National Library of Canada
Bibliothèque nationale du Canada

Canadian Theses Service
Service des thèses canadiennes

Ottawa, Canada
K1A 0N4

NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Reproduction in full or in part of this microform is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30, and subsequent amendments

AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure

La reproduction, même partielle, de cette microforme est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30, et ses amendements subséquents.

NL 339 (r 88/04) c

Canada

DESIGN, PRODUCTION AND EVALUATION OF A PROTOTYPE ITV PROGRAMME FOR SOCIAL AND POLITICAL SCIENCE STUDENTS AT THE OPEN UNIVERSITY OF INDONESIA (UNIVERSITAS TERBUKA)

DEWI A. PADMO PUTRI

A Thesis
in
The Department of Education

Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts at
Concordia University
Montreal, Quebec, Canada

March 1991

© Dewi A. Padmo Putri

National Library of Canada
Bibliothèque nationale du Canada

Canadian Theses Service
Service des thèses canadiennes

Ottawa, Canada
K1A 0N4

The author has granted an irrevocable non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of his/her thesis by any means and in any form or format, making this thesis available to interested persons.

L'auteur a accordé une licence irrévocable et non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de sa thèse de quelque manière et sous quelque forme que ce soit pour mettre des exemplaires de cette thèse à la disposition des personnes intéressées.

The author retains ownership of the copyright in his/her thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without his/her permission.

L'auteur conserve la propriété du droit d'auteur qui protège sa thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

ISBN 0-315-68727-4

Canada

Abstract

Design, Production and Evaluation of A Prototype ITV Programme for Social and Political Science Students at The Open University of Indonesia (Universitas Terbuka)

Dewi A. Padmo Putri

The purpose of this thesis was to design, produce and and evaluate a prototype television programme which is intended for students in the Faculty of Social and Political Science of the Open University of Indonesia (Universitas Terbuka). The specific programme is intended to support an Organization and Management course. Formative evaluation was employed in every stage of the programme's development: design, script development and production. In the design stage, a needs assessment was conducted prior to script development in order to determine and evaluate the potential target population's problem areas and needs. In the script development stage, the script was reviewed and evaluated by subject matter and media presentation experts. In the last stage, evaluation was undertaken with an expert appraisal, one to one evaluation and field testing with samples of the intended learning group.

A one group pretest-posttest design was used for evaluating the production which had a duration of 25 minutes. The field testing included a total of 33 students who were taking the course. The data collected were

analysed to determine the efficiency and effectiveness of the programme. Seventy-five percent of the subjects achieved 75% of the objectives. The t-test results indicated that there was a notable increase in knowledge significant at $p<.001$. Based on results from the technical variable analysis, suggestions were made for programme revision.

A final recomendation was directed toward using this development and evaluation model in future programmes produced by Universitas Terbuka to further improve its effectiveness in providing quality distance education materials.

Acknowlegements

I would like to thank my thesis supervisor, Prof. Gary Coldevin, whose flexibility allowed me to do a thesis which, while conforming to academic requirements, is very practical and useful to the kind of work I am engaged in; and I am grateful for his assistance and encouragement. I wish to thank the members of my committee, Prof. J. Baggaley and Prof. S. Shaw, for their participation as well.

I also wish to express my appreciation to :

Prof.Dr. Setijadi M.A.
Prof.Dr. Yusufhadi Miarso M.Sc.
Dr. Atwi Suparman M.Sc.
Drs. Henry Walandow

for their permission and support which enabled me to conduct my project in Indonesia.

I am especially grateful to the members of the design and production team, namely:

Drs. Marulak Sihombing M.Sc. PA
Dra. Mirrian S. Arief M.Ec. PA
Dra. Ary Yuliana
Dra. Asnah Limbong
Drs. Suryo Prabowo
Ir. Sri Kurniati
Lili Sutrisna
Jimmy Pudjisetio
Maman
Joy Soejoyono
Risdianto
Hendy K.

for without their time, energy, expertise and dedication this project could not have been completed.

A special "thank you" to my parents, sisters, nieces and nephews for their encouragement along the way.

TABLE OF CONTENTS

page

CHAPTER I. INTRODUCTION
Context of the problem 1
Goal of thesis 2
Rationale of thesis 2

CHAPTER II. LITERATURE REVIEW
A. TELEVISION AS AN EDUCATIONAL MEDIUM 6
B. FORMATIVE EVALUATION
A Definition 8
Approaches to formative evaluation 9
Selecting an approach 12
Formative evaluation in ETV 13

CHAPTER III. INSTRUCTIONAL MATERIAL DEVELOPMENT AND EARLY FORMATIVE EVALUATION 17

A. SCRIPT DEVELOPMENT ACTIVITIES
Pre-developmental phase; a needs Assessment 19
- Introduction 19
- Needs assessment procedure 20
- Analysis phase 20
- Setting the objectives 21
- Script development 23

B. SCRIPT EVALUATION 23
Evaluation of first draft of script 24
- First internal evaluation 24
- Evaluation results 25
Evaluation of revised script 26
- Second internal evaluation 26
- Evaluation results 26
- External evaluation 26
- Evaluation results 27

C. PRODUCTION ACTIVITIES 28
Pre-production phase 28
Production phase 28

CHAPTER IV. LATE FORMATIVE EVALUATION 30
Objectives 30
Target Population 33
Conducting the evaluation 33

1.Subject matter expert evaluation 33
- Participants 33
- Instrumentation 34
- Procedures 34
- Data analysis procedure 34

2.Technical presentation expert evaluation 35
- Participant 35
- Instrumentation 35
- Procedure 36
- Data analysis procedure 36

3.One-to-one evaluation 36
- Participants 36
- Intrumentation 36
- Procedure 37
- Analysis procedure 37

4.Evaluation results 37
- Subject matter expert evaluation results 37
- Technical presentation expert evaluation results 38
- One-to-one evaluation results 39

5.Revision 40

Field Test 41
- Participants 41
- Evaluation design 42
- Constraints of the design 42
- Instrumentation 43
- Procedure 44
- Data analysis procedure 45
- Evaluation results 45
  - Cognitive test results 45
  - Programme's quality results 47

CHAPTER V. CONCLUSION, DISCUSSION AND RECOMMENDATIONS 52
Conclusion 52
Discussion 53
Recommendations 55

References 59

Appendix

I. Needs assessment questionnaire 66

II. Needs assessment results 68

III. Television script 70

IV. Subject matter expert questionnaire 89

V. Technical presentation expert questionnaire 91

VI. One to one interview guidance list 94

VII. Student feedback questionnaire 98

VIII. Student questionnaire data 107

LIST OF TABLES

1. Integrating Formative Evaluation with ETV Development 15
2. Pretest and Posttest Results 46
3. T-test Comparison of Pre and Posttest Scores 47
4. Mean Scores From Student's Opinion Questionnaire ... 48

LIST OF FIGURES

1. Instructional Material Development and Early Formative Evaluation 18
2. Late Formative Evaluation Design 32
3. Bar Graph of Means of Correct Answers in Posttest .. 47
4. Bar Graph of Means of Technical Presentation Variables 50

CHAPTER I

INTRODUCTION

Context of the problem

Most of the reasons for establishing a distance education system in a third world country are due to its utility as a means of ameliorating traditional educations problems. Especially in the post colonial third world, where the costs of expanding primary, secondary and tertiary level provision to meet the needs of increasing populations have proved too much for many countries and have strained the budgets of others, distance education has come to be seen as a means of meeting the demand for education. Indonesia is one of the third world countries which faces this problem.

At the higher education level, the Universitas Terbuka (the Open University of Indonesia) was seen as a means of satisfying the demand for higher education places which the traditional universities were unable to meet. The Universitas Terbuka (UT) was established in September 1984. UT grew out of a series of pilot projects in Indonesia designed to provide in-service training for teachers using distance learning techniques provided through existing educational faculties. Today, the Universitas Terbuka has four teaching faculties: Education, Social and Political Science, Economics and Mathematics. Material which is prepared and distributed to students consists of textual

materials supported by audio cassettes. Broadcast radio is regularly used but at present there is only a very limited access to broadcast television.

Due to the limited access to broadcast television, it would be highly worth while to attempt to maximize its effectiveness. In this spirit this thesis is concentrated upon designing, producing and evaluating a prototype of UT's television programmes to improve the quality of a distance education course.

Goal of thesis

The purpose of this thesis is to prepare and evaluate a television programme for the Open University of Indonesia (Universitas Terbuka). This study is an attempt to produce a programme based on student's needs. The programme will be designed to help the students acquire a better understanding of the most difficult parts of printed materials (modules) in an Organization and Management course (ADNE 4217). Thus, it is hoped that the students will perform better in the course as a result of the television programme produced.

Rationale of thesis

Television is a medium of communication that has been extensively used for educational purposes. It is commonly

accepted that to educate implies a process of helping someone to achieve certain knowledge, skills, goals or objectives through certain means. Television can definitely be one of those means and it has been widely shown that it can be an effective medium for education, and more precisely, for delivering certain types of knowledge or helping to develop certain skills ; in other words it has proven itself as a good medium for helping people to learn. With regard to the effectiveness of broadcasts, Brown (1984) points out that the Open University television broadcasts perform a variety of roles in addition to their primary teaching function within courses. They are watched by a much wider audience, including schools, colleges and the general public, and the university undoubtedly benefits from this wider exposure.

Even though television broadcasts give great benefits to the Open University, at present the Universitas Terbuka provides only a very limited access to broadcast television. This limitation is due to production cost and availability of transmission times for university programmes. Because of these problems, it would be worth while if the programmes which are produced were based on specific objectives which are important and which could be only achieved by visual presentations. As Harris (1985) points out, if specific objectives could be listed, there would be a rationale basis for the construction of strictly necessary television

programmes only. Moreover, it would be valuable if the objectives selected were based on the student needs. As proposed by Efebo (1987), an advisory committee should be set up to determine and evaluate potential target problem areas or needs that must be attacked or solved. Mager (1976) supports this proposal in noting that for successful teaching there must be a connection between the problem and solution, between the need for instruction and the nature of the instruction.

However, the effectiveness of an educational television programme not only depends on how the programme is developed but also whether the programme produced has achieved its objectives. Lewis (1977) points out that one of the ways to determine and to improve the effectiveness of educational television offerings might be through the use of formative evaluation. He further mentions that the results of formative evaluation are usually applied directly to the development of the programme under consideration so that changes based on the data can be immediately implemented.

In order to improve the effectiveness of the Universitas Terbuka's television programmes, those activities mentioned above are important to be implemented. Therefore this thesis is aimed at developing the quality of the Universitas Terbuka's television broadcasts, in order to facilitate successful transfer of learning to meet the

end needs of students.

This thesis thus consists of the design, production and evaluation of a prototype television programme for the Universitas Terbuka based upon the findings of various studies on the use of television for instruction.

CHAPTER II

LITERATURE REVIEW

A. TELEVISION AS AN EDUCATIONAL MEDIUM

Television is a very rich medium in terms of information density of the amount and types of symbol system it can simultaneously carry (Bates, 1988). Lewis (1977) points out that television offers complete flexibility and enables instructional designers to use any combination of sight and sound to communicate their message. One function of television is to generate appropriate audio-visual images linked to otherwise difficult abstract concepts. Bates (1988) advocates that it is extremely valuable to be able to provide higher education distance learning students with powerful audio-visual concrete examples. Much of higher education is about abstraction.

A few examples exist of research conducted by obviously unbiased educational investigators on the cognitive and affective impacts of television. Salamon and Gallagher (1988) reported that television seems to be of particular value to the high risk "open university student" and can help to keep down drop-outs resulting from the difficulty of a course . The same results were reported by Brody (1984) and Simonson et al (1987) that the use of educational television programme can contribute to increased learning. Karman (1986) reported no differences in the amount of

learning that occurred between telecourse students and on-campus students. Rollyson (1984) concluded that television is a powerful tool for learning, provided that it is respected as a mode of communication in its own right.

