from the telephone. An amplifier for the speakers is located at the side of the platform.

## Regina Control Room

All camera and lens movements are controlled remotely by one technician in the control room using separate lens (JVC 110 MD) and pan/tilt (2x2 double pole, center-off switches) controls. The camera selection and power is also controlled remotely by a video switcher (JVC KM 1200) and two camera controls (JVC RS 110). Four 9 inch

black and white monitors and two 14 inch colour monitors are provided for the technician to monitor the camera signals, output signals and to preview mixes. The system is designed to handle a third camera which has not yet been installed. The video signals are also monitored by an Hitachi waveform analyzer and a video clamp amplifier (RHL vca-4) has been installed to control video white levels. The signals from the on-campus system are fed into the Sasktel system at frequencies and levels as specified by Sasktel.

The control room also has audio level and mixing controls (JVC MI 2000). Two audio monitors have been installed. An audio limiter (Symetrix 501) controls audio level peaks. The technician is able to talk over the system (to on or off-campus classes) via a microphone as well as privately to the classroom by phone. A regular phone is provided for the technician to call Sasktel's operations control room, or remote classrooms. The off-campus sites can also call the technician directly. The telephone system is controlled by a Symetrix TI-101 interface.

# Technical Equipment in Use in 85W

Classroom:

2 - Cameras--JVC BY 110 with HZ-110MD Lens

2 - Motorized pan/tilt--Panasonic WV 7230B

2 - Microphones--Crown PZM 30 GP

1 - Telephone selector--Sasktel

4 - Telephone Speakers--Symetrix A220

Lighting (supplementary)--5 flourescent fixtures

Control Room:

2 - Camera Remote Controls--JVC RS 110

2 - Lens Controls--JVC 110 MD (see Cameras)

2 - Pan/tilt Controls--2 x 2 Double Pole, centre off switches

1 - Video switcher--JVC KM 1200

4 - 9" Video monitors--Panasonic black and white, and rack mount

2 - 14" color Video monitors

for program and preview--Panasonic BT51300 and rack mount

1 - Distribution Amplifier--RHL VDA-4s

1 - Audio Mixer--JVC-MI-2000, 8 input - 2 out

2 - Audio Monitors--Ampex speakers, Symetrix A220

1 - Talkback microphone--Shure and Gooseneck

1 - Telephone to classroom--Sasktel

1 - Telephone (ordinary)--Sasktel

1 - Waveform--Hitachi

1 - Audio Limiter--Symetrix 501

1 - Video Clamp Amplifier--RHL VCA-4

1 - Telephone Interface--Symetrix T1-101

CONTROL ROOM LOG BOOK: FAULTS & IRREGULARITIES, 85F

| NATURE OF PROBLEM & DURATION | COMMENT RE CAUSE/SOLUTION |
|---|---|
| Sept. 9<br>First class of semester, no problem noted. | No error--comment only! |
| Sept. 10<br>7:05 Yorkton & Weyburn reported no audio--service restored by 7:10. | Sasktel operations error at Television Operating Center (T.O.C.)--test equipment left connected. |
| Sept. 16<br>7:03 Swift Current report "cloudy" video, audio O.K. Can be tolerated.<br>7:00-7:07 telephones out of service. | Network equipment at Swift Current --faulty modulator--replaced.<br>Amplifier in E 1.7 disconnected. U. of R. problem/error. |
| Sept. 18<br>Intermittent audio buzz reported by Swift Current and Weyburn. | Not verified but suspect poorly adjusted cable modulators at these locations. |
| Sept. 23<br>Camera 2--Image retention and comet tails also difficult to white balance. | Camera 2 is not performing as well as 1. (Note the problem was not reported or commented on by any receiving point.) |
| Sept. 26<br>Sasktel relayed message that Swift Current initially had no picture--trouble cleared shortly./ About 8:30 Weyburn report audio and video interruption, duration 5 minutes. | Problem likely in local receiver, as network O.K. to Swift Current./Since Estevan, beyond Weyburn was O.K. this is likely receiving point problem. |
| Sept. 30<br>Yorkton circuit rerouted before transmission./ All points complained of illegible overhead transparencies. Operator agreed quality poor. | Network problem diagnosed beforehand by Sasktel--no impair- of transmission. Material preparation problem--U. of R. fault. Network system O.K. No error. |
| Oct. 1<br>Yorkton reported trouble during test period. Trouble cleared by 7:00 start time./ Moose Jaw telephone trouble but cleared it themselves at 9:20. | Sasktel rerouted Yorkton feed as above. No transmission time lost. No error./ No details given, had assume a loose jack or other connector--trouble did not repeat under test. |

