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Formative Evaluation of a Documentary Film
on the Effects of Poverty on a
Montreal Family

Tanya Ballantyne Tree

A Thesis Equivalent

in

The Department

of

Education

Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts, Educational Technology at
Concordia University
Montréal, Québec, Canada

February 1989

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ISBN 0-315-49041-1

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Abstract

In 1966, a documentary film, The Things I Cannot Change was produced by The National Film Board of Canada. Intended to illustrate the living conditions of the poor in Canada, this film has been used in secondary schools, junior college and university education, in social work and in the training of social workers. The purpose of this thesis equivalent was to perform a NEEDS ANALYSIS, followed by the PRODUCTION and EVALUATION of a follow-up film or update to the original film. This second film had as its purpose to document the current life situation of the Bailey family, featured in The Things I Cannot Change, to further illuminate the conditions, causes and consequences of urban poverty. It was hoped that the film would prove effective in provoking viewers to question their attitudes towards poverty and the poor in Canada.

The need for an up-date to The Things I Cannot Change and, once produced, its effectiveness in meeting its stated objectives in terms of attitude, content and production variables, was tested in a pre/post test design. For this purpose, samples from the target audience were selected from Montreal CEGEP classes in Social Science, many of whom are familiar with The Things I Cannot Change. Instruments include an attitude questionnaire and the PEAC response analysis system. The combination of qualitative and

quantitative evaluation methods indicated a) necessary changes to sequencing, pacing and length of film segments, and b) a positive impact of the film at the summative stage of evaluation.

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I'm not trying to convert, but to inform. I don't want people to believe me, any more than they should believe the party line I'm criticizing - academic authority, the media, the overt state propagandist, or whatever. In talks and in print, I try to stress what I think is true: that with a little willingness to explore and use one's mind, it is possible to discover a good deal about the social and political world that is generally hidden. I feel that I've achieved something if people are encouraged to take up this challenge and learn for themselves.

-Noam Chomsky

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Chapter 1

Media Presentation

Introduction

Purpose of Media Presentation

The documentary film, The Things I Cannot Change was commissioned and produced by The National Film Board of Canada, in conjunction with the Privy Council of the Canadian government. Premiered on national television in May 1967, this hour-long documentary was intended to alert the general public to the current conditions of Canadians living below the poverty line. The method then selected to fulfill this objective was to document on film the daily life of a poor family in order to illustrate the difficulties of urban survival for those on very low incomes.

The Things I Cannot Change was an early example of an approach to "documentary" film-making, described in the literature as "cinema-verite" (Rosenthal, 1980). The term "documentary" was coined by John Grierson, the first Canadian Film Commissioner, and proponent of the use of film for educational and propaganda purposes (Forsyth, 1966). It has been applied to a range of films and other media whose common element is the attempt to depict reality "as it happens".

The literature on the documentary reflects the

development of this form from the early days of wartime propaganda and public education through the spawning of experimental and candid investigations made possible by the development of lightweight portable equipment and ever faster film stock (Levin, 1971, Barsam, 1973, Rosenthal, 1971, 1980). Simultaneous with this development was the increasing use of audio-visual media: film, tape, slide-tape and sound tape, in formal education.

The history of The Things I Cannot Change reflects the interaction between two broad programming streams: (1) public broadcasting "general information" educational media and (2) more strictly formal curriculum-oriented educational media production. Although originally intended primarily for television and general audience distribution, this film has found its greatest use in formal teaching and training situations.

It should be noted that the film The Things I Cannot Change unintentionally served as the precursor of a program introduced at the National Film Board in the late sixties, known as "Challenge for Change". Its main focus was the production of films designed primarily as instruments of social change. The actual process of film production in various social contexts was conceived as an element of a complete communication system which included the subsequent implementation of the film in the context in which it was

produced. This interactive type of film-making which relied heavily on the participation of those groups with and about whom the film was being made, was, in theory, an attempt to involve people at the grass roots level, in producing documents which authentically reflected their experience. Unfortunately, despite some interesting experiments, (eg. The Alinsky Approach series) the project was abandoned.

The film, The Things I Cannot Change, was first made available through the NFB's free loan system in 1967. Although always intended for television release and with a mass audience in mind, it has developed a substantial audience in various educational contexts. For the last eighteen years, this film has seen continuous use in primary, secondary, junior college and university curricula in courses on social science. Now recognised as a classic of the candid genre, the film is used equally in film studies. It also finds an audience in social work and therapy situations whether as a training tool for students in social work or directly in therapy situations, such as drug and alcohol abuse programs and half-way houses and rehabilitation centers.

The decision to undertake a needs analysis on the proposal to produce a follow-up film to The Things I Cannot Change was taken following increasing interest in the subject on the part of the news media and of users and

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audiences in education. Those who had seen and/or used The Things I Cannot Change had expressed curiosity about the Bailey family, featured in the film. They wanted to know what had become of its members since the film was produced. As the director of the film, I had received numerous requests from the public and primarily from teachers and students, enquiring as to the fate of the Baileys. Whenever I participated personally at a screening of the film whether to students or interested members of the public at large, the same questions were always asked; was I still in touch with the Baileys, whatever had happened to them, where and how were they now? It was these questions, in addition to a serious proposal from the CBC to consider an update to the film for release on television, which prompted the undertaking of a needs assessment for such a venture.

Educational Context

Educational Objectives of Media Presentation

The educational objectives of the media presentation were primarily affective but included the acquisition of information relevant to the current life situation of the Bailey family. The final film was conceived in terms of providing a stimulus to discussion. Its purpose was to reveal a given set of circumstances, thereby providing a basis for comparison with the prior circumstances of the same family group as illustrated in the previous film study, The Things I Cannot Change. As such, the intended film,

like its predecessor, was to be a sociological study whose intention was to provide "soft" data on victims of urban poverty.

In this type of document the actual content of the film is subordinate to the overall effect of the program on audiences in terms of attitudes to the family's situation and to poverty in general. The main objective of the film therefore was not conceived in terms of specific content or subject matter, (although these do play a role,) but rather as a stimulus to the audience to think about socio-economic conditions and their effects on people and vice-versa. It was hoped therefore that a follow-up film on the Baileys would promote further research on the part of audiences into the causes and conditions of poverty and furthermore would prompt people to question some of their fundamental and often unconscious attitudes on these matters.

It was expected that these films would motivate audiences to take an interest in the conditions and causes of urban poverty in 20th century North America. As well, the intended documentary film purported to raise questions about which audiences have definite attitudes. Whether or not certain attitudes are reinforced, radically changed or somewhat modified were tested in a pre/post design.

In addition to these primary objectives, the second film was intended to supply basic factual information as to

the current circumstances of each member of the Bailey family, in accordance with the results of the initial needs analysis. In terms of providing a basis for comparison between the family's situation in 1966 and that of 1984, the film had as its objective to supply the viewer with a short current portrait of each of the Baileys, including relevant biographical data, as well as to present a general picture of the family as a whole. Of course, the extent to which these objectives may be satisfied in a half-hour or even one hour document is limited. For this reason, at the time of its release, support materials were developed, in the form of a print package, for distribution with the film.

Intended Target Audience

Several distinct target audiences for these documentaries were identified. Whereas users of the film were found in fifteen audience categories, (see Appendix I-Breakdown of Bookings,) four primary user groups accounted for the majority of bookings of The Things I Cannot Change. They were: (1) College or University, (2) Secondary School, (3) Health Service Organizations and (4) Social Service Organizations.