Broadcast television can be also be reproduced in a video cassette format. As Brown (1984) suggested, substituting video cassettes for repeat broadcasts not only increases the accessibility of programmes overall, but also improves their control characteristics and their perceived degree of integration with the rest of course materials. Further, he commented that these changes were reflected in enhanced student learning and in an increased appreciation of the value of television as a course component.

Extensive investigations of television have looked at not only how it is used but also how it is produced. Shepard (1967), Zettl (1968), Anderson (1972), Chu & Schramm (1967), and Coldevin (1981) have all outlined areas of actual or potential television production variable research. Researchers (e.g., Gagne, 1980; Chu & Schramm, 1967) and educators (e.g., Brofenee Drenner, 1970) have indicated that there is a direct relationship between attention and achievement in an educational presentation. Writers of television production text have suggested that attention to a television presentation may be increased through the application of appropriate production technique (Zettl, 1984;

Utz, 1980). Morris (1988) also reported that television production techniques can improve the effectiveness of a television programme. Production techniques that were used in his study included special effects and drama to integrate the message and motion to dramatize and clarify an event.

The foregoing research has consistently demonstrated that educational television programmes can be powerful tools in helping people to learn in a variety of contexts.

B. FORMATIVE EVALUATION

A definition

The term formative evaluation was coined by Scriven in 1967, but as Cambre (1981) demonstrated, the idea of a formative use of evaluation has been pursued for quite a while in the practice of educational television and film. The term formative evaluation proposed by Scriven was referring specifically to the evaluation of educational programmes while they are still under development (see, Weston 1986). Abedor (1972) defined formative program evaluation as an attempt to identify weak points in a program using data collection, analyzing these data to revise hypotheses and design, and evaluate revisions. Dick & Carey (1985), whose concern is instructional design, defined

formative evaluation as the process which is used by instructors to obtain data in order to revise their instruction to make it more efficient and effective.

There are many other definitions of formative evaluation that attempt to be more specific. Weston (1986) in her review of formative evaluation noted that the term formative evaluation has been employed to refer in general to any try-out and revision of instructional materials.

Approaches to formative evaluation

There are several questions that concern the product developer of instructional program materials that greatly impact the formative evaluation process, such as : How does a product developer set up a system for revising materials ? What kind of information should be sought and how should it be used in determining the revision? Several approaches have been depicted in the literature that respond to these questions. For example, the approach to formative evaluation by Dick & Carey (1985) consists of three stages; one-to-one evaluation, small group evaluation and field tests. Another approach briefly described is Arenson's (1981) model which combines the best features of both Abedor's (1972) and Hartley's (1972) model. This model's approach uses technical experts, combination individual and group try outs, followed by immediate student feedback.

There are many other approaches to conduct formative evaluation proposed by experts in the field of educational technology and instructional design. Weston (1986) compiled various approaches which are very common and more accurately describe a particular approach to formative evaluation. They include, Expert Review, Developmental Testing, the Three Stage Model, and Learner Verification and Revision (LVR).

The expert review approach to formative evaluation proposes that an expert or a series of experts review prototype materials during development and suggest improvements (e.g. see Montague et al, 1983). This approach seems the more simple one since the expert is asked to review the instructional material within his/her area of expertise. The accuracy, completeness, instructional sequence and technical quality can be maintained using this approach, but it does not give an input to student difficulties or problems in using the materials. Rothkopf (1963) found a negative correlation between expert ranking of instructional materials and student achievement. Due to this reason, it would be worth while if the expert review approach is combined with student data.

The development testing approach is similar to expert review which again advocates that draft materials be tried out and revised before a final version is produced (e.g. see

Henderson & Nathenson, 1976). In contrast to expert review, however, this approach requires that learners be used as a primacy source or feedback for revision. Horn (1964) indicates that in developmental testing the try out of materials should be done only in one-to-one sessions with individual learners. Arenson (1981) proposed one model which combines different approaches i.e technical expert and combination of individuals and group try outs, in order to get a better final draft.

Some authors (e.g. Dick & Carey, 1985) proposed a three stage model as basic phases of formative evaluation. The first is one-to-one or clinical evaluation. In this phase, the draft materials are tested with individual students and revised. Weston (1986) pointed out that in this stage the major instructional problems are usually identified resulting in revisions such as a change in the instructional strategy or overall organization of instruction. In the second stage, the revised draft materials are tried out with small groups of learners who are representative of the target audience. The recommended sizes of groups varies; for example, Bell and Abedor (1977) recommend groups of 4 to 6 learners, Dick & Carey (1985) suggest 8 to 20 and Friesan (1973) suggest that 30 is appropriate for larger groups. The final phase is usually a field trial. The emphasis in the field trial is on testing the procedures in as "real world" a situation as possible. Revisions are made

again, the materials are produced in final form and are implemented.

The learner verification and revision (LVR) approach to formative evaluation (e.g. see Komoski & Woodward, 1985) is similar to developmental testing and the three stage model discussed earlier. This approach requires the learners individually or in groups to be used as the primary source of feedback revision. Cambre (1982) pointed out that the learner verification approach to formative evaluation shows the most promise for insuring quality control of the new instructional materials. Further, she commented that involving the learner in the development of materials from the earliest stages, then evaluating each segment with individual learners as the program moves along in a succession of try-out and revision, is a time consuming but highly effective methodology.

Selecting an approach

While the literature on formative evaluation indicates that the success of formative evaluation resides in the utilization value of the results found, that is , in the usefulness of the information obtained to solve the needs of developers, there do seem to be doubts concerning the best way to carry out formative evaluation. Although there are many approaches to formative evaluation as

mentioned earlier, valid on their own terms, the selection of a particular approach is based upon a number of specific considerations. These include identifying the type of information needed from the evaluation as well as the duration and frequency with which the evaluation should occur.

Since each approach may differ with regard to the primary source of feedback advocated, a combination approach is highly recommended (Dick & Carey, 1985; Thiagarajan, 1978; Kandaswany, 1980; Weston, 1986). Of particular importance in selecting an approach, is a consideration of practical constraints. Available resources such as time, budget, money, personnel, and facilities can affect the decision of selection process (Weston, 1986; Palmer & Tovar, 1987).

As practical contraints could affect the selection of an evaluation approach, Weston (1986) suggests choosing a combination of evaluation strategies from existing methods. The strategy that will be used to evaluate certain course materials should be of concern with the identified constraints as well as the type of information needed.

Formative evaluation in educational television

The formative evaluation process can and should be applied to materials being developed in any medium.

Formative evaluation in ETV is concerned with the assessment of the merits of features of ETV materials being developed so as to correct or modify them while being produced. As Nickerson and Gillis (1979) state: "Formative evaluation of the project enables the production staff to improve or modify the television programmes or other system components while they are being produced" (p.7). Mielke (1978) pointed out that the most important role of formative evaluation in ETV is that it provides a systematic link with the target audience. It is designed to provide diagnostic feedback into the decision making process for production, so that programming improvements, if needed, can be made before broadcasting. It is also important to note that formative evaluation in ETV programmes is not only concerned with the evaluation of pilot programmes, but can be also used to try out ideas, scripts, production techniques, etc. A study by Nugent (1980) supports the use of script evaluations as an efficient means of identifying strengths and weaknesses of a television programme and serving as a guide for programme revision. Further, he reported that "Evaluation of a programme's content and organization, as well as cognitive outcomes or indication of the programme's instructional effectiveness can be obtained from script reviews"(p.25).

Duby (1988) classified formative evaluation into early formative and late formative evaluation stages. In the stage of developing ideas, rationale, content and scripts,

formative evaluation can be done by collecting data through needs assessment, assessment documents, expert opinion and "in-house" formative evaluation. These activities are considered as early formative evaluation. Production matters such as format presentation, sound pacing, attractiveness of programme or editing techniques can be examined when the programme is available for viewing. Due to this reason, ETV production houses usually produce pilot segments, or pilot programmes for previewing and formatively evaluating (Baggaley & Duck, 1976; Cook & Curtin, 1985; Tidhar, 1979). Duby (1988) classified these activities as late formative evaluation. Table 1. illustrates the integration of formative evaluation with ETV development.

Table 1
Integrating formative evaluation with ETV development.

Formative evaluation	Phases	ETV stage of development
Early formative evaluation	Preparation	Idea Rationale
	Development	Content Script
Late formative evaluation	Production	Production of pilot Full-scale production.

(Duby, 1988)

Further, Duby (1988) points out that if intensive and reiterative formative evaluation for ETV development takes place in early development stages the testing of the pilot can be limited mainly to production issues.

CHAPTER III

INSTRUCTIONAL MATERIAL DEVELOPMENT AND EARLY FORMATIVE EVALUATION

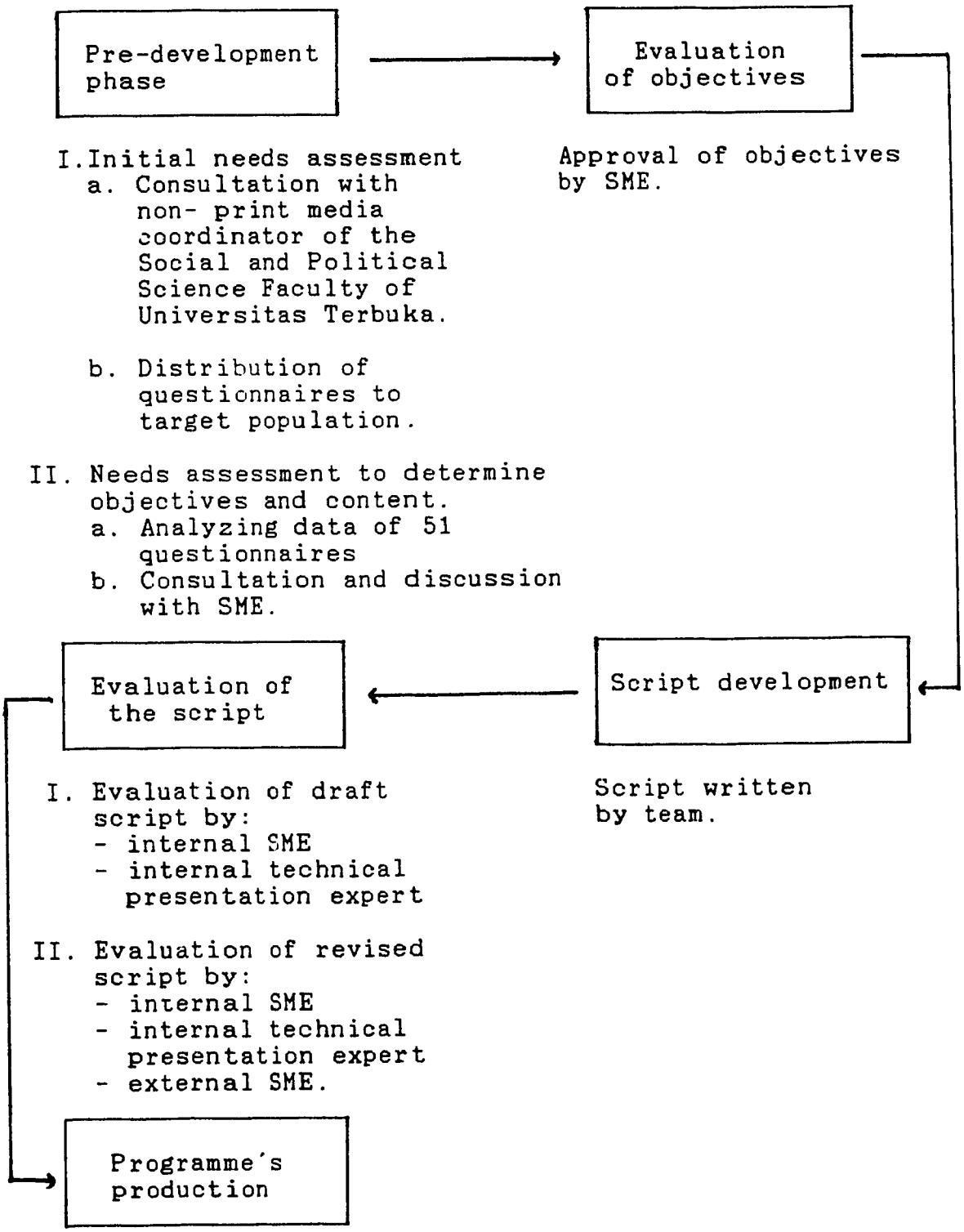
The development of the television programme was a lengthy process which began in February 1990 and continued for 8 months. During this time 5 phases of development were implemented. These included a pre-development phase, analysis phase, script development phase, production phase and post-production phase. A summary of the development of the instructional material design appears in Figure 1.