| | |
|---|---|
| Oct. 3<br>Estevan no audio or video at 7:00--O.K. by 7:10, cables had been disconnected. | Problem due local disconnection in school. |
| Oct. 7<br>Estevan reported no audio or video at 7:00. At 8:05 with no change class called to say they were leaving. 8:20 T.O.C. called to report they were still working on problem, hampered by snow storm. 8:55 Estevan O.K. | Sasktel problem with Estevan microwave, with nearest technician in Weyburn. |
| Oct. 9<br>7:15 Yorkton reported picture break-up, audio O.K. T.O.C. investigating, but trouble cleared at 7:43. | Sasktel or local receiver problem. |
| Oct. 10<br>6:45 talkback and telephones out--classroom amp. not powered. Film sound not heard in class. | Power unaccountably disconnected. Our technician should have deduced problem and replaced plug with little delay--operator at fault! All malfunctions related to classroom amplifier. |
| Oct. 21<br>7:10 Swift Current phone call not heard in class, due control off. Control reset all O.K. at 7:15. | Operator error--master mixer control off. |
| Oct. 23<br>7:15 Estevan has noisy picture and sound. Reported T.O.C./ Trouble with film sound at 10:05 to 10:08. | 10:33 T.O.C. reported Estevan microwave knocked out of alignment due roof repair./ Film sound trouble was poorly seated plug. |
| Oct. 24<br>Camera 2 not as good as Camera 1. No complaint from network. | Camera 2 was returned to manufacturer and replaced. |
| Oct. 30<br>Yorkton called to report they could not phone the instructor./ Film to speaker trouble again, caused no film audio for 2 min. | Yorkton phone was unplugged!/ Film to speaker trouble, same as before, so plug changed. |
| Oct. 31<br>Time on 7:00--late due locked classroom. Class underway at 7:20./ Swift Current reported low audio buzz. | Operator given classroom key for emergency use./ Swift Current buzz was tolerable, so was eliminated next day. |

| | |
|---|---|
| Nov. 4<br>Transmission late--technician no show! Log on and start of class approximately 7:30./ Swift Current not on until 7:55 due local problem. Regular technician arrived 8:08. | Instructor called G. Jackson, who came from home at 7:15. Arrived 7:26 started up immediately./ Swift Current problem local at classroom and not related. Regular technician had been stranded on country road, disabled car, no phone. |
| Nov. 5<br>Class cancelled due illness. | Most students advised in advance. No error. |
| Nov. 11<br>Class scheduled on Legal Holiday in advance. Moose Jaw was missing its TV receiver, had substitute brought in, had trouble tuning. All O.K. at 7:35. | Moose Jaw receiver borrowed for holiday weekend. Substituted a 14" from College Director's home! |
| Nov. 12<br>Moose Jaw reports receiver trouble. Professor green--boards grey--chalk illegible. | See Nov. 11. Set maladjusted when returned from weekend use. Moose Jaw problem. |
| Nov. 14<br>6:55 Estevan has audio but no video. Sasktel Estevan had problem solved at 8:05. | Initially suspected local receiver problem as network O.K. Now suspect Sasktel Estevan microwave link. |
| Nov. 18<br>Swift Current reports "faint high frequency hiss". | Sasktel did not report on solution, which could have been local receiver, et. Network O.K. |
| Nov. 19<br>Yorkton reports red/green breakup when overhead transparencies used. | Other points O.K. Found we could help Yorkton by lowering video level (iris down). |
| Nov. 26<br>Weyburn report no audio or video, also dead telephone. Back on at 7:47. | Sasktel acknowledge a cable accident near site in Weyburn. |
| Nov. 27<br>Estevan--no picture--audio O.K. Operator had call out difficulty in trying to confirm Weyburn O.K. | Sasktel repaired Estevan at 9:13. Phone trouble due number mix up. Estevan trouble probably microwave. |
| Dec. 3<br>Swift Current reports buzz when using Camera 1 when panning, tilting and occasionally when still. | No other point noticed this. Sasktel checking Swift Current equipment. |

OBSERVATIONS RE TECHNICAL FAULTS AND IRREGULARITIES

Fall Semester 1985

(from AV Services)

Classroom equipment and operator faults were generally quickly remedied. Most were one time occurrences, as new instructions or alternate methods are developed to eliminate problems.