The primary target audience for this film and the proposed sequel, therefore, was composed of young people of both sexes enrolled in secondary schools, junior colleges and universities. In the majority of cases, this audience

had been the film in the context of sociology and/or social work training courses. The second major audience grouping, made up of health and social service workers, utilised the film as a way of exposing employees and their clients to the conditions and problems of the urban poor. It is an indication of the need for educational materials such as this that The Things I Cannot Change, produced in 1966, and therefore, no longer contemporary, continued to be widely circulated in these educational contexts in 1983 when the needs assessment was conducted.

Outline of Content and Form of Presentation

Results of the needs assessment performed with samples from the target audience showed a high level of interest in a sequel to The Things I Cannot Change with an emphasis on the current situation of the family as a whole. In terms of specific content, the majority of those tested indicated a preference for a film which explores all aspects of the lives of the Baileys including their economic, medical, social and personal circumstances rather than any one of these dimensions to the exclusion of the others.

Because of its intended distribution via television and in the classroom and in training, the medium of 16 mm film was chosen as best suited to satisfy the stated objectives in these contexts. Whereas it may be argued that, for various reasons, the use of videotape in this context might

be more appropriate, because the producing agency in this case was the National Film Board, the question of the greater suitability of tape over film was not posed.

Based on data obtained through the initial needs assessment, a half-hour film was decided upon as best suited to the needs of users. Equally, research indicated a preference for a production design similar to that employed in the original film, that is to adopt a "candid" or "cinema-verite" approach in which the film-maker functions as interviewer and catalyst, while attempting to interfere as little as possible in capturing for the viewer the raw experience of the subjects' lives.

Literature Review

In the four decades since the last world war, the development of evaluation as a specific and clearly defined activity has kept pace with the growing sophistication of media, whether for purposes of entertainment, marketing, news coverage, or education, (formal and informal). But the widespread use of (summative and formative) evaluation of educational media barely predates the release of The Things I Cannot Change (Cambre, 1981). Indeed, in Canada, where the National Film Board pioneered the production of films designed for use in schools, little attention was paid to formative evaluation procedures. Even today, films infrequently undergo (systematic) formative evaluation

although summative evaluations and audience research have become more common.

Despite the limited role actually played by evaluation in the world of public media and even educational media production, evaluation theory, a hybrid of market research methodology and "scientific" or quasi-scientific, (educational) research techniques, (heavily influenced by systems theory and analysis,) meanwhile continues to flourish. Detailed evaluation models proliferate (Borich, 1984) but rarely are they applied in the rough and ready realms of public media production. Several explanations may be offered for this situation, including the expense and complexity of conducting such evaluations especially in open-sector programming (Kuplowska, 1981) as well as the ongoing reluctance of producers to face the consequences of audience feedback (Borich, Jemelka, 1982).

Even in situations in which evaluation is employed, whether as an aid to decision making or in the attempt to improve a product, the complex social and political interactions of government and public or private institutions can serve to severely limit the effectiveness of evaluation (Brickell, 1976; Cronbach et al., 1980; Horst, Nay, Scanlon, and Wholey, 1974; Suchman, 1972; Weiss, 1972, quoted in Borich and Jemelka, 1982). Despite the increasing rigour and systematization of all aspects of evaluation

methodology, the opportunities to put such tools to use, especially in Canada, depend on limited resources and even more limited agreement as to their most appropriate use.

Whereas in the fields of formal education, a systematic, objectives-oriented approach to the production and evaluation of educational media is increasingly the norm, in such areas as open-sector public broadcasting and community and quasi-educational, multi-purpose programming, the process of evaluation tends to the qualitative as opposed to the quantitative and may be as ill-defined as the opinion of a few colleagues after a rushed screening or as after the fact as the Neilson Ratings for the program the day after it is aired. Needless to say, clearly defined objectives, identified at the outset and systematically addressed are no more a part of such programs than their subsequent evaluation.

Whether more or less evaluation of such media would lead to their improvement is debatable. It may be argued that the freely inspired intelligence of an inquiring and imaginative mind has more to inform than the predictable results of behavioristic instructional design systems. On the other hand, some form of evaluation of any product, formal or otherwise, is inevitable and serves to establish a basis for future programming directions.

The two films here in question suffer from the

contradictions inherent in a situation in which community oriented and general purpose public broadcasting or "quasi" educational media are used to satisfy a variety of objectives in several formal and informal educational contexts.

The educational use of such documents, as in the case of The Things I Cannot Change varies according to the specific context and type of audience with which it is used. The major use, as mentioned above, has been with college and university students, whereas the film was not designed with this audience in mind nor was it intended to satisfy clearly defined objectives. This vagueness of purpose does not appear to have hindered its ongoing use as a stimulus to discussion or as a means of motivating students to learn more about social conditions. But the film therefore had to be evaluated, and a second film proposed and evaluated, in terms which took these factors into consideration. Inevitably, in 1984 and in the context of the requirement for a second film to satisfy a particular need, a second film had to be approached with a more clearly defined set of criteria. It was hoped however, that such an approach would not inhibit the spontaneity which characterises The Things I Cannot Change.

Due to the nature of this type of documentary, and to the type of product it generates, the more traditional

models of evaluation in education had to be adapted to fit this particular set of needs. An evaluation model designed to identify appropriate objectives for the development, production, and evaluation of such types of media had to be developed. Such a model had to allow for the unsystematic and informal character of such media products. Documentary films, like The Things I Cannot Change evolve out of a specific set of circumstances without reference to specific curriculum requirements. Their subsequent use in education testifies to the non-formal dimension found even in formal educational contexts.

Clearly, such documents must be classified as primarily affective in character. Therefore, an important aspect of such an evaluation model must measure, or at least describe, the film's effect on viewers' attitudes. As noted above, various models have been developed by different researchers; see, for example the section on models and strategies in Borich, 1981, or Baggaley's model of the stages of formative and summative evaluation in the development of media material (Baggaley, 1986).

The model followed in this evaluation included stages similar to those outlined by Dick and Carey but also allowed for revision and modifications to the product based on tests with a fairly large sample from the target audience as well as conclusions about the overall effectiveness of the two

films in satisfying users' needs. These have been identified as multi-faceted and observed to extend in various ways beyond the strict concept of attitude change to include such functions as that of providing a stimulus or catalyst to concern and/or curiosity and discussion, thereby contributing to the process of education.

✓ The informed evaluation of such media as utilised in these contexts has been too rarely undertaken. Such precedents as the formative research done in conjunction with the production of films for seal fishermen (Baggaley & Smith, 1982) and the earlier work on Fogo Island (Gwyn, 1972) and the use of formative and summative evaluation for educational television production in Ontario (Kuplowska, 1981) are examples of a type of research which includes both qualitative and quantitative aspects. The evaluation reported here provides a case history of the application of a particular evaluation model to a non-didactic, quasi-educational or open-sector documentary film study, in this case, a sociological case history of urban poverty as experienced by one Montreal family.

It is hoped that the in-depth formative and summative evaluation of this educational system may help to establish a basis for similar investigations and help to validate the continued production of such types of media for use in these varied contexts.

Chapter 2

Production Evaluation

Purpose of the Evaluation

The purpose of the evaluation was threefold; to perform: (1) a SUMMATIVE EVALUATION of The Things I Cannot Change, which simultaneously provided data for a NEEDS ASSESSMENT for a follow-up film; (2) a FORMATIVE EVALUATION of the sequel and of the two films considered as two complementary parts of an educational package.