The first three phases were implemented through consultations between the author and three subject matter experts. The remaining phases were implemented by the production team from Universitas Terbuka.

Evaluation and revisions of the work carried out in each phase were conducted by the team involved in the phase's implementation. Since developing the strategy of this television programme was a new approach for the Universitas Terbuka, the process of evaluating and revising work was considered particularly important for future work at the University.

Figure 1.

Instructional Material Development And Early Formative Evaluation



A. SCRIPT DEVELOPMENT ACTIVITIES

Pre-development phase : Needs assessment

Introduction

This phase was started with a long distance consultation process between the author and non print media coordinator of the Social and Political Science Faculty. The consultation concerned the selection of course content that would be produced in the television programme. In the end, the Organization and Management course (ADNE 4217) was chosen on the basis of several considerations such as , 1) all students majoring in the Business Administration and Public Administration program have to take this course, and 2) the high percentage of students majoring in those two programs.

The next step of the needs assessment involved collecting data from the students. This activity was done in order to investigate whether there was a particular topic from the course chosen that had a higher degree of difficulty which would be more clear if presented by television. In the literature review of this thesis, a number of authors stressed that it is important to determine and evaluate potential target problem areas or needs that must be attacked or solve.

Needs Assessment Procedure

For the purpose of the needs assessment, a questionnaire was constructed in an open-ended format and mailed to the subjects i.e., students of the Universitas Terbuka already taking the course (see Appendix I).

Ten cities were chosen from all over Indonesia which would be relatively easy to reach by mail within a period of 7 to 10 days. These cities were :

- Jakarta
- Depok
- Bogor
- Surabaya
- Malang
- Lampung
- Palembang
- Medan
- Menado
- Ujung Pandang

The next step, was to randomly select 150 students from the ten cities. The Questionnaires were then mailed and within one month 51 questionnaires were returned to the central offices where the data were analyzed.

Analysis Phase

Based on the data, 27 difficult topics were listed (see Appendix II). Based upon an agreement decided beforehand, the team was concerned with the topics that were chosen by 50% and above of the students. With this limitation imposed, there were only eight topics that

were included in the selection process:

1. Span of supervision
2. Neo-classic theory
3. System approach and the contingency application
4. Delegation of authority
5. Group dynamics in the organization
6. Management as a core of organization
7. Bureaucratization and Indonesia development
8. Bureaucratization.

Based upon consultation and discussion with subject matter experts and a media specialist, it was decided to produce a television programme on "Span of Supervision" for this project. The 7 other topics will be produced in future programme.

Setting The Objectives

The topic of "Span of supervision" was agreed to be produced because it was considered as a difficult one and it was seen to be more clear if presented via a television programme. The overall objective of this television programme is to successfully teach students to comprehend the concept of "span of supervision" and its application. The specific behavioral objectives of the programme are listed as under in terms of terminal objectives. Overall, it was intended that seventy-five percent of the students

should attain a minimum level of competency of 75% of the objectives.

1. The concept of span of supervision

   - The learner will correctly define the concept of span of supervision.

2. Widening the span of supervision.

   - The learner will correctly identify the ideal span of supervision according to William Newman.

   - The learner will correctly identify the ideal span of supervision according to Lyndall Urwick.

3. Guides for selecting the optimum span of each executive.

   - The learner will correctly name five guides for selecting the optimum span.

   - The learner will correctly clarify the influence of organization planning in determining optimum span.

   - The learner will correctly clarify the influence of the employees' relationship and their task in determining optimum span.

   - The learner will correctly clarify the influence of variety and importance of activities supervised in determining optimum span.

- The learner will correctly clarify the influence of executive and subordinates' capacities in determining optimum span.

- The learner will correctly clarify the influence of the operation's stability in determining optimum span.

4. Widening and narrowing spans.

- The learner will correctly clarify what is meant by by widening span of supervision.

- The learner will correctly clarify what is meant by narrowing span of supervision.

Script Development Phase

Based further on the rationale, the content to be included in the programme was decided upon, followed by writing the script. Experts in the subject matter were invited to provide information concerning content, the objectives and their order of importance. It was agreed that the author and one subject matter expert from the faculty would write the script.

B. SCRIPT EVALUATION

During the script development, formative evaluation was

conducted. According to Duby (1988) this evaluation was classified as early formative evaluation. The purpose of this early formative evaluation was to determine whether the written script matched the rationale and with the content in order to ensure that the objectives were treated and oriented correctly. This early formative evaluation consisted of both internal and external assessment.

Evaluation First Draft Script

First Internal evaluation

The first internal evaluation during the script development was carried out by developers and an in-house evaluator of programmes. Lewy (1985) concluded that formative evaluation is best done by internal evaluators. Further, Duby (1985) points out that closer contact between developers and evaluators and the possibility of simultaneous planning of development and evaluation activities are the main advantages of in-house evaluation and of self formative evaluation. No formal instrumentation was used. The review of script was followed by discussion and/or brainstorming sessions to determine possible improvements.

The first rough draft of the script was reviewed by a senior subject matter expert and media presentation expert from the university. In this session the expert reviewed

the written script to ensure that the rationale and objectives were treated and oriented correctly. More specifically this review session concentrated on:

- the suitability of the programme format to the content.
- the suitability of the programme to the needs of target population.
- the ability of the target audience to accept, absorb or use the programme.

First Internal evaluation results

Based on the review and evaluation sessions of the first draft, there were a lot of revisions suggested concerning both the programme format and content. Accordingly, the first draft script was revised as follows:

- The script was shortened and limited to a few concepts; thus more information about certain concepts could be covered in greater depth.
- The programme format was changed. Instead of one single presentation, the programme incorporated both dramatic form and presenter. According to Efebo (1987) the dramatic form might be a simulation of a problem and its solution with built-in implications.

Evaluation of revised script

At the next step, to ensure that the script was developed correctly, both internal and external evaluator were asked to review the revised script to ensure that the information content was relevant to the needs and objectives of the programme, and to further check on the accuracy and usefulness of the material.

Second Internal Evaluation

The revised script was ready within two weeks. As previously, the revised script was reviewed and evaluated by a senior subject matter expert and technical presentation expert.

Evaluation result

There were few revision suggestions made. The revisions recommended were concerned with the clarity of the ideas and simplicity of words that were used in describing technical terms. Following this session, an evaluator worked together with the producer in revising the script.

External Subject Matter Expert Evaluation

Even though there are many advantages of internal evaluation, the subjectivity of this method makes it

difficult to see gaps. For this reason in the stage of script development, evaluation from an external source was employed in addition to in-house critique.

The external subject matter expert reviewed the revised draft script. The script was sent to the external evaluator two weeks before the meeting with the script development team. This procedure was used in order to give enough time to the evaluator to read the script carefully within her tight working schedule, thus ensuring that she could evaluate the script properly.

In the review meeting session, the evaluator came along with several corrections to the script which were concerned with the appropriateness and accuracy of the content and verbal complexity. This was clarified through a discussion and brainstorming session. The visual aspects of the script were also discussed.

Evaluation result

Based on the data from the external evaluator, the revised script was corrected and revised once again.

Once revisions to the script were made in response to the input obtained from the evaluators, the prototype of the television programme was produced.

C. PRODUCTION ACTIVITIES

Pre-production phase

During this phase, the author as the programme director undertook several activities, including:

- Breakdown of the script.
- Making a shooting plan/schedules.
- Selecting the talent, i.e. host, actors.
- Outlining the script for the talent who had been selected.

Since the production was using the Universitas Terbuka's studio equipment as well as the production crew, the shooting schedules were concerned with schedules and daily studio activities.

Production phase

This phase involved the shooting both inside and outside the studio. The video shoot took ten days to complete all scenes and was conducted in several different locations.

1. Inside studio:
   - Shooting of the host 1 day
   - Shooting of the illustration segment 2 days
   - Shooting of the graphics/animation 2 days

2. Outside studio:

- Shooting of the consultation segment 2 days
- Shooting of garment production activities, and illustration segments 3 days

The shooting was recorded on Umatic format (3/4 inch). All production techniques that could be done using the capabilities of studio equipment were applied in order to achieve a good quality of the programme.

Programme editing took 3 days to finish on the rough form. The programme duration was 27.5 minutes. This was too long to be fit into the twenty-five minutes maximum university television slot in the National Television Network. It was obvious that the programme had to be cut down in order to meet the proper duration time.

The programme director and editor worked together to find several possibilities to cut it down. Notes were made and the subject matter expert involved in the script development phase was consulted. Agreement was reached to cut several illustrations which would not reduce the main purpose of the sequence.

CHAPTER IV

LATE FORMATIVE EVALUATION

OBJECTIVES

After the programme was produced in a semi-final version, late formative evaluation was conducted. The purpose of this evaluation was to determine how effective the television programme was in achieving its objectives. In addition to determining effectiveness, this evaluation was intended to provide specific information on recommended production changes.

In order to achieve the goal, the evaluation of the programme consisted of measures to determine:

- Attention to the programme.
- Comprehension of the content.
- Opinion of segments of the programme.

More specifically, the evaluation was concentrated on the following:

1. Message design:
    - Appropriateness of the content
    - Clarity of the content
    - Accuracy of the content
    - Density of the content
    - Interest level of sequences
2. Content organization:
    - Pacing

- Appropriateness of delivery system (expository delivery)
- Appropriateness of graphics
- Review strategy

3. Technical quality:
   - Setting
   - Lighting
   - Editing
   - Appropriateness of music.

4. Cognitive achievement of target audience

   The audience should attain a minimum level of competency which in this study was set at 75 percent of the subjects mastering 75 percent of the number of items on the test.