Shortly after this series began in 1984, AV Services instituted a test period and line-up procedure with Sasktel. This allowed AV Services to establish contact with the T.O.C. attendant (Television Operating Centre) between 6:40 and 6:50 for a 7:00 p.m. start time and classroom activity is transmitted from that time. This allows students who arrive early in distant sites to raise advanced alarm if they see trouble. This has frequently saved loss of transmission time (see Oct. 1), but is not foolproof.

Network problems typically cluster at the beginning of the semesters and become less significant after the first weeks. Sasktel, our network carrier, has been very co-operative in solving problems. General network problems affecting all points are usually solved in minutes. Network problems at a single, distant point are often much slower to be resolved; due primarily to the difficulty of "calling out" competent technicians. This may, in some cases, relate to the fact that local distribution is, in three cities, via the local cable operator's "Head End" and involves cable convertors in addition to conventional television receivers.

Most audio buzz problems are the result of poor adjustment of video levels at cable "Head Ends." Note that Weyburn and Estevan have not had the audio buzz problem and they are served without passing through cable "Head Ends." Estevan's problems mostly related to their temporary microwave link, which was located on a roof that

was under repair for a persistent leak. This made it more vulnerable to misadventure than usual. The microwave had been replaced by a short cable link, similar to the mocrowave to cable replacement at Weyburn, during the previous semester.

Weyburn's cable interruption was an anomaly, purely an external excavation accident.

Sasktel's determination to serve the project is well illustrated by their dispatching of Weyburn personnel to Estevan to make repairs when a local technician is unavailable. This has happened on several occasions, even after it appeared that the trouble might be in the television receiver in Estevan.

The most difficult and most common off-campus problem was a maladjusted or failing classroom television receiver. Even today, with television a common household item, the average student does not seem able to properly tune and adjust a strange television set. Add convertors or VCRs and they seem to be completely lost. But even with these, as the semester proceeds, the situation improves; likely as familiarity increases.

AV Services and Sasktel are at a disadvantage when attempting to diagnose and remedy problems from the description given by non technical people who cannot be expected to see and describe faults in the technician's more exact terminology.

Except for some totally unexpected problems, such as locked doors to both local and distant classrooms, stranded employees, and a few, still mysterious technical items, the technical system itself worked well. The log lists 26 items, about 20 problems in 56 transmissions, or 196 operating hours. Seven of the 20 were acknowledgements of irregularities, simply noted for information. Serious system impairment was present in a minority of cases.

Analysis of the previous semester shows a similar decline in network problems. The log of the subsequent semester shows a continuing decline in network faults, with a typical peak near the beginning. It may be early to assume that transmission problems have all been solved but patterns of technical faults, and perceptions are becoming quite evident. (Even at Estevan, students are 100% in favour of continued videoconference classes, in spite of having the record for technical difficulties.)

PROPOSAL FOR A CLASSROOM/STUDIO FOR TELEVISED CREDIT CLASSES

(from AV Services)

The University conducted four evenings of experimental television classes through 84F. These were extended through 85W in similar style by four additional classes.

In the experiment, the aim was to transmit typicazl classroom instruction to remote sites with minimal change in the classroom and instructional technique. The remote sites were equipped with a television receiver and a telephone. They placed direct-dial calls to ask or respond to questions. All points, including the classroom, could hear any phone call and classroom discussion via television audio.

E 1.11, the room utilized for this service, was chosen because it had an adjacent office space for a control room, and because it was of suitable size, had good acoustic properties, a carpeted floor and flexible furnishings, allowing the instructional area to be compressed or expanded according to student numbers. Lighting appeared to remain normal for this room, but was marginally increased.

As this was an experiment, little capital was expended for equipment, so most was "found," recycled or borrowed, except for a "telephone interface," some intercom units and two microphones. Technical quality of the video was less than would be wished.

Four operators, student assistants were engaged and instructed for this specific, simple presentation methos. They were instructed to keep the production simple in terms of style, to hold the picture of any written material and otherwise simply present the classroom and the instructor, as they appeared to anyone present in the room.