N.B. BECAUSE THE THRUST OF THE PRESENT THESIS IS ON THE FORMATIVE AND SUMMATIVE EVALUATION OF COURAGE TO CHANGE, THE SEQUEL TO THE THINGS I CANNOT CHANGE AND NOT PRIMARILY ON THE NEEDS ASSESSMENT PHASE, THIS ASPECT WILL BE SUMMARISED ONLY, NOT REPORTED IN DETAIL. OUTCOMES OF THE NEEDS ASSESSMENT WILL BE PRESENTED ONLY IN TERMS OF THEIR RELEVANCE TO THE DECISION TO PRODUCE A FOLLOW-UP FILM.

Objectives

Clearly, the objectives of the evaluation had to be identified in terms suited to the type of product and process outlined above. That is to say, in addition to evaluating the films' effects on attitude change, the evaluation system followed here addressed their overall effectiveness in satisfying users' needs as identified through the preliminary needs assessment. It included as

well, formative and summative evaluation of the second film, in terms of its effectiveness in satisfying stated needs.

As indicated above, the primary objectives of this media package are affective; specifically, results of the needs assessment for a sequel to The Things I Cannot Change indicated the value of producing a similar film whose purpose was to complement the original, in terms of providing a general portrait of the Bailey family, eighteen years later.

It was expected that the two films, viewed consecutively, in addition to provoking changes in attitude, would provide researchers into social conditions with valuable longitudinal data on this family group and would stimulate thought and provide a basis for discussion. It was the purpose of this evaluation to provide for the identification and elaboration of these objectives and to establish to what extent and in which ways they have been satisfied (or not).

Evaluation Methodology

The model to be followed in carrying out this evaluation and production system is described, in the form of a flow-chart, as a feedback system in which results from each stage of the process serve as input for the next (see Fig. 1). The stages of the evaluation are outlined in Figure 1 and refer to the three major phases of the

evaluation already identified, (see Production Evaluation: Purpose of the Evaluation).

The design and procedure to be followed for each of the major stages of the evaluation were determined by the type of evaluation methodology deemed appropriate to each stage in the development of the system.

MODEL OF EDUCATIONAL MEDIA DESIGN PROCESS

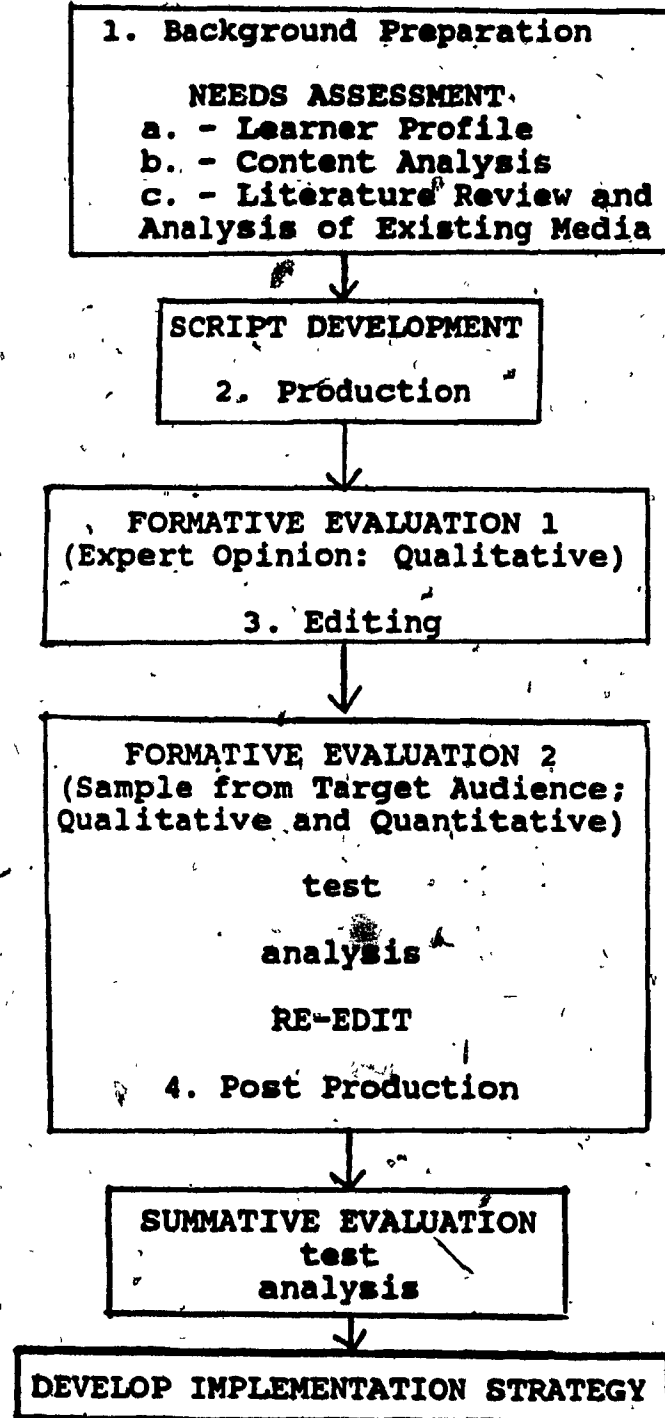


Figure 1.

Chapter 3

Needs Analysis for Sequel to The Things I Cannot Change

Introduction

The term needs analysis as defined by Kaufman, (1988) refers to the process of analyzing a need, once identified, into its constituent parts. In this specific context, no formal needs assessment (identification of a need) was conducted in so far as the decision to develop this product arose out of a demand from both audience and producers. However, once identified, the need for a sequel to The Things I Cannot Change was analysed in terms of the considerations outlined below. Whereas, perhaps not followed strictly according to Kaufman's approach, the term "needs analysis" has been applied to this process.

Subjects

The initial phase of the project included a detailed audience analysis, (see Appendix I), of users of the film and their client populations. The largest group of users was identified as university and junior college students who were shown the film in the context of social science courses.

Design and Instrumentation

In the context of a pre/post design, test screening of the film were held with samples from these target

populations. The attitude instrument, (a five-point Likert response scale, applied to twelve separate items) was used throughout all phases of the evaluation in a pre/post test design (see Appendix II). Subjects were required to indicate degrees of agreement with statements reflecting general social attitudes to social poverty, the subject matter of the film being evaluated. Included as part of the questionnaire (post-test), were questions relating to the need for as well as the design and production of a further film on the Baileys.

Procedure

Before the screening, test subjects were told about the purpose of the evaluation. The pre-test was handed out and students were asked to complete it immediately. The film was screened and the post-test handed out. Students were asked to complete the post-test. The pre- and post-tests were collected. A fifteen-minute discussion followed in which students offered suggestions and comments about the advisability of producing a follow-up film.

User Research

In addition to this audience research, over twenty telephone interviews were conducted with a randomized sample taken from the population of Canadian users (primarily teachers and social workers).

Data Analysis

Data from these procedures were analyzed descriptively in terms of (1) the effectiveness of the film in producing attitude change and (2) the desirability of producing a sequel to the film for use with the same or similar audiences. Data from telephone interviews were analyzed in terms of percentages of responses to questions relating to length, format, style and other production variables as well as to the need for a sequel. Open-ended questions allowed for suggestions and comments from users to be included as input to decision making about the follow-up film.

Results

To summarise, results of the needs analysis indicated continuous use of The Things I Cannot Change by those target audiences identified above. The greatest use was with college and university students in the context of social science courses.