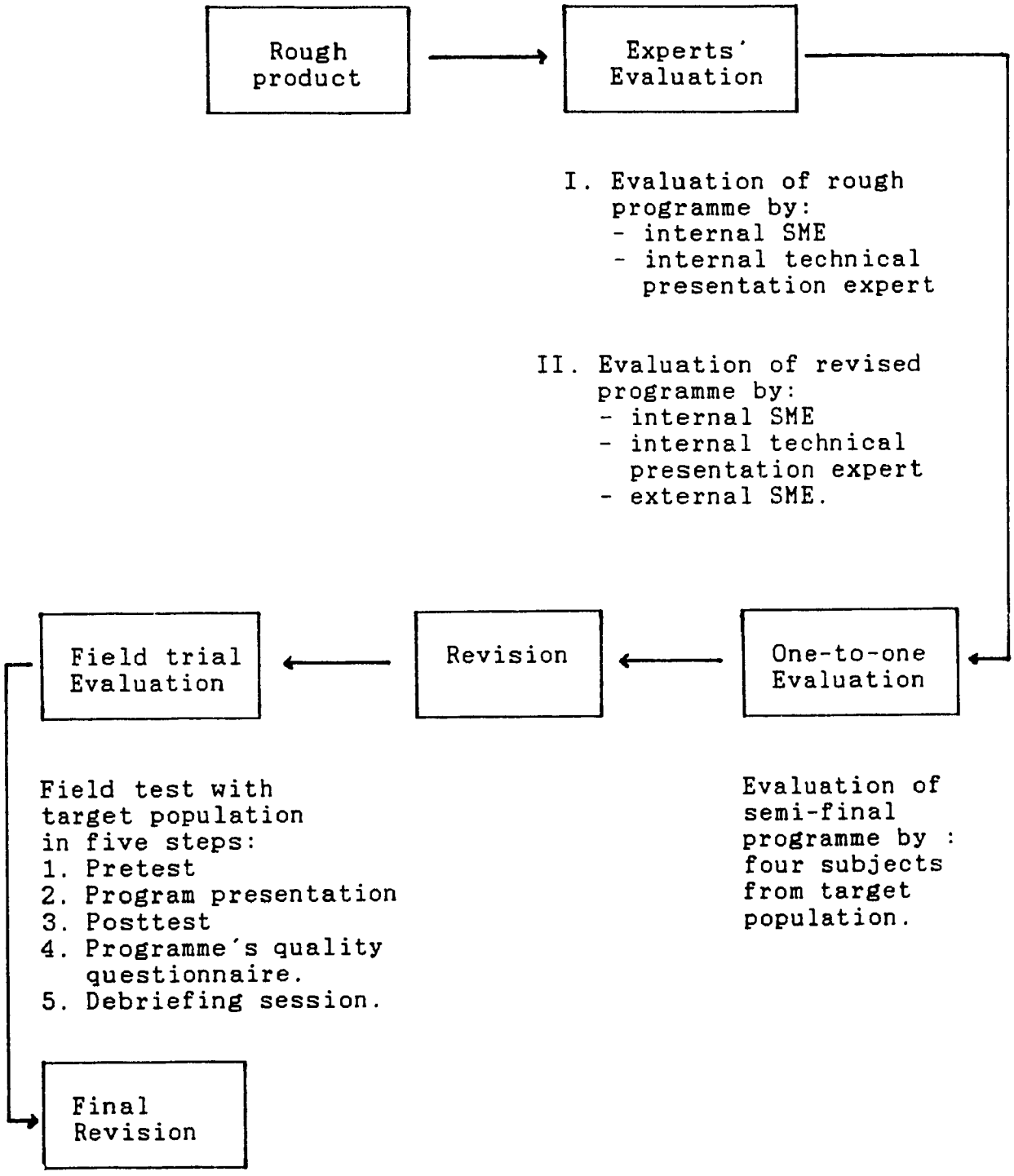
This evaluation study used three basic sources of data:

1. Experts' opinion
   - Internal subject matter expert
   - Internal technical presentation expert
   - External subject matter expert.
2. Students' opinion
3. Cognitive test results.

A summary of the late formative evaluation design appears in Figure 2.

Figure 2.

Late Formative Evaluation Design



TARGET POPULATION

The target population for whom this television programme was intended are the students of the Universitas Terbuka in the Faculty of Social and Political Science, especially students taking the "Organization and Management course" (ADNE 4217). Based on students' data statistics, their age ranges between twenty and forty five years old. Seventy-five percent of the students are working either in government institutions or private companies.

CONDUCTING THE EVALUATION

SUBJECT MATTER EXPERT EVALUATION

Participants

The subject matter experts consulted for the formative evaluation process analyzed the programme to determine which variables could be improved. There were two subject matter experts. One of them was an internal evaluator from the university who also acted as an evaluator in the script development phase. The second one was an external evaluator. They were requested to discuss their general reaction to the programme as well as suggest any revisions which they deemed important after viewing the programme.

Instrumentation

An open-ended questionnaire was created and used to evaluate the correctness as well as the appropriateness of the content (see Appendix IV). Informal interviews were also used to record comments and suggestions made by subject matter experts.

In particular, they were asked to consider the accuracy of the information presented, the validity of the objectives, the clarity of the content and the appropriateness and effectiveness of the programme in terms of interest, sequence, level of difficulty and comfort, and learnability.

Procedures

Each subject matter expert viewed the programme without disturbance for 25 minutes from the beginning until the end. Following the viewing, the questionnaire was answered. Comments, discussion and recommendations for improvement were noted throughout a further second viewing of the programme.

Data analysis procedure

Responses generated from the questionnaire were listed. The comments and suggestions were than analyzed to determine

possible corrections to the programme content or other aspects.

TECHNICAL PRESENTATION EXPERT EVALUATION

Participant

The technical presentation expert was the one from the university (internal evaluator). Since the expert is from the university, he knows the capability of the studio equipment. Thus the evaluation of the technical aspect that was given was within the context of the equipment's capability.

Instrumentation

An open-ended questionnaire was used to evaluate the presentation and technical aspects (see Appendix V). Informal interviews were also used to record comments and suggestions made by the technical expert.

As well as the SME, a technical presentation expert was requested to discuss her general reaction to the programme. This evaluation mainly focused on the technical presentation aspects. In particular, he was asked to consider the appropriateness of graphics, setting, lighting, sound and editing.

Procedure

The technical expert viewed the programme without disturbance for 25 minutes from the beginning until the end. Following the viewing, the questionnaire was answered. Comments, discussion and recommendations for improvement were noted during a second viewing of the programme.

Data analysis procedure

Responses generated from the questionnaire were listed. The comments and suggestions were than analyzed to determine possible corrections to the programme in terms of presentation and technical aspects.

ONE-TO-ONE EVALUATION

Participants

Four subjects were selected and invited to participate in the one-to-one evaluation. Three of them were male and the fourth, female. They were all working either in government or private institutions. The average age was 35 years.

Instrumentation

No formal instrumentation was used. Following the

review of the programme, an interview session was conducted using a guidance interview list (see Appendix VI). The subjects were encouraged to be active in the discussion session.

Procedure

The developer met with each of the subjects individually for evaluation, each session of which lasted for about one hour. After establishing a comfortable rapport, the developer explained to the subject that she wanted him/her to evaluate the television programme presented.

Analysis Procedure

Responses generated from interviews were listed then analyzed to determine possible corrections to the programme.

EVALUATION RESULTS

A. Subject Matter Expert Review

Overall, the subject matter experts seemed impressed and satisfied with the programme. Both subject matter experts found the structure and sequencing of the programme to be adequate and sufficient to achieve the goal of the

programme. In addition, they found that the information presented was accurate and appropriate for the target audience. However, a few modifications concerned with the programme's quality appeared to be necessary, as under:

- The animation pace on the first and second diagrams of "span of supervision " was too slow. They should be faster.

B. Technical Presentation Expert Review

The technical presentation expert found that the overall production technique was adequate and well done. However, he suggested some modifications, such as :

- Increase the animation pace on first and second diagrams.

- The colour of the opening scene which presents a flash back scene is uninteresting. Instead of using a normal colour on that scene, it would be better to use an unusual colour. This can be done by manipulating the colour of the picture during the editing process.

- The ambient sound on the opening sequence was distracting. The level should be lower or totally diminished and with music replacing it.

- For several scenes, the editing was not smooth. It

would be better to re-edit, by selecting more proper sequences from the stock.

- Instead of full text caption, it would be better to use animation graphics. It would motivate and attract more attention.

- It would be better if more visualization is used rather than talking heads.

C. One-to-one evaluation

All subjects indicated that they believe this programme would definitely be useful and helpful in comprehending the topic. However, there were a few things which came out that should be considered:

- The animation of the first and second diagram "Span of supervision " was too slow.
- Ambient sound on the opening scene was too loud.
- The colour of the first and second diagram on "span of supervision " was too bright.
- The full text caption was good, but it is difficult to read.
- The Host :

  Two subjects noticed that the speech tempo of the host was too slow, but two other subjects felt it was very appropriate; it was easy to follow and very clear.

REVISION

The evaluation results from subject matter experts, technical presentation expert and one-to-one evaluation were analyzed. Based on the analysis, it was decided to make some revisions:

1. The pace of the first and second animation on "span of supervision diagram" was increased.

2. The full text captions of no.20 and no.21 were changed to become animation graphics (see Appendix III)

3. Relevant visualization was added in order to reduce the amount of talking heads.

4. The ambient sound on the opening scene was kept slow.

Reediting for an unsmooth scene was agreed to be done on the final editing. For the Host, there was no need to reshoot since the feedback that was achieved was not adequate to make any changes or revision (Two subjects felt comfortable with the speech tempo and prefer slow tempo while two others did not).

After the programme was revised, it was evaluated in a field test in order to obtain information about the programme's effectiveness and further feedback on the programme's quality.

FIELD TEST

Participants

As mentioned earlier, the target audience for this programme are the students from the Social and Political Science faculty majoring in Public Administration and Business Administration, especially the students who are taking the "Organization and Management Course" (ADNE 4217).

Since the target audience is spread throughout the country, it was difficult to select a representative sample to evaluate the programme. Due to several constraints such as time and budget, it was decided to choose the target audience which lived in Jakarta area.

Evaluation Design

The design of the evaluation that was used for field trial evaluation was adopted from the one group pretest-posttest design (Campbell & Stanley, 1967). This design consists of a pretesting and posttesting with a single group. A pretest and posttest were used to measure significant differences in achievement before and after the treatment. These differences would be taken to represent the impact of the programme on the subjects. The design is illustrated as followed:

PRETEST	TREATMENT	POSTTEST
O1	X	O2

O1 indicates the first observation or measurement; pretest

X indicates the TV programme to be evaluated or the treatment

O2 indicates the second observation or measurement; posttest

Constraints of the design

Even though this design is still widely used in educational research and evaluation due to its advantages, it has also many constraints which can jeopardize internal validity and threats to external validity. History, testing, maturation and instrumentation are kinds of threats to internal validity. History refers to incidents or events affecting the result which may occur during the study. Campbell & Stanley (1967) point out that history becomes more of a plausible rival explanation of change the longer the time lapse between O1 and O2. The term testing refers to the effect of taking a pretest on the following posttest. Maturation refers to changes in the subjects under study over time.

Efforts were employed in order to minimize some of the mentioned threats. In order to control for history, the interval between the pretest and the posttest was kept

short. This strategy was also useful to control maturation. And two identical tests were used in order to eliminate violating internal invalidity. Finally, to minimize or reduce biasing or cueing of the group, the posttest was administered immediately after screening.

Instrumentation

For measuring the cognitive domain, a testing instrument constructed in multiple choice and true-false formats was used (see Appendix VII). This measuring instrument was used to indicate what viewers already knew and how much they had learned from the programme. Twenty questions were designed for this purpose based on the objectives of the programme.

In order to determine what viewers thought about the overall quality of the programme's message design, content organization and technical quality, a five point Likert type scale was used, ranging from strongly agree to strongly disagree (see Appendix VII). As well, open-ended questions were used. Henerson et al (1987) point out that open-ended questions may produce responses which draw evaluators' attention to a situation or outcome that was unanticipated when constructing the questionnaire. Due to the advantages of open-ended questions, it was also used to elicit the information needed (see Appendix VII). In order

to elicit demographic information, items relating to age, sex, and working status were included (see Appendix VII).

In addition to the questionnaire, a debriefing session was also conducted to determine possible improvements and to summarize group comments and revision suggestions.