In these three to four hour classes there would be little or no opportunity to rehearse and plot more elaborate production techniques, without restructuring the entire presentation to a degree.

With two cameras, audio and video mixing, a four person crew has been the norm. With the slow pace of this production style, the crew members are bored and even somewhat redundant at times.

Given the experience gained in these classes, a design for a more idealized room for similar televised classes was clear. A spacious room with reasonable acoustics, low rumble, minimal extraneous sound, flexible furnishings and slightly elevated light levels would meet requirements, providing it was within camera cable length of the AV Centre or other control point. (Classrooms with adjacent offices are not common.)

To minimize operating costs, a degree of automation should be included, to wit, wall or ceiling mounted cameras, remotely controlled, to allow reducing the crew to one operator.

In addition to man hour savings, such a system would minimize the intrusion/distraction of crew and equipment and leave the room immediately available for non-television use.

For such alternate use cameras and other classroom equipment would best be ceiling or wall mounted, relatively high. To compensate for the higher camera location the instructor should work from a riser, the width of the room, to minimize the diminishing effect of a high angle camera "looking" down.

The remotely controlled equipment should be virtually silent in action, so as to minimize distraction or intrusion.

Microphones, speakers and video monitors should be built into the room decor, which should be modified to avoid white and reflective metalic backgrounds. It should be clean and simple to minimize

distraction.

It was determined that Room E 1.7 would suit these requirements with only a furniture change and some fresh paint.

With respect to equipment, it was determined that there should be three cameras, remotely controlled, two located to view the instructor from the viewpoint of the class and one from the front to show the class and/or items or documents the instructor wishes to display. These cameras and monitors should be the only visible alterations to the room. The cameras should be lightweight, of current design with a minimum of 600 lines resolution and -55DB of noise and a minimum illumination specification of about 10 fc or less. They should show good detail in shadows, as well as little effect from highlights such as the reflections from eye glasses or personal jewellery. This equipment should be stable and reliable, capable of full use with minimal "warm-up" and a minimal requirement for skilled adjustments or alignment.

A single operating technician should have full control of all camera functions, including both lateral and vertical movement, zoom, focus and iris, plus a full camera remote control unit for control of registration, white and black balance, etc. He should have a video switcher with a minimum of five inputs (3 cameras, aux. & test), effects mixing to either preview and program outputs, preview monitors for each input except test, plus preview and program monitors.

For audio control he should have control of microphone(s) and telephone audio mixing, telephone to loud speaker-volume, intercom to the instructor via open speaker and a direct telephone (for privacy). The telephone to audio mixer interface should be conveniently located for occasional operating adjustment. A high quality audio monitor is required. The microphone inputs should be equipped with suitable

filters to "roll-off" bass frequencies to minimize transmission of building and air conditioning rumble, as well as 60 Hz hum from lighting and other power circuits.

SUMMARY - Based on the presentation style of our successful experimental series, a classroom should be as follows:

ROOM - 30' X 45' (60-80 students), with a raised platform and chalkboard along the 30' dimension.

- Non-glare trim and medium to dark paint, with carpet and comfortable seating (evening classes are three hours, plus).
- Slightly increased lighting--soft, glare free with few distracting shadows.
- Normal classroom acoustics with attention to minimizing building rumble and extraneous noise.
- Table top lectern and graphics stand, plus the telephone selector unit are required for the instructor.

EQUIPMENT -

| | |
|---|---|
| 3 | Remote Control Cameras |
| 2 | Ceiling mounted "PZM" microphones |
| 2 | Four classroom video display units, selectable |
| 6 | Ceiling mounted loudspeakers (for telephone) |
| | Intercom to control point, speaker and headset |
| | Telephone line indicator lights |

CONTROL POINT - 10 x 15 room adjacent AV Services Master Control Room to contain camera remote controls, audio and video mixing facilities, input preview, effects preview and program monitors, audio monitor telephone interface, intercom to instructor, maintenance and test equipment and necessary amplifiers. A PBX telephone is required.

Equipment cost is variable depending upon particular units selected. Suitable equipment, equivalent to that in the present television studio, could be obtained for approximately $60,000.00.

In selecting equipment, consideration has to be given to minimal interference to normal non-television use of the classroom space and its suitability for alternate use should the project terminate or be modified.

KESTEN, CYRIL
-- A system evaluation of the university of Regina television project : Final report.