(1) In terms of attitude change, scores from the Likert scales indicated some change in attitude from the pre-test to the post-test. As mentioned earlier, the focus of this thesis equivalent is on the formative and summative phases of the evaluation; outcomes of this study are presented only in terms of their relevance to the decision to produce a follow-up film.

(2) Users of the film with the audiences identified reported a high level of interest in a sequel, to be shot in

the same style as the original and designed to provide a comprehensive picture of the family as a whole.

Conclusion

Based on these results and after the submission of several proposals to the NFB, the decision was made to go ahead with the production.

Based on the needs analysis, the objectives for the proposed film were identified as follows:

1. To provide a general portrait of the Bailey family as a whole which would include where possible, specific data on the current circumstances of each member of the family. This sequel to The Things I Cannot Change would serve as a basis for comparison with the circumstances of the family as it was when the original film was made (1966).

2. To produce a film which resembled as closely as possible the previous film on the Bailey family, The Things I Cannot Change in terms of its stylistic approach and production variables. Particularly, the film should have the same characteristic as the original of providing the audience with a vivid sense of participating in the lives of the people portrayed.

Production

The constraints imposed on the production of this type of document are such that it is not possible to adhere

closely to a defined script. The film-maker, of necessity, must adopt an approach suited to the task at hand; namely, to make herself and the film crew available to the subjects of the documentary, in the hope of finding opportunities for fulfilling the given objectives. This, of necessity, somewhat passive approach is both frustrating and time-consuming and requires considerable patience, as the subjects of the film are not always able or willing to produce the desired behaviour at any given moment. In this case, the various members of the Bailey family were more or less co-operative throughout the production, a state of affairs which frequently led to the waste of precious time and film stock.

Under such circumstances, it is clearly impossible to ensure the proper attainment of predetermined objectives, as for example in the case where four of the eleven children simply refused to participate. And in dealing with those of the Baileys who did (more or less) agree to become involved, the amount of control exercised by the director was severely limited and subject to the whims of those she was attempting to film.

All together, fifteen hours of synchronized picture and sound were shot over a three-month period, one week in October, one in November, one in December of 1984. Some of the advantages of this discontinuous approach are that it

provides the film-makers with the opportunity to screen and evaluate the material at each stage and it gives the subjects and film-makers an opportunity to recuperate from the stress of filming. A disadvantage, however, is that it breaks the rapport which develops among all concerned and at each separate stage the process of establishing intimacy and familiarity with the production process must be undertaken all over again. When attempting to capture a sense of intimacy with the subjects of the film which in turn involves a process of familiarization with the process, the more relentless approach of more or less continuous interaction may be a better method. Of course, as with so many aspects of this dubious process, known as the candid or cinema-verite technique, this is just one example of what should or should not be encouraged depending on goals, values and expectations.

Chapter 4

Formative Evaluation

Formative Evaluation of Courage To Change

(title of sequel to The Things I Cannot Change)

Introduction

For this type of process and the product it engenders, a formative evaluation methodology had to be developed which took these factors into consideration. The needs analysis had provided for the decision to proceed along the lines indicated above with a view to producing a document which satisfied certain criteria. But the very process implied by this decision precluded the development of a formal script or the formative evaluation of that script by traditional methods.

For these reasons, and due to the constraints of limited available time and production resources, other than the continuous assessment of the material obtained and the ongoing elaboration of ways and means of better achieving the stated objectives, no (further) formal formative evaluation procedures were implemented until the difficult shooting phase had been completed.

However, it must be understood that in this phase of the development of a product, a great deal of informal formative evaluation is continuously taking place in the form of discussions with colleagues. Accordingly, during

production, changes and revisions were shown to interested parties on an informal basis with further revisions resulting from consideration of feedback obtained in this way. After production was completed, formative evaluation took place in two successive stages:

Formative Evaluation 1

Subjects

The sample was composed of 14 test subjects including film-makers, users of the film and members of the general public.

Design, Instrumentation and Procedure

A preliminary rough assembly, based on the stated objectives, and composed of the most relevant scenes from all the material obtained, was screened to this "expert" audience. Their reactions to this material were assessed by means of a questionnaire designed to elicit feedback on questions related to interest level and relevance of different scenes, omissions, material to be deleted, (see Appendix III). Based upon this feedback and upon input from the producer and distribution personnel at the NFB, a further cut subsequently was undertaken, as considered necessary.

Data Analysis

Feedback from the first formative screening, being qualitative in nature, could not be analyzed by quantitative

methods. Answers to the open-ended questionnaire and verbal reactions to the film were given due consideration by the producer/evaluator and general conclusions extracted from the variety of responses. As has been suggested, with this type of film, it is difficult to establish a consensus as different viewers react to different scenes in different ways. As in all affective situations, such reactions are highly subjective and stem from deeply rooted, often unconscious attitudes, in themselves not easily susceptible to change.

Ultimately, it is the producer/director, influenced by whatever degree, by these often conflicting reactions, who must decide on a final version of the film. Inevitably, the reactions of those asked to comment will play a role in this decision-making process. But the criteria referred to must also include the intuitions and intentions of the author of the work and as such, are subtle and complex. Unlike purely didactic and goal-determined educational materials, the desired outcomes of this document are, by definition, non-specific and difficult to measure. The means of evaluating their realization are equally vague; whether or not the film is "working", as the term is used by film-makers, is difficult either to measure or to describe in words.

The questionnaire used in the evaluation, designed to measure changes in attitude due to viewing the film(s) is

however, more susceptible to quantitative analysis, as was carried out in the second formative evaluation. In this first formative evaluation, qualitative feedback, in the form of answers to open-ended questions (Appendix III) was emphasized.

Results

Results of the preliminary formative evaluation provided a general basis for shortening and modifying the two-hour rough assembly. Written answers to questions about form, length, pacing and content indicated areas of confusion and redundancy which were reworked in the light of pertinent feedback. Results were as follows:

1. Please describe in 25 words or less the predominant impression you have received from seeing this material.

In answer to the first question, the most common reference was to the obnoxiousness of the father in the family, Ken Bailey. Comments included sympathy and approval for his wife, Mrs. Bailey, and compassion for their children. But the predominant sentiment was recognition of the negative aspects of what one respondent referred to as "the film's key character, Ken Bailey."

This common theme is reinforced in a contradictory fashion by the answers to the second and third questions about content of greatest and least interest. Whereas all

subjects had strong (primarily negative) feelings about K.B., for some, the scenes featuring him were of greatest interest, whereas for others, these scenes were considered tiresome and redundant. As those who expressed an interest in seeing less of Mr. Bailey and more of the children were in the majority, the number and length of such scenes were reduced in carrying out modifications.

2. Please identify the part or parts which interested you (a) the most, (b) the least.

Approximately half the sample found Ken Bailey to be of least interest. However, in some cases a negative attitude was accompanied by interest. It is of note that when people are asked to express their opinions, these are not always susceptible to categorization. In this situation, there was a wide range of reactions, both positive and negative to different scenes and characters so that a majority opinion or consensus was hard to arrive at. Some respondents liked the hospital scenes, for example, while others thought they should be omitted.

3. What is included in this assembly that you definitely think should not be in the finished film? Why?

Several specific references played a role in the decision to eliminate two scenes; one in which Mr. Bailey abusively criticises his daughter's sexual adventures and

the other scene of Mrs. Bailey and her daughter Heather doing the food shopping. In the first case, the scene was considered as having unfortunate negative effects for the Baileys themselves. In the second, the scene had little interest of any kind and seemed out of place in the context of the rest of the film.