Procedure

The following steps describe the administration of the testing procedures:

After establishing a comfortable rapport, the developer explained to the subjects that she wanted them to evaluate the UT's television programme on the topic "Span of Supervision". This evaluation would include two aspects, namely the programme's effectiveness and the programme's quality. The subjects were also informed that they would receive the pretest in order to determine how much information they already knew, the posttest, and programme's quality questionnaire after viewing the programme.

The pretest took about 10 to 15 minutes to administer. Following the pretest, the programme was presented. The posttest was then administered, as well as the questionnaire to elicit information on the programme's quality.

A debriefing session followed the questionnaire. It was

designed to elicit detailed information on problem areas noted and summarize group comments and revisions suggested. During debriefing, subjects were encouraged to play an active role.

Analysis Procedure

The pretest and posttest scores were tabulated and a t-test was calculated in order to determine whether the gain in information was significant or not.

The programme's quality data generated from the questionnaire were summarized and mean scores were evaluated for each criteria. These mean scores and the comments from open-ended questions and debriefing data were analyzed to determine overall reactions towards the programme.

Evaluation results of field test

A. Cognitive test

The t-test for the significance between two means for correlated samples was calculated on the pretest and posttest result. The mean score obtained on the pretest was 9.85 or 49.24% and on the posttest, 15.67 or 78.33% of the total possible score, i.e, 20 or 100%. The range of

the pretest scores was 4 to 14 and for the posttest, 9 to 19. The standard deviation for the pretest was 2.02 and for the posttest 2.19. Table 2. shows this information.

Table 2

Pretest and Posttest Results

	Pretest	posttest
Mean score	49.24%	78.33%
Range of scores	4 to 14	9 to 19
Standard Deviation	2.02	2.19

The result of the t-test was found to be significant ($t_{calt} = 22.14$, $df = 32$, $p<.001$). Table 3. shows the t-test comparison of pretest and posttest scores. Thus one may conclude that there was a significant difference between the means of the pretest and posttest. Further, it can be stated that this difference was due to the participation of the subjects in this television programme. Seventy-five percent of the subjects achieved seventy-five percent of the objectives; altogether 25 out of 33 subjects achieved scores between 15 and 19. Figure 3. shows the areas where content knowledge is weaker and could be improved.

Table 3

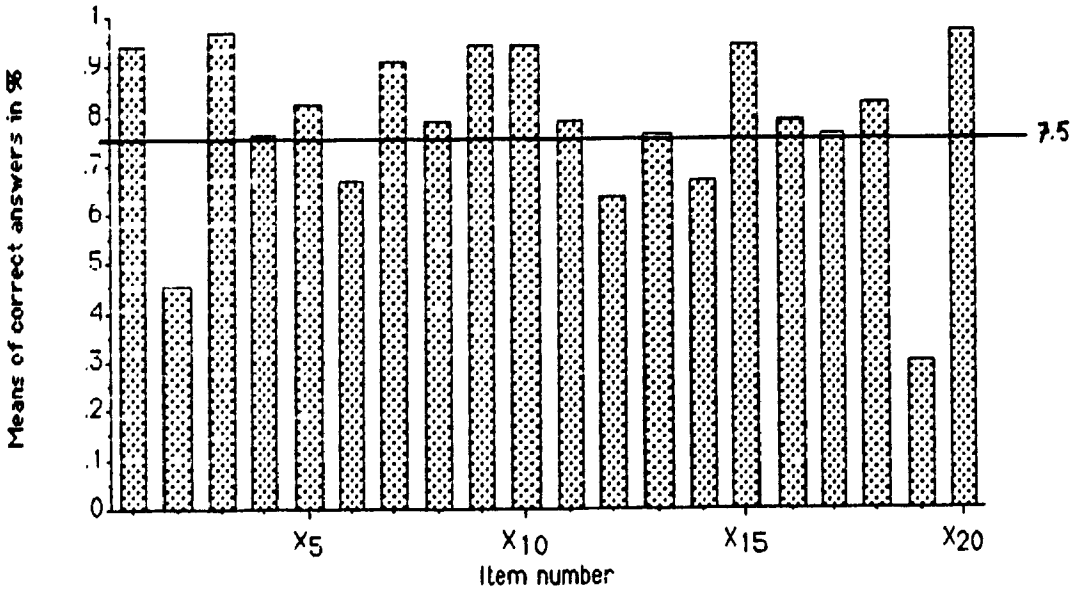
T-test Comparison of Pre and Posttest Scores

Pretest X	Posttest X	df	t-value
9.84	15.66	32	22.14*

* p <.001

Figure 3.

Bar Graph of Means of Correct Answers In Posttest



Programme's quality

The data which were obtained on students' opinions regarding the programme's quality reflect several inputs. Table 4. lists the mean scores of each item while Figure 4. graphically illustrates these results.

Table 4

Mean Scores From Student's Opinion Questionnaire

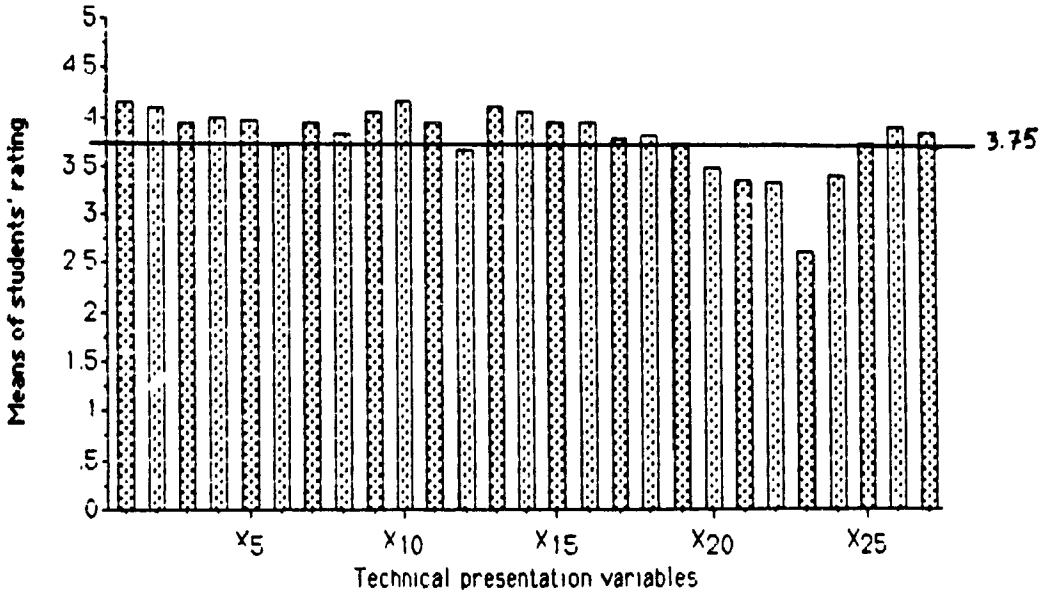
Question	Means
1. Clarity of objectives	4.16
2. Interest of topic presented	4.10
3. Accuracy of content	3.94
4. Logical order of sequences	4
5. Quantity of information presented	3.97
6. Appropriate length	3.73
7. Appropriate of delivery system	3.94
8. Clarity of the consultation segment	3.82
9. Clarity of the host segment	4.03
10. Clarity of visualization/illustration	4.16
11. Clarity of graphics	3.94
12. Music theme	3.66
13. Appropriate of pictures	4.09
14. Appropriate of sound level	4.03
15. Continuity	3.94
16. Lighting	3.94
17. Appropriate of colour	3.76
18. Setting of the consultation segment	3.79
19. Setting of illustration segment	3.73
20. Setting of the host segment	3.47
21. Host's pace	3.32

Question		Means
22.	Host's gesture/attitude	3.30
23.	Host's speech tempo	2.59
24.	Editing	3.39
25.	Speech tempo on the consultation segment	3.76
26.	Pace on consultation segment	3.88
27.	Overall assessment of the programme	3.82

The mean scores from the questionnaire on the students' opinion to the programme's quality indicate that the overall opinion and interest concerning the criteria of the programme are generally positive. However, the results showed that several aspects of technical quality should be improved. For these purpose, a criterion limit of 3.75 was set. Any item falling below this limit was deemed subject to revision. In this analysis, eight variables centering on the length of the program, setting of illustrations segment, factors associated with the presenter (host), and editing are recommended for revision.

Figure 4.

Bar Graph of Means of Technical Presentation Variables



In addition to the scale rating questionnaire, the open-ended questions were able to explore more comments and constructive criticism on how the programme could be changed. The comments made by subjects are categorized as follows:

Negative

"the host was not relaxed"

"the host's speaking tempo was too slow"

Positive

"the topic is very interesting"

"the presentation format was good and effective, and made it easy to comprehend the concept"

"the illustration was good and effective"

"the programme was excellent and very interesting"

"the programme was good because it gives a reality situation"

"important words were put on the screen"

"well made since it was easy to understand"

Improvements

"at the beginning of the programme, the module that will be discussed should be named"

"music theme, if possible, should be changed"

"it would be better if the host did not bring the script"

"at the end of the programme, it would be better if there is an announcement for next programme".

A debriefing session was held after the subjects answered the questionnaire. The session was designed to elicit detailed feedback on problem areas and responses to the production variables. During the debriefing, subjects were encouraged to play an active role in suggesting revisions to the programme. The discussion was recorded without subjects noticing it.

CHAPTER V

CONCLUSION, DISCUSSION AND RECOMMENDATIONS

Conclusion

The television programme on the topic "Span of Supervision" proved to be effective since a notably significant increase in knowledge capabilities of subjects was noted. But even though a significant result was found, a few modifications to the programme appear to be necessary, especially on the technical aspects.

It was not surprising that the result on the late formative evaluation dealt primarily with improvement on the technical presentation aspects. This proved what Duby (1988) points out, namely, that if intensive and reiterative formative evaluation for ETV development takes place in early development stages, the testing of the pilot can be limited mainly to production issues. It thus seems that in order to produce a better educational television programme it would be valuable to apply formative evaluation in the early stage of programme development as well as in the production stage. In each stage there will be a specific points to be evaluated. Early formative evaluation in this sense was very helpful to determine potential target problem areas or needs that must be attacked or solved (a needs assessment), while in the script development stage, it was very useful to discover the

inappropriate content. Thus as early as possible, the inappropriate content or information to be included in the programme can be taken out by follow-up revision. The changes on paper that stem from the evaluation recommendations cost less than changes on video tape. But, it is also obvious that in the early development stage, that is in script development, there is more time for evaluation than in the late production.

Discussion

What has been gained by this development of Universitas Terbuka's television programme and its evaluation? The developers learned the value of having input on students' problem areas given as ideas to develop a programme on essential topics. The contributions from the students enabled the developers to strengthen the supplementary relationship between the print and nonprint components. A needs assessment classified as early formative evaluation, reinforced and emphasized the need to focus learning materials on the learner, rather than on developing a programme acceptable only to other faculty members or media specialists. However, these activities are worthless, time and money consuming if the programme to be produced from a certain course is only 25 minutes long; it should form part of a series.

The weaknesses of the needs assessment process were due to the sample. It would be seen less representative since the sample which was used was only from a small part of target population.

The cognitive test result indicated that the subjects increased in knowledge after they participated in the programme. The mean score obtained on the pretest was 9.85 and on the posttest 15.67. The difference was quite significant. This result might be caused by the high motivation and the seriousness of the participants. All participants were very pleased and provided a very good collaboration with the developers. However, the same condition would also be found on most of target audience who want to learn from the UT's television programme which broadcasts through TVRI (Indonesia television network). Thus there's no reason to doubt the high score resulting from this study.

The production variables questionnaire provided important data for decisions regarding revision. Despite the fact that most items yielded favorable responses, all negative responses were probed in the debriefing to ensure that no important flaws were overlooked. However, the response on the speech rate/tempo of the host seems interesting to be discussed. The response on this specific

item indicated that the speech rate of the host was slow (2.59). According to this response, the speech rate of the presenter is supposed to be increased but the decision to do this was quite difficult since 18 subjects out of 33 subjects preferred a slower rate. When the cognitive test was compared between the two categories, the subjects who preferred a slower rate was better than the subjects who preferred a faster rate, but this difference was found non-significant. In order to satisfy both categories, the presenter's speech rate might be increased a little bit.

Recommendations

The production of this programme which resulted in a developmental and evaluation model could well serve as a guide in the future production of television programmes at the Universitas Terbuka.

In order to increase the effectiveness and efficiency of the Universitas Terbuka's television programme, formative evaluation should be conducted throughout its development : in the preparation stage, script development stage and production stage.

1. Preparation stage

Since the cost for a television production is expensive,

it would be worth while if the programme to be produced is based on the students'expressed needs. For this purpose the Media Production Center of the Universitas Terbuka should set up an advisory committee to determine and evaluate potential target problem areas or needs that must be attacked or solved. Such a committee can be handled by the Research and Development Unit that already exists in the Media Center to collaborate with Faculty members. In order to collect the data efficiently, a questionnaire can be distributed during either the mid-term or final term tutorial. By using this method, the cost for needs assessment can be minimized because in one location there will be two goals that can be achieved. Another method that can be implemented is a questionnaire attached to printed material which the student should fill in and bring along when the mid-term or final term examination is administered.

These needs assessment activities will gear the materials toward student learning and will strengthen the supplementary/complementary relationship between the print and nonprint component.

2. **Script Development stage**

Formative evaluation in the script development stage is crucial. Evaluation in this stage should probe the

inappropriate content and the final script which, when ready to be produced, would be perfect in terms of content. Thus in the production stage (late formative evaluation), the evaluation can be limited mainly to production issues.

In the script development stage evaluation would be better if conducted by an internal evaluator as long as the SME in the faculty is available. The closer contact between script developers and evaluators and the possibility of simultaneous development and evaluation activities are the main advantages of in-house/internal evaluation. Moreover, internal evaluation will reduce the threat associated with the activities of an external evaluator. However, if necessary, e.g. to provide objectivity, external evaluators can be also used.

3. **Production stage**

Since there will be a lot of problems and constraints with inviting a large group of students to evaluate a given programme, a small group of 8 to 10 students can be accepted. While evaluation by subject matter experts and media presentation experts is important and can not be ignored, a sampling of programmes should be tested with target audiences.

4. **Programmes' schedule**

In order to maximize the usefulness of

television programmes by the students, the Universitas Terbuka should distribute the schedule of television programmes that will be broadcast. Ideally, the schedule should be made for one a year period. However, if it seems difficult to be implemented, an announcement for one or two programmes that will be broadcast next should be given at the end of each programme. This kind of schedule is very important for the students in order to prepare themselves to watch the programmes and incorporate them into their study schedule.

In summary, this study has well demonstrated the potential value of incorporating formative evaluation into the preparation of television programmes to support print based instructional materials. The experience gained will serve as valuable lessons for the further development of distance education at the Universitas Terbuka.

REFERENCES

Anderson, C.M. (1972). In search of a visual retoric for instructional television. Audio Visual Communication Review. 20(1), 43-63.

Abedor, A.J. (1972). Development and field of a model of formative evaluation, Viewpoint, 48, 9 - 43.

Arenson, M. (1981). A Model for Systematic Revision of Computer-Based Instruction Materials in Music Theory. Journal of Computer-Based Instruction, 7, 78-83.

Baggaley, J. & Duck, S. (1976). Dynamics of Television, Farnborough, Saxon House.

Bates, T. (1988). Television, learning and distance education. International Council for Distance Education Bulletin. 16(1), 29-38.

Bell, N., & Abedor, A. (1977). Developing audio-visual instructional models for vocational and technical training. Englewood Cliffd, N.J.: Educational Technology Publications.

Brody, P.J. (1984). A research - based guide to using pictures effectively. Instructional Innovator. 29 (2), 21-22.

Brown, S. (1984). Television in the open university. Teaching at a Distance

Cambre, M.A. (1981). Historical overview of formative evaluation of instructional media products. Educational Communication and Technology Journal, 29(1), 3-25.

Campbell, D.T. & Stanley, J.C. (1967). Experimental and quasi-experimental designs for research, Hopewell, NJ., Houghton Miffin.

Chu,G. & Schram, W. (1967). Learning from television: what research says Washington, DC. : NEAB.

Cook, T.D. & Curtir, T.R. (1985). Evaluating the CTW model for producing educational television, Educational Communication and Technology Journal, 33,pp. 91-112.

Coldevin,G.O. (1981). Experimental research in television message design; Implication for ETV, Programme Learning Educational Technology, 18(2), 85-99.

Dick,W. & Carey,L. (1985). The systematic design ofinstruction Glenview,IL : Scoot Foresman.

Duby, A. (1988). Early formative evaluation of educational television. Journal of Educational Television, 14(1), 43-51.

Efebo, E.B.A. (1987). A strategy for designing ninstruction for educational television in developing nations. Journal of Educational Television.13(2), 125-135.

Friesen, P. (1973). Designing instruction. Santa Monica, CA: Miller Publishing Company.

Frinkle, R.B. & Jones, W.S. (1970). Assessing corporate talent: A key to managerial manpower planning New York, NY. John Wiley & Son, Inc.

Gagne,R.M. (1980). Is education in phase ? Educational Technology. 20 (2), 7-14.

Gronlund,N. (1968). Contructing achivement tests. Englewood Cliffs, N.J. : Prentice Hall.

Hambleton, R.K. (1989) Criterion-Referenced Measurement. In Fraut,M. (Ed). The international encylopedia of educational technology (p.450-453). Brington, UK. Pergamon Press.

Harris,D. (1987). Openness and closure in distance education. The Falmer Press, London.

Hartley, J. (1972). Strategies for Programmed Instruction: An Educational Technology. London: Butterworth.

Henerson,M.E., Morris,L.L., Fits, Gibbon,C.T. (1987).How to measure attitudes Baverly Hills, CA. Sage Publication.

Henderson, E.S & Nanthenson, M.B. (1976). Developmental testing: An impirical approach to course improvement. Programmed Learning and Educational Technology, 13(4), 31-42.

Horn, R.E. (1964). Developing testing. Ann Arbor, Michigan: Center for Programmed Learning for Business.

Houston, A., Wright,J.C., Wartela, E., Rice,M.L, Watskin,B.A., Campbell,R. & Potts,R. (1981). Communicating more than content : Formal features of children's television programs. Journal of Communication, 31 (3), 32-48.

Kandaswamy, S. (1980). Evaluation of instructional materials: A synthesis of models and methods. Educational Technology,20(6), 19-26.

Komoski, P.K. & Woodward, A. (1985). The continuing need for the learning verification and revision of textual materials. In D.H. Jonassen (Ed.), The Technology of text : vol 2. Principles for structuring, designing and displaying text (P. 396-415). New Jersey.

Lewis, R.F. (1977). How to improve a television series by formative evaluation. Education Canada, 17 (3), 42-47.

Lewy, A. (1985). The autonomous unit of evaluation: combining the strengths of in-house and external evaluation, in:

P.Tamir (Ed) The Role of Evaluators in Curriculum Development (Beckenham, Croom Helm).

Mielke, K.W. (1970). Media -message interaction in TV Viewpoint.16, 15-32.

Morris, J.D. (1988). The use of television production technique to facilitate the learning process : An experiment. Intructional Media. 15 (3),244-256.

McMillan, R. & Schumacker, S. (1989). Research in education :a conceptual introduction Scoot,Foresman & Co., Illinois.

Montague, W.E., Ellis,J.A. & Wulfeck, W.H. (1983). Instructional quality inventory : A formative evaluation tool for instructional development. Perfomance and Instruction Journal. 22(5), 11-14.

Nickerson & Gillis. (1979). Information for Decision Making During the Television Production: the OECA Model. Mimeo. The Ontario Educational Communications Authority.

Nugent,G.C. (1980). What can we evaluate at the script stage in instructional television programming. Educational Technology. 20 (7), 23-25.

Palmer, M. & Tovar, M. (1987). Developing interactive videotape in a university setting. Canadian Journal of Educational Communication. 16(3), 195-204.

Peterson, D. & Clark,D.W. (1988). The effect of video assisted instruction on student achievement and attitude in the first grade mathematics. Educational Technology,28, 49-52.

Popham, W.J. (1975). Educational evaluation(2nd.Ed). New Jersey ; Prentice Hall.

Rothkopf, E.Z. (1963). Some observations on predicting instructional effectiveness by simple inspection. Journal of Programmed Instruction,2,19-20. Reprinted in Improving Human Performance, 1973, 2, 165-167.

Simonson, M.R., Agerter, R., Berry,T., Kloock, T., & Stone,R. (1987). Four studies dealing with mediated persuasive messages, attitudes, and learning styles. Educational Communication and Technology. 35 (1), 31-40.

Thiagarajan, S (1978). Instructional product verification and revision : 20 questions and 200 speculations. Educational Communication and Technology Journal,26(2), 133-142.

Utz, P. (1980).Video users handbook Englewood cliffs, New Jersey : Prentice Hall.

Weston, C.B. (1986). Formative evaluation of instructional materials: An overview of approaches. Canadian Journal

of Educational Communications. 15(1), 5-17.

Whittington, N. (1987). Is instructional television educational effective ? A research review. The American Journal of Distance Education. 1 (1), 47-54.

Zettl, H. (1984). Television production handbook Bellmont, California : Wads worth Publishing company.

APPENDIX I

NEEDS ASSESSMENT QUESTIONNAIRE

If you are now taking or if you have already taken the Organization and Management course (ADNE 4217), please complete this form according to the following instructions :

1. On column 2, specify the topic(s) that you found difficult to understand using the module(s), and write the module number on column 3.

2. Indicate the topic(s) that you think would be clearer, if presented via television programme by checking ( ) on column 4.

3. If you check column 4, specify in column 5 the best type of presentation for each topic by writing the letter corresponding to the type given in the list below:

   A. One presenter + caption + dramatizations.
   B. One presenter + caption + demonstrations.
   C. Panel discussions.
   D. On-location interviews.
   E. etc., specify very briefly.

EXAMPLE:

NO.	A DIFFICULT TOPIC	MODULE NUMBER	TV	TYPE OF PRESENTATION

Please return this form to the university before May 15, 1990, using the envelope provided.
THANK YOU FOR YOUR TIME AND CO-OPERATION.