12 One frequently repeated comment was the suggestion to avoid scenes in which Ken Bailey appeared very drunk as it was considered that he was too easy "a target" and that it would not be advisable to release a film in which the man was shown in such an unfavorable way.

This view touches upon a theme central to this type of documentary; the issue of the film-maker's role in choosing what to include in a film and the criteria used to make such choices. There is no pat answer to this dilemma. In this case the opinions expressed in this formative evaluation as to what should be included or eliminated in the finished film varied widely. Although many people singled out the same scenes as being of interest; those of Mrs. Bailey and the children, and a strong majority expressed dislike for scenes of Ken Bailey complaining, there were several strong dissenters who felt that Ken was the most interesting person in the film. It is such differences of opinion which pose a real challenge to the evaluation of such documents and subsequent decisions about modifications.

4. Is there any omission or confusion you would like to point out?

Very few answers were obtained to this question, presumably because most respondents had already expressed their views in answering the three previous questions.

Overall, feedback obtained as a result of this formative screening indicated a high level of interest in the material which provided information about the circumstances of the individual family members, especially those of the mother and children. As this outcome was compatible with results of the needs analysis, this preliminary evaluation influenced the further direction the film would take and provided strong indications about what scenes held the greatest interest in terms of this objective.

Formative Evaluation 2

The next version of the film to be evaluated was approximately ninety minutes long but still contained all the material the director considered important to achieve the defined objectives. At this stage, the question of the final length of the finished film, originally intended as a half-hour, was raised. A formative evaluation screening was held, this time with subjects drawn from the primary target audience for the film, (Junior College students).

Subjects

The sample of 37 Cegep students was selected from the largest population of users of the original film; college or university students, (see Appendix I, Audience Breakdown). These students had previously viewed The Things I Cannot Change as part of their course curriculum and had expressed an interest in seeing the sequel.

Instruments

The PEAC Response Analysis System, (Nickerson, 1979) was used in addition to the attitude instrument referred to in Chapter 3. (see Appendix I). The variable selected for measurement by this system was that of INTEREST, which is to say that subjects were asked to indicate their level of interest at any given moment while watching the film, according to a four-point scale. Each of four buttons, (A, B, C, D) represents a different level of interest ranging from "Very Interesting", to "Quite Interesting" to "Not Very Interesting" and finally, "Boring".

As indicated, (see p. 18) the twelve item attitude scale was developed to test beliefs about the causes and effects of poverty on its victims. The film under evaluation was designed to inform audiences about living in poverty; the questionnaire was developed to evaluate to what extent and in what ways the film modified previously held opinions. The decision to use the same attitude

questionnaire that was used to measure reaction to The Things I Cannot Change, (see Chapter 2 and Appendix II), was based on the common objectives of the two films in addition to the need for a common standard with which to measure the differential effects of the two films on test audiences.

Included with the Likert scales were open-ended questions which allowed subjects to express reactions to production variables such as length, pacing, length of individual scenes, use of commentary etc.

Design

A single-factor within-subjects pre/post design was chosen as best suited to testing the effect of the film at this formative stage.

Procedure

Students were instructed on how to use the questionnaire and hand-units. As indicated, the variable chosen was INTEREST and students were instructed as to the significance of each button: A: "Very interesting", B: "Quite Interesting", C: "Not Very Interesting" and D: "Boring".

Students were told how to operate the hand-units while watching the film. Then the pre-test was administered to the students who were told to fill it in immediately. The hand-units were then given out. The subjects were.

instructed to write the number of their hand-unit on the top page of their questionnaire to permit correlation of questionnaire and hand-unit responses.

The film was then screened. At the end of the screening the post-test was handed out and completed. The subjects were instructed to write the same number on the post-test as they had written on the pre-test, ie. the number of their hand-unit. Hand-units and pre- and post-tests were then collected. A discussion followed during which the evaluator took note of reactions and comments.

Data Analysis

At the second stage of the analysis, pre/post test shifts on each of the five-point Likert-type scale items were determined by means of matched-pairs t-tests. Results from the PEAC (Program Evaluation Analysis Computer System) were analyzed descriptively by means of a graph illustrating mean audience responses on the four-point hand-unit scale at each ten-second interval throughout the film. These results were considered in deciding upon modifications to be made in developing a final version.

Production variables brought into consideration, such as length, pacing, use of commentary, relevance and interest value of given scenes, were evaluated in terms of feedback received from the questionnaires, the PEAC System, by word of mouth and in discussions with viewers and/or colleagues,

after seeing the film. By these various methods, the final version arrived at by the producer/director was decided upon after due consideration, informed by appropriate feedback, of all relevant variables.

Results

Table 1 shows the demographic breakdown for the sample tested. Table 2 illustrates results of the t-test performed on responses to each of the 12 Likert scales. No significant pre/post differences are observed. Results of evaluating this second version included answers to the five-point Likert scale, applied to the following 12 attitude statements.

1. The poor will always be with us.
2. The unemployed should receive government assistance.
3. People live in poverty because they are too lazy to work.
4. It is the responsibility of the government, to ensure that everyone has a job.
5. People on low incomes should have small families.
6. The sins of the fathers are visited on the children.
7. The children of low income families have as much chance as anyone to succeed.
8. People without special skills are destined to live in poverty.
9. It is shameful to accept charity.
10. The poor are victims of an unjust social system.

11. People get what they deserve and deserve what they get.
12. It's a "dog eat dog" world.

Table 1

Demographic Data in Percentages for Formative Evaluation Sample

	Cegep 1 N = 19	Cegep 2 N = 18	All N = 37
<u>Sex</u>			
M	58%	44%	51%
F	42	56	49
<u>Age</u>			
18	58%	44%	51%
19	32	33	32
20	11	22	16
	(and over)		
<u>Marital Status</u>			
S	95%	100%	97%
M	05	0	03
<u>Religion</u>			
Prot.	21%	44%	32%
Cath.	58	44	51
Other	21	11	16
<u>Occupation</u>			
Student	100%	89%	95%
Other	00	11	05
<u>Previous Education</u>			
High School	89%	67%	78%
Sp. Train	11	17	14
Pt. Univ.	00	14	06
<u>Political Affil.</u>			
Lib.	37%	33%	35%
Cons.	21	17	19
NDP	05	17	11
Other	00	06	03
Didn't Vote	32	22	27
No Response	05	06	05
<u>Hrs. TV Per Wk.</u>			
< 5	42%	44%	43%
< 10	32	39	55
< 20	16	06	11
< 30	11	11	11

Table 2

Likert Attitude Scales: Pre/Post Scores

<u>Statement</u>	<u>MEAN</u>		<u>STANDARD DEVIATION</u>	
	<u>Pre</u>	<u>Post</u>	<u>Pre</u>	<u>Post</u>
1.	1.8378	1.8919	.898	.843
2.	1.7568	1.9730	.548	.726
3.	1.1081	3.7297	.774	1.097
4.	3.0270	3.0270	.157	.184
5.	2.1622	2.2703	.866	1.122
6.	2.5676	2.4865	1.068	1.096
7.	3.5405	3.5946	1.325	1.189
8.	3.0000	2.9730	1.054	1.166
9.	3.8649	3.6757	1.084	1.270
10.	2.4054	2.4324	.175	.171
11.	3.7838	3.6486	1.058	1.111
12.	1.9730	1.8649	.131	.178

The change in the mean score, pre to post on all but one of the scales was never more than .22. On item no. 3 (People live in poverty because they are too lazy to work) there was a shift in the mean score from 1.1081 to 3.729, that is; away from strong agreement towards an attitude of less agreement and greater uncertainty (don't know).