NO.	A DIFFICULT TOPIC	MODULE NUMBER	TV	TYPE OF PRESENTATION

APPENDIX II

NEEDS ASSESSMENT RESULTS

NEEDS ASSESSEMENT RESULTS

NO.	TOPIC	MODULE NUMBER	TOTAL	%	TYPE
1.	Span of supervision	3	35	68.6%	A
2.	Neo classic theory	4	35	68.6%	A
3.	System approach and the contingency application	5	33	64.7%	A
4.	Authority delegation	3	32	62.7%	A
5.	Group dynamics in the organization	4	31	60.7%	C
6.	Management as a core of organization	8	28	54.9%	A
7.	Bureaucratization and Indonesia development	9	28	54.9%	C
8.	Bureaucratization	2	28	54.9%	A
9.	Administration perfect-ion	7	26	45%	A
10.	Scientific management and administration theory	2	20	39.2%	C
11.	Administration and organization conditions in developing countries	7	20	39.2%	A
12.	Management approach	8	20	39.2%	A
13.	Individual behaviour and its motivation	5	19	37.2%	A
14.	Background of Japan management	6	19	37.2%	A
15.	Modern theory	5	18	35.2%	A

NO.	TOPIC	MODULE NUMBER	TOTAL	%	TYPE
16.	Z theory	6	18	35.2%	A
17.	Organization from the scientific approach and its applications	1	17	33.3%	A
18.	The ideal bureaucratization	2	17	33.3%	A
19.	Group conflict	4	17	33.3%	A
20.	Organization environment	5	17	33.3%	C
21.	Background of Indonesia bureaucratization and its development	9	16	31.3%	A
22.	Administration, organization and management	1	15	29.4%	C
23.	Japan and USA' management	6	15	29.4%	A
24.	Formal organization development	3	11	21.5%	A
25.	Organization' goal	1	10	19.6%	C
26.	The role of research in science and management	1	10	19.6%	A
27.	The background of Bureacratization growth	1	8	15.6%	C

APPENDIX III

TELEVISION SCRIPT

V I D E O	A U D I O
1. MONTAGE:SUPERIMPOSE TITLE.	MUSIC
2. UNIVERSITAS TERBUKA PRESENTS:	MUSIC
3. TOPIC: SPAN OF SUPERVISION	MUSIC
4. COURSE: ORGANIZATION AND MANAGEMENT	MUSIC
5. SCRIPT WRITTEN BY: Drs. Marulak Sihombing M.Ec. PA & Dra. Dewi Padmo	MUSIC
6. LIFE: CLOTHING MANUFACTURER'S OFFICE.	LISA: Hai...what's in your mind. You look like having a big problem.

V I D E O	A U D I O
	OWNER: Oh Lisa, I really don't know how to handle this company if it is become larger. I'm afraid that I can not supervise a bigger number of workers.
	LISA: No...., that's not a big problem. It's an easy one, You can have an assistants.
	OWNER: Ya...I thought about that too but the problem is how many assistants should I have and how many workers should be supervised by each.
7. MS. PRESENTER.	PRESENTER: The problem faced by the owner of the Clothing manufacturing plant is an interesting topic for theoreticians and management practitioners and of course for students studying organization and management. In this session, I would like to talk about

V I D E O	A U D I O
	span of supervision which deals with how many subordinates a supervisor can manage effectively within one organization. After watching this programme you will be
8. CAPTION/ VIDEO TYPEWRITER (VTW).	able to get an understanding of: 1. Span of supervision concept 2. Widening of span of supervision 3. Guides for selecting the optimum span for each executive 4. Widening and narowing span of supervision.
9. CONSULTANT OFFICE. ESTABLISH SHOOT. CONVERSATION BETWEEN THE OWNER OF CLOTHING MANUFACTURING AND A CONSULTANT.	CONSULTANT: I got what you mean, you intend to increase the size of your Manufacturing but you confuse whether you can take on the supervision of the new employees and still perform your present duties satisfactorily. If it is decided that a new assistant supervisor should be added then will you have the time and capacity to direct your

V I D E O	A U D I O
	activities. You also questionned about how many employees can be adequately supervised by each executive. The question of proper span of supervision presents itself time and again at all levels in the executive hierarchy; no administration organization can be created without attention to it.
10. CAPTION/ANIMATION NEWMAN DIAGRAM	In fact, until now there is no certain formula to determine how many subordinates a superior can manage effectively. However, according to William Newman the ideal number of subordinates for all executives in higher echelons would be three to seven, whereas the optimum range for first line supervisors of routine activities or for the performance of specific tasks and not for the supervision of others may be fifteen or twenty employees.

V I D E O	A U D I O
11. CAPTION/ANIMATION URWICK DIAGRAM	The prominent British consultant, Lyndall Urwick found the ideal number of subordinates for all superior authorities to be four and at the lowest level of organization the number may be eight to twelve.
12. MS.PRESENTER.	PRESENTER: What they just talked about was the problem related to span of supervision, specifically about how many subordinates a superior can manage effectively. As previously stated, there is no certain formula to answer such a question. The issue of span of supervision poses a dilemma. In practice a constant span for all executives is not necessary. Some executives may be able to direct the work for only a very limited number of subordinates, whereas others can take care of a bigger number. In fact, the analysis indicated clearly that what may be an

V I D E O	A U D I O
	effective span for one executive may be either too large or too small for another. Consequently, the choice of a practical span of supervision, like most other aspects of organization, requires personal judgement.. Several points, however, so often influence the wise choice of the number of immediate subordinates that the skillful organizer will consider them each time s/he makes a decision on this issue. These guides are :
13. CAPTION/VTW.	1. Several things concerned with the organization planning 2. The relationship among employees and their tasks 3. Variety and importance of activities supervised 4. Capacity of executive and subordinates 5. Stability of operations.

V I D E O	A U D I O
14. CONSULTANT OFFICE.	OWNER: Thus, if I want to find out the right number of subordinates I should consider those five factors. It's quite complicated. CONSULTANT: It sounds like that, if you prefer to run your manufacture efficiently. To make it clear, I'll explain the influence of those factors on your company's situation. The first factor is related to the organization planning. Much of the character of a subordinate's job is defined by the plans he is expected to put into effect. I'm sure you have a plan or production target. OWNER:Yes, of course. The production target is distinguished by a long term period and short term period. Let's say for a short term period, for instance in one day, there should be 150 ready. To achieve this target, a task should be clearly defined, and who does what.

V I D E O	A U D I O
	CONSULTANT: I think it's quite organized. Basically an adequate and clear planning particularly in the area of policy making will go far toward increasing the span of supervision. The first factor is quite related to the second one, that is, the relationship among employees and their tasks.
15. CLOTHING MANUFACTURE'S ACTIVITIES. CUTTING, SEWING, FINISHING, ETC.	For instance, in your clothing manufacture's plant there are several different tasks which are done by several people. There should be a group of people in charge of designing, sewing, packing and other things.
16. CONSULTANT OFFICE.	OWNER: I have an idea of what you just explained. You meant that if a manager clearly delegates authority to undertake a well defined tasks, a well trained subordinate can get it done with a minimum of the supervisor's time and attention.

V I D E O	A U D I O
	CONSULTANT: Exactly, with such conditions the span can be wider. Now, we continue discuss the third factor. This factor dealts with a variety and importance of activities supervised. The number of people an executive should try to supervise is strongly influenced by the activities they perform. More variety demands much more time and effort in supervision. Thus, the number of subordinates should become fewer.
	OWNER: I see. Thus, in my present condition whereas my manufacture is small and limited to a plain design, there are not many job varieties, hence it is quite adequate if I have a wide span.
18. A EXECUTIVE ACTIVITIES IN A LARGER MANUFACTURER.	CONSULTANT: Yes. But whenever there are expansions to your plant, increases in company product, or other changes leading to addition of

VIDEO	AUDIO
	employees, it will effect the variety and the importance of activities. Then you will be unable to do a satisfactory job of supervising all subordinates any more. Morover, as the owner and the higher excecutive, you have several other duties in addition to supervising your subordinates. The amount of time you are expected to spend on these other duties will effect the number of people you can supervise effectively.
	Let's say, you will double your employees to sixty and produce more complicated and a variety of designs. In a new situation, a single supervision would be quite inadequate and would probably develop stomach ulcers in the process. Those two points that I just mentioned, the variety and importance of activities supervised and the other duties of an

V I D E O	A U D I O
	executive, account in large measure for the empirical rule that the number of immediate subordinates should become fewer in successively higher positions in the administrative hierarchy. Thus, it seems fair for you to appoint an assistant supervisor. Is it clear?
19. CONSULTANT OFFICE.	OWNER: Yes, its quite clear. By the way, if I'm not mistaken you said that the capacity of executive and subordinates also influence the span of supervision. What does that mean?
20. GRAPHIC ANIMATION ON "EXECUTIVE CAPABILITIES"	CONSULTANT: What is meant by excecutive capacity is his/her ability to get things done through people and to the extent that s/he does this. An executive need not be expert in all phases of the business. However, this capability is dependent upon several aspects such as: education, experience and his communication ability.

V I D E O	A U D I O
21. GRAPHIC ANIMATION ON "SUBORDINATES CAPABILITIES"	On the other hand, capable and experienced subordinates are relatively easy to supervise They understand directions quickly, ask fewer questions, require less checking and make fewer errors. Thus the capacity of subordinates is also influenced by education, experience and communication.
22. CONSULTANT OFFICE.	OWNER: I conclude that the higher the capability of the executive and subordinates, the wider the span of supervision that can be permitted. CONSULTANT: Aaa, You got the point. Now the last factor that should be considered in order to determine how wide the span is the stability of operations. The stability of operations or lack of it, makes a lot of difference in the supervisory work required.

V I D E O	A U D I O
23. GRAPHIC ANIMATION ON "STABLE ORGANIZATION"	Mostly, in a stable organization, a kind of job and its variety will remain the same. In this condition, the organization can be operated without any serious problems. Thus supervision functions much more easy. Consequently, a large number of subordinates can be supervised by each excecutive.
24. GRAPHIC ANIMATION ON "LESS STABLE ORGANIZATION"	On the other hand, there will be a lot of difficulties in tackling a new job, in changing the methods of performing an old one, in making drastic expansions or contractions in the volume of work, and in adjusting to other changes in operation. In such a situation, the number of subordinates that supervised should be fewer.
25. CONSULTANT OFFICE.	In your case, if you intend to expand your manufacturing, for sure you should consider how many

V I D E O	A U D I O

subordinates to assign to a particular executive in order to make a new adjustment in supervisory load.

OWNER: It's clear to me that the stability of operation is highly related to supervisory load. The more stable the operation the less supervisory work required; thus the greater number of subordinates that can be supervised. On the other hand, when the operation is less stable, more supervisory work is required and fewer subordinates can be supervised.

CONSULTANT: Oh good....You really got the point.

OWNER: And the most important thing, I have to consider the five factors that you already mentioned in arriving at an optimum span for each excecutive.

V I D E O	A U D I O
26. MS. PRESENTER.	PRESENTER: Well, I hope the previous conversation between the owner of clothing manufacturing plant and her consultant give you a better understanding about span of supervision which dealt with how many subordinates can be adequately supervised by a single executive. Now, let continue our session by talking about widening and narrowing the span of supervision. What is meant by narrowing and widening the span is to create proper levels in the organization by creating less or greater numbers of levels. If a small span of supervision is desirable, then the number of executives and the number of levels of supervision between the senior executive and the operating employee will have to be increased. On the other hand, if management wants to keep the number of strata of executives small, there will

V I D E O	A U D I O
	have to be an offsetting increase somewhere in the number of individuals reporting to a supervisor.
27. ILLUSTRATION. THE MEETING BETWEEN THE OWNER OF THE CLOTHING MANUFACTURER AND HER NEW ASSISSTANTS.	OWNER: In the past, when I supervised thirty employees by myself, I found it made me quite busy. As this manufacturing increases in sise, hiring more employees, e.g., sixty, will also produce more variety design. Obviously I will not be able to supervise all workers and give effective direction or keep track of what each is doing. Most of my time will be spent dealing with organization planning and management. That's why I asked the four of you come to my office. You'll be my assistants. Each of you will supervise and be responsible to a number of workers in different sections. Nuri, you will supervise workers on designing and cutting. Ati will responsible for sewing.

V I D E O	A U D I O
	Nani will be in charge of the finishing touch. And Mutia will supervise workers on packaging, distribution and administration.
29. MCU PRESENTER. CUT TO ANIMATION ON DIAGRAM OF WIDE SPAN OF SUPERVISION.	PRESENTER: From that illustration, we got an idea that when the clothing manufacturing plant was small, the owner as a single supervisor was able to supervise her thirty employees. However, as the enterprise increases in size and she hired sixty workers, the owner felt that she would not be able to take on the supervision of the employees. Theoretically, one executive can supervise all sixty workers, but the average time s/he can spend with each would be so small that she obviously could not give effective direction or keep track of what each was doing. With such consideration, the owner decided that she could keep track of four assistants and

V I D E O	A U D I O
	that each of these could supervise 15 workers, thus she would have the situation with a total of five executives and two supervisory levels.
30. MS. PRESENTER CUT TO ANIMATION ON A NARROW SPAN OF SUPERVISION DIAGRAM.	Perhaps, in the near future, the owner as a chief executive will find that 15 would be too wide a span for each assistant and the assistants may become overburdened for a variety of reasons, hence the span can be narrowed. The number of subordinates that are supervised by each assistant would be reduced. For instance, a chief executive will have three assistants and each assistant will supervise three immediate subordinates such that each of these could supervise six workers. This narrow span would require three supervisory levels, with a total of thirteen executives.

V I D E O	A U D I O
31. MLS. PRESENTER.	PRESENTER: Clearly, the optimum span lies somewhere between sixty and three. In making the choice we should always remember that as the span of supervision is reduced the number of executives and frequently, the levels of supervision are correspondingly increased. (FADE IN MUSIC) Well, that's all we learned from this session. See You in other session and good luck to you.
32. CLOSING TITLE UNIVERSITAS TERBUKA PRODUCTION BROADCASTED BY TVRI (INDONESIA TELEVISION NETWORK)	MUSIC MUSIC FADE OUT

APPENDIX IV

SUBJECT MATTER EXPERT QUESTIONNAIRE

After reviewing the material covered in the programme would you please answer the following questions.

1. Do you think that the structure and sequencing of this programme are adequate and sufficient to achieve the goal of the programme? If not, specify.

_____

_____

_____

_____

2. Do you think that the objectives of this programme are covered in the material presented? If not, specify.

_____

_____

_____

_____

_____

3. Do you think that the information and illustrations presented gave an adequate vision of the actual situation of span of supervision? If not, specify.

_____

_____

_____

_____

4. Is there any specific information presented or illustrated in this programme that you feel is not adequate?

5. What would you like to see changed ? How could this programme be improved?

Thank you for your co-operation.

APPENDIX V

TECHNICAL PRESENTATION EXPERT QUESTIONNAIRE

Please give your opinion on the programme in terms of presentation and technical aspects and please write any suggestions you may have which would improve the programme.

1. Introduction segment

_____

_____

_____

_____

Suggestions for improvement:

_____

_____

_____

_____

2. Consultation segment

_____

_____

_____

_____

Suggestions for improvement:

_____

_____

_____

_____

3. Presenter segment

Suggestions for improvement:

4. Graphics

Suggestions for improvement:

5. Illustrations/visualisation

Suggestions for improvement:

6. Technical aspects in terms of : colour, pictures, audio, lighting, and editing.

Suggestions for improvement:

7. Continuity

Suggestions for improvement:

APPENDIX VI

ONE TO ONE INTERVIEW GUIDANCE LIST

ONE TO ONE INTERVIEW GUIDANCE LIST

1. Introduction to the problem sequence

   - Interesting
   - Realistic
   - Gave a good idea about the topic
   - Setting

   General comment:

   _____

   _____

   _____

   _____

   _____

2. Consultation segment

   - The information presented
   - The content presented
   - Pacing
   - Tempo
   - Gesture
   - Setting

   General comment:

   _____

   _____

   _____

   _____

   _____

3. Presenter segment

- The information presented
- The content presented
- Pacing
- Tempo
- Gesture
- Setting

General comment:

_____

_____

_____

_____

_____

4. Graphics

- Informative
- Clarity
- Interesting
- Motivate
- Colour
- Easy to understand

General comment:

_____

_____

_____

_____

5. Illustrations

- Clarity
- Interesting
- Motivate
- Relevant
- Give a better understanding
- Setting

General comment:

_____

_____

_____

_____

_____

6. Continuity

_____

_____

_____

_____

7. Technical aspects

- Colour
- Pictures
- Sound/audio
- Lighting
- Editing

General comment:

8. Overall assessment

9. Improvement suggestion

APPENDIX VII

STUDENT FEEDBACK QUESTIONNAIRES

PART I

Please fill in the form below. This demographic information will facilitate the analysis of the project, otherwise it will kept confidential.

1. Student indentification number _____

2. S e x : ( ) Female
( ) Male

3. A g e : ( ) 20 - 30
( ) 31 - 40
( ) Above 40

4. Working : Yes _____
No _____

5. If yes, what institution ( ) Government
( ) Private company
( ) Other, specify
_____

6. How many credit you have taken _____

7. Are you taking Organization and Management course this term ?

Yes _____
No _____

PRETEST/POSTTEST
PART II

I. Please answer each question by circling the letter a, b, c or d which best indicates your response.

1. According to Newman, the ideal number of subordinates for all superior authorities is:
   a. Three to seven
   b. Less than four
   c. Fifteen to twenty
   d. Eight to twelve

2. At the lowest level of organization, the minimum number for delegation of the performance of specific tasks, according to Urwick is:
   a. Three to seven
   b. Less than four
   c. Fifteen to twenty
   d. Eight to twelve

3. An executive's ability to manage subordinates depends upon several factors, with the exception:
   a. Experience
   b. Education
   c. Physical condition
   d. Communication

4. An adequate and clear authority delegation and planning produces an effect on:
   a. The fewer number of subordinates under an excecutive's supervision
   b. The larger number of subordinates under an excecutive's supervision
   c. No effect on the number of subordinates
   d. a, b, c are incorrect

5. Another way to identify one level supervision is:
   a. A wide span of supervision
   b. A narrow span of supervision
   c. A small number of subordinates
   d. a, b, c, are incorrect

II. Please indicate whether the following statements are are true or false.

1. ( ) According to Urwick, executives in higher echelons should have a span less than four.

2. ( ) If a manager clearly delegates authority to undertake well defined tasks, well trained subordinates can get it done with a minimum of the supervisor's time and attention.

3. ( ) The number of people an executive should try to supervise is strongly influenced by the activities they perform.

4. ( ) Capable and experienced subordinates permit executives of larger corporations to have a wide span of supervision.

5. ( ) The stability of operations, or lack of it, makes no difference in the supervisory work required.

6. ( ) There is a formula to determine how many subordinates a superior can manage effectively.

7. ( ) The fewer problems within an organization, the fewer the number of subordinates who can be supervised by an executive.

8. ( ) The wider the spans, the fewer the number of levels.

9. ( ) The narrower the spans, the greater the number of levels.

10. ( ) The process of widening and narrowing spans is highly related to the organization needs.

11. ( ) The greater the executive's ability, the wider the spans.

12. ( ) The capacity of subordinates has no influence on the span of supervision.

13. ( ) The less stable the organizational operation, the bigger the number of subordinates who can be supervised.

14. ( ) As the span of supervision is reduced the number of executives and frequency of the levels of supervision are correspondingly increased.

15. ( ) In practice, a decision making on span of supervision, like most other aspects of organization, requires personal judgement.

oooo000oooo

PART III

On the following 27 statements, you are asked to rate each on the programme you have just wacthed. The ratings are given on a scale from strongly agree to strongly disagree as shown below.

1 = Strongly disagree

2 = Disagree

3 = Fair

4 = Agree

5 = Strongly agree

Please circle the rating which corresponds closest to your own opinion towards the following statements.

1. The programme objectives were clear	1	2	3	4	5
2. The topic presented was interesting	1	2	3	4	5
3. The content was accurate	1	2	3	4	5
4. The sequences of the programme followed a logical order	1	2	3	4	5
5. The amount of information was adequate	1	2	3	4	5
6. The lenght of the programme was appropriate	1	2	3	4	5
7. The content delivery was appropriate	1	2	3	4	5
8. The consultation segment conveyed information clearly	1	2	3	4	5
9. The presenter segment conveyed information clearly	1	2	3	4	5
10. The illustration segment conveyed information clearly	1	2	3	4	5

11. The graphics were used properly	1	2	3	4	5
12. The music theme created a good mood	1	2	3	4	5
13. The pictures were clear and sharp	1	2	3	4	5
14. The audio was clear	1	2	3	4	5
15. The programme continuity was clear	1	2	3	4	5
16. The lighting was sufficient	1	2	3	4	5
17. The colour was appropriate	1	2	3	4	5
18. The consultation segment setting was adequate	1	2	3	4	5
19. The illustration segment setting was adequate	1	2	3	4	5
20. The presenter segment setting was adequate	1	2	3	4	5
21. The presenter's pace was appropriate	1	2	3	4	5
22. The presenter's gesture was appropriate	1	2	3	4	5
23. The presenter's speech/tempo was appropriate	1	2	3	4	5
24. The programme editing was smooth	1	2	3	4	5
25. The consultation segment speech/tempo was appropriate	1	2	3	4	5
26. The consultation segment pace was appropriate	1	2	3	4	5
27. The programme was able to hold my attention	1	2	3	4	5

Please provide an answer to the several questions below based on your opinion.

1. What was the best thing about the programme that you have just seen ?

2. What was the worst thing about the programme that you have just seen ?

3. What would you like to see changed in the programme you have just seen? How could this programme be improved?

4. Is there anything else you would like to see improved?

Thank you for your co-operation

APPENDIX VIII

STUDENT QUESTIONNAIRE DATA

	sex	age	working status	institutions	credits	pretest	posttest
1	male	22.0	yes	government	24 0	10 0	16 0
2	fem...	32.0	yes	government	24 0	8.0	15.0
3	male	27.0	yes	government	24.0	14.0	19.0
4	fem	27 0	yes	government	24.0	8.0	16 0
5	fem	32 0	yes	government	24 0	8 0	14 0
6	fem	22 0	yes	government	24.0	10 0	17.0
7	male	27 0	yes	government	150.0	4.0	9.0
8	male	27 0	yes	private	145 0	11.0	17.0
9	male	22 0	yes	government	134 0	10 0	18 0
10	male	27 0	yes	government	60.0	11 0	15 0
11	fem...	22 0	yes	government	50.0	10.0	18.0
12	male	22 0	no	•	60 0	11 0	16 0
13	male	40 0	yes	government	143 0	10 0	17 0
14	male	27 0	yes	government	149 0	11 0	18 0
15	male	27 0	yes	government	144.0	10 0	14.0
16	male	27 0	yes	government	158 0	9 0	17 0
17	fem	37 0	yes	private	99 0	10 0	15 0
18	male	27.0	yes	private	104 0	12 0	17 0
19	fem	32 0	yes	private	62.0	11.0	14.0
20	male	32 0	yes	government	16 0	12 0	16 0
21	male	40 0	yes	private	157 0	11 0	18 0
22	fem	22.0	yes	private	72.0	8.0	15 0
23	male	27.0	yes	government	119.0	13.0	15 0
24	male	32 0	yes	government	96 0	8 0	14 0
25	male	40 0	yes	government	108 0	8 0	14 0
26	male	22 0	yes	private	72.0	10.0	17.0
27	fem..	37.0	yes	private	106.0	10 0	17.0
28	fem	22 0	no	•	105 0	11.0	18 0
29	fem	40 0	yes	government	18 0	8 0	12 0
30	fem	27 0	yes	government	70.0	5.0	11.0
31	fem..	27 0	yes	private	•	10.0	15.0
32	male	40 0	yes	private	104.0	9 0	15 0
33	male	32 0	yes	private	113.0	13 0	18 0