Qualitative Feedback

In addition to the attitudinal data, answers to the following open-ended questions allowed subjects to express opinions and indicate scenes of greatest and least interest:

1. Please describe in 25 words or less the predominant impression you have received from seeing this material.
2. Please identify the part or parts which interested you (1) the most, (2) the least.
3. What is included in this assembly that you think definitely should not be in the finished film? Why?
4. Is there any omission or confusion you would like to point out?

The data obtained in answer to these questions confirmed the general pattern of reaction established in the first formative screening.

In answer to the question about scenes of least interest, the most frequent reference was to scenes involving Mr. Bailey and his wife or scenes involving family arguments and Christmas scenes. Scenes of greatest interest included those referring to the economic conditions of the Bailey children. This is not surprising in light of the average age of the subjects, (see Table 1).

Group discussion also provided feedback which was considered in making further modifications. Reaction to the

film on the whole was positive, but all concerned agreed that it was too long and that certain scenes involving the mother and father and at the Christmas party were repetitive. Scenes which showed the Baileys in an unfavorable light, such as when they were arguing and complaining were appreciated less than those showing their positive efforts and kindness to each other. Many singled out the scenes in the hospital as the most interesting.

PEAC System

Reaction to the film by test subjects using the PEAC System are represented by the graph in Figure 2.

N.B. During summative evaluation a comparison was made using analysis of co-variance between the scores of the group tested using the PEAC System and those of the group not tested with the PEAC System. Results of this test revealed no significant differences between the two groups, (see Appendix V). This result suggests an absence of any threat to validity posed by the use of the PEAC System at the formative or summative stages of the evaluation.

Modifications

These results pointed to the need for further modifications to the film to make it more interesting and effective.

Results of the analysis of variance on data from the

Film title: COURAGE TO CHANGE (Before modifications)

Audience sample: N = 38

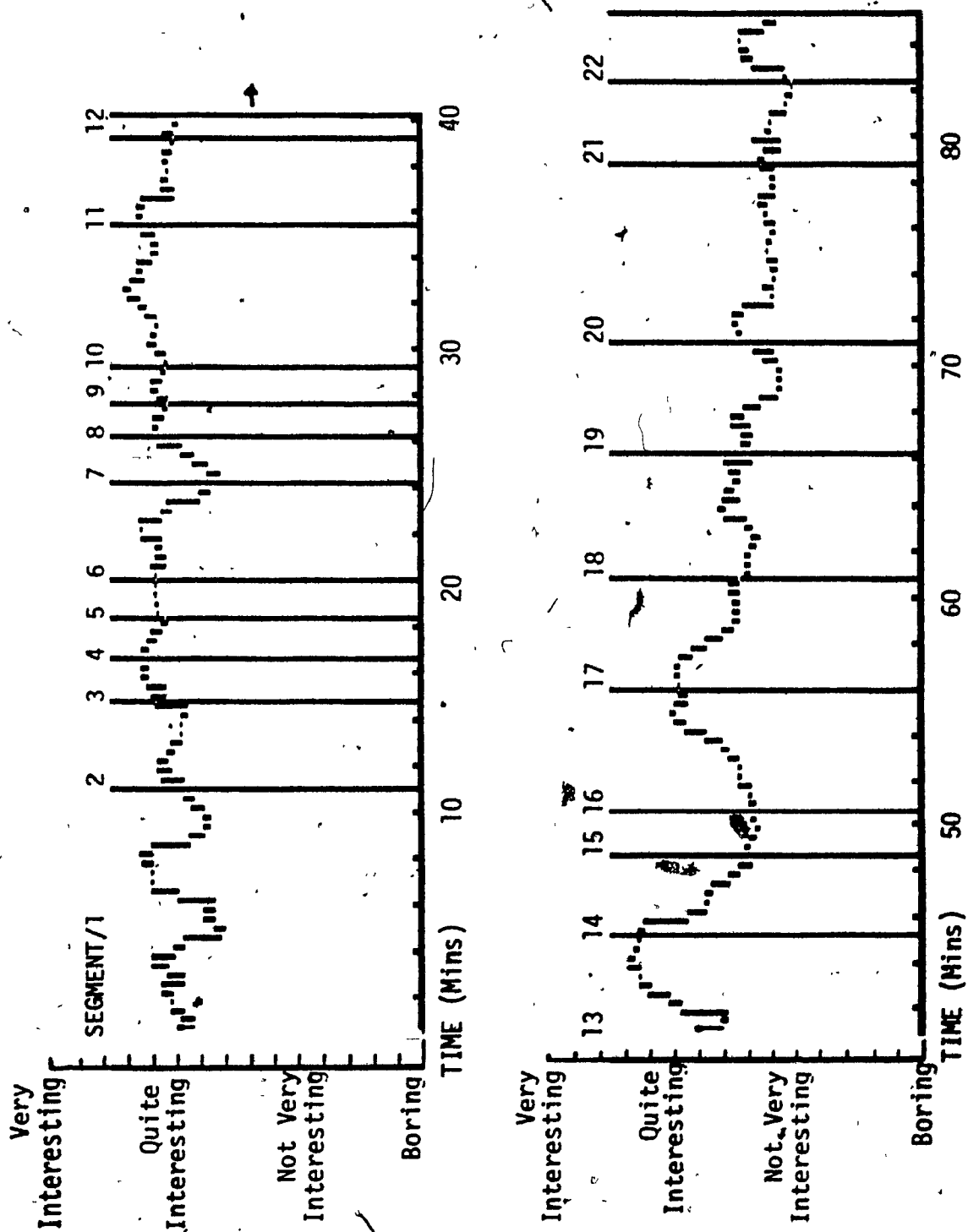


Figure 2. Second-by-second audience reactions to 'Formative' version.

attitude Likert scales indicate that, for this sample, in all cases but one the film provoked little or no change in previously held beliefs. Various interpretations may be placed on these results. In most cases the attitude held before viewing the film seems to be consistent with the point of view tacitly (but not intentionally) expressed by the film. Where a shift in attitude occurred, it was consistent with conclusions generally reinforced by the film; eg. On item no. 7 (the children of low income families have as much chance as anyone to be successful) the mean score shifted very slightly from "don't know:" towards disagreement.

In the context of this formative evaluation, the primary objective was to improve the overall dynamic of the film, in itself designed more to provoke interest and reflection than to promote specific attitudes. Results from the questionnaire served primarily as an indication of how the audience was interpreting the material. These seemed on the whole to reflect an understanding of the issues raised and a general comprehension of the material. More detailed information was provided by feedback from the PEAC System and from the qualitative data.

The decline in positive reactions as the film progressed, illustrated by the PEAC System graph, confirmed the desirability for further editing of the material. The

use of the graph in conjunction with verbal and written feedback helped to point to problem areas in this version where audience interest flagged.

For example, one of the lowest points on the graph occurs at 24 minutes from the beginning, during a scene in which Ken Bailey is carrying on a monologue about his misfortunes and achievements. In the next scene, the family visits Debbie, one of the daughters who is an accident victim, in the hospital. During this scene the graph continues to climb. In the written comments given in answer to open-ended questions, scenes with Ken Bailey were identified as having less interest than those featuring other family members, especially the scenes in the hospital and those where the two sons, Kenneth Jr. and Tom Bailey recount their experiences in foster homes. These scenes were characterized by high interest levels as represented on the graph.

These results echoed the type of response seen in the earlier formative evaluation. In the subsequent revisions therefore, the scenes involving Ken Bailey (especially when talking about himself) were drastically reduced and those featuring other family members were emphasised.

Based on feedback from this evaluation, it was decided to further shorten the film by about thirty minutes, bringing the final length down to under 60 minutes. As the

PEAC graph had indicated a gradual falling off of interest after the first hour of the film, the scenes from this section which had elicited waning interest were either shortened, removed altogether or placed elsewhere in the film. This was done with certain scenes which had reflected low levels of interest on the graph but which nonetheless were important content in terms of the overall objectives of the film.

Scenes from throughout the film which had shown high points on the graph were those in which written feedback had confirmed a higher level of interest. Such scenes were therefore retained within the body of the shortened final version. As several comments had focussed on the repetitive and irritating aspects of the Christmas scene at the end of the film, especially where Ken Bailey is obviously drunk, this last section was radically shortened and much of the offensive material deleted.

Conclusion

In accordance with the results of formative evaluation, the modified version of the film provided a generalised portrait of the family as a whole, with emphasis on the wife and children. The content of this version conforms with the desired content profile established in the needs assessment.

This film illustrated some of the negative long-term effects of poverty but confirmed the view that despite

handicaps, the next generation of Baileys is trying to escape the "circle of poverty". Results of formative evaluation suggested that scenes illustrating the negative aspects of the father's character did not meet with audience approval. This raises the question of how much a given product, if not designed for commercial purposes, should cater to an audience's preference for cheerful material, especially when such material does not accurately reflect the situation being examined. The question of how to integrate unpalatable material into the overall picture so that it reflects the reality without causing the audience to "turn off" deserves serious consideration. In this case, an attempt was made to include scenes representative of all the material obtained in such a way as to provide an accurate reflection of the Baileys without alienating the audience or falling into "victimization" of the subjects.

Finally, further modifications were completed. This final version was approved by the Director General of the NFB and the film proceeded into post-production. It was this final version which was subsequently subjected to summative evaluation.

Chapter 5

Summative Evaluation of Courage to Change

Introduction

In this phase of the evaluation, somewhat different issues were considered than at the formative stage.

During formative evaluation the goals are first to determine, then to deliver (produce) the elements required to realize the objectives. This is largely the job of the writer, director and/or producer, whereas in this instance the evaluation has been performed as well by the producer/director. This is an unconventional situation but one with advantages and disadvantages. Such considerations notwithstanding, in its formative phase, a media product is evaluated primarily in terms of its efficiency in satisfying the given objectives, in terms of the resources available to the producer.

Of course, this process should of necessity include some testing with samples from the target audience(s). In reality, until formal formative evaluation procedures become an accepted part of established production procedures, such testing as in this case, is the exception, not the rule. During production and formative evaluation the specific concerns of producers on matters of content and production variables, (content, pacing, use of sound, length etc.) tend to overshadow questions of overall effectiveness. The product is approached mainly in terms of improvements which

can or should be made to ensure greater clarity or elegance (efficiency).

Summative evaluation subsequently may be said to be concerned with the effectiveness of the product(s) in the context of its/their implementation(s). Once summative evaluation has begun, the opportunity to make changes in the product no longer exists. The emphasis of the evaluation is placed on the long term overall success or failure of the product(s) in meeting users' needs.

Based on the above considerations, the questions to be answered by this summative evaluation may be considered primarily in terms of the capability of the product to satisfy users' needs; in other words, to fulfill the objective identified in the needs assessment. The film(s)' effectiveness in stimulating thought and provoking curiosity about the causes and effects of social poverty is, of course, central to the proposed evaluation. There is also the question of the interest value of the two films, considered as components of a single system, and that of whether or not the viewing of both films is more effective in terms of changing attitudes than seeing only one.

In terms of the present study, the evaluation focussed on two major aspects:

(1) Summative evaluation of Courage to Change, as a sequel to The Things I Cannot Change.

(2) A comparison of the differential effects in terms of attitude change of viewing either of the two films, independently, or both, consecutively.

Summative Evaluation 1

Subjects

For this study, a sample of approximately forty subjects was drawn from the primary target audience of Junior College Students, in this case Cegep students from Vanier College, enrolled in a social science program. As is usually the case, these students had been shown The Things I Cannot Change as part of the normal curriculum. Subjects were tested in two groups, one of which was tested with the PEAC System, one without.

Instruments

The test instrument used in this evaluation is the same attitude questionnaire referred to above in the context of the needs assessment and formative phases of the evaluation. The decision to base the evaluation on results of testing with this questionnaire was derived from the need for a common measure on which to base a comparison between the film at a formative and at a summative stage as well as from the consideration that the second film about the Bailey family purports to satisfy the same or highly similar objectives as does the original: The Things I Cannot Change.

Whereas during formative evaluation the emphasis was on collecting data which could help to evaluate the effectiveness of the film in terms of possible modifications, at this stage the attitude instrument may be seen more in terms of a tool for formative research into the role of the film in shaping attitude, whether this occurs in the form of a change of attitude or as a reinforcement of an attitude already held.

In addition to the twelve attitude measures a question was included concerning the overall effectiveness of the film. There also were open-ended questions which allowed the respondent to express ideas on any aspects of the film s/he chooses (see Appendix II).

Design

The overall study provides for a comparison of attitudes via a pre/post design in which the two groups were: a) the sample tested during formative evaluation, and b) the summative sample.

Procedure

As during formative evaluation, subjects were given the pre-test, then shown the film, then given the post-test. The sample tested with the PEAC system followed the same procedure as during formative testing (see p. 32).

Data Analysis

The post-test scores from testing the two versions of the film, (unmodified, formative phase; and modified, summative phase) were compared using analysis of covariance. Independent tests were performed on each of the twelve Likert scales; in each case the pre-test score was used as co-variate. Threats to the assumption of homogeneity of regression of the two samples tested were checked via the slope test for heterogeneity of regression (Baggaley & Brauer, 1989). The overall method of analysis was selected as appropriate for the investigation of post-test differences in the non-experimental situation according to the recommendations of Tabachnik & Fidell, 1983.

Results

Table 3 illustrates a demographic breakdown in percentages of the sample tested. Comparison with Table 1 confirms the demographic homogeneity of the two groups tested at the formative and summative stages of the evaluation.

Table 4 reports the slope test results and the analyses of co-variance conducted on each Likert scale. All slope tests were non-significant, indicating the robustness of the main treatment effects owing to the homogeneity of regression. N.B. The adjusted post-test scores are used in the standard BMDP mainframe procedure whether or not the

regression test is significant. This procedure is also recommended as a standard approach to formative evaluation data in the pre/post multiple/group design, (Baggaley & Brauer, 1989).

Table 5 provides means and standard deviations of pre- and adjusted post-test scores for the formative and summative samples tested.

Figure 3 illustrates the reaction to the film in the form of a graph charting the mean response of the sample at ten second intervals as recorded with the hand-units.

The overall results indicate a marked post-test difference in response between the unmodified and modified versions of the film.

Table 3

Demographic Data in Percentages for Summative Evaluation Sample

N = 22

<u>Sex</u>	M	41%
	F	59
<u>Age</u>	17	09%
	18	36
	19	45
	20	09
<u>Marital Status</u>	Single	100%
	Married	00
<u>Religion</u>	Jewish	23%
	Catholic	45
	Other	32
<u>Occupation</u>	Student	100%
<u>Previous Education</u>	High School	86%
	Sp. Train	5
	Pt. Univ.	9
<u>Political Affiliation</u>	Liberal	50%
	Conserv.	05
	NDP	05
	Other	05
	Didn't Vote	36
<u>Hrs. TV Per Wk.</u>	< 5	55%
	< 10	41
	< 20	05
	< 30	00

Table 4

Slope Tests and Analyses of Co-variance on Formative and Summative Scores

Q.	F Ratio Pre vs. Group (Slope test)	T Value	
		1 vs. 3 (cntrst 1)	2 vs. 3 (cntrast 2)
1.	0.78	- 1.75	3.57 **
2.	2.31	- 1.19	1.80
3.	1.45	1.03	- 2.25 *
4.	2.26	- 0.15	- 0.23
5.	0.17	- 0.49	2.09 *
6.	0.43	0.97	- 0.29
7.	2.42	- 0.70	- 1.39
8.	1.77)	- 1.43	1.14
9.	1.54	1.48	- 2.63 *
10.	0.12	0.09	1.96
11.	1.21	1.56	- 2.30 *
12.	0.71	1.19	2.19 *

P < .05 **

P < .01 *

Contrast 1 refers to the comparison between the scores of the two groups tested during summative evaluation, one with the PEAC System, one without.

Contrast 2 refers to the comparison of scores between the summative group using the PEAC System and the formative group, (also using the PEAC System).

Table 5

Descriptive Statistics following Analyses of Co-variance for Formative and Summative Scores

Source	Pre-test (Co-variate)		Post-test (Variate)	
	Form.	Sum	Form.	Sum.
1. Mean	1.84	4.39	1.89	4.30
S.D.	0.90	0.50	0.84	0.63
Adj.gr.m.			2.55	3.75
2. Mean	1.75	4.13	1.97	4.00
S.D.	0.55	0.70	0.73	0.60
Adj.gr.m.			2.73	3.34
3. Mean	4.11	2.17	3.73	1.91
S.D.	0.78	0.94	1.09	0.79
Adj.gr.m.			3.07	2.29
4. Mean	3.03	3.03	3.03	3.17
S.D.	0.96	0.97	1.12	0.94
Adj.gr.m.			3.16	3.08
5. Mean	2.16	4.13	2.27	4.08
S.D.	0.87	1.06	1.12	0.80
Adj.gr.m.			2.86	3.49
6. Mean	2.57	2.83	2.49	2.52
S.D.	0.98	1.11	1.10	0.95
Adj.gr.m.			2.57	2.49
7. Mean	3.54	2.40	3.59	2.65
S.D.	1.32	1.16	1.19	1.11
Adj.gr.m.			3.32	2.93
8. Mean	3.00	2.70	2.97	3.13
S.D.	1.17	1.17	1.17	1.10
			3.88	3.19
9. Mean	3.86	2.17	3.68	1.87
S.D.	1.08	1.07	1.27	.81
Adj.gr.m.			3.04	2.34
10. Mean	2.40	3.30	2.43	3.39
S.D.	1.07	1.06	1.04	0.94
Adj.gr.m.			2.74	3.21
11. Mean	3.70	2.26	3.64	2.17
S.D.	1.06	0.81	1.11	0.77
Adj.gr.m.			3.18	2.55

Table 5 (Continued)

Descriptive Statistics following Analyses of Co-variance for Formative and Summative Scores

<u>Source</u>	<u>Pre-test (Co-variate)</u>		<u>Post-test (Variate)</u>	
	Form.	Sum	Form.	Sum
12. Mean	1.97	3.96	1.86	3.74
S.D.	0.72	0.77	1.08	0.75
Adj.gr.m.			2.58	3.22

Film Title: COURAGE TO CHANGE (After modifications)

Audience sample: N = 22

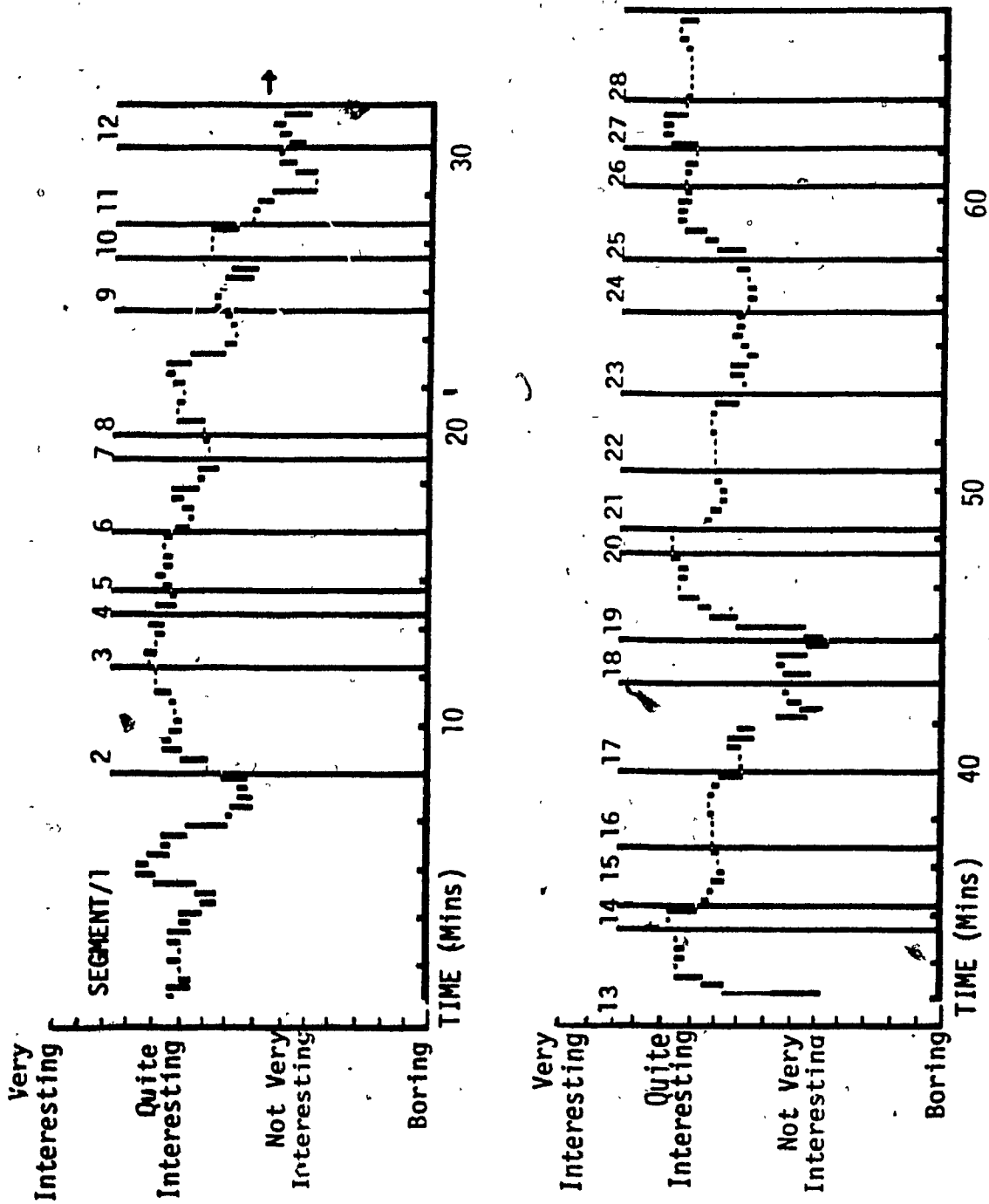


Figure 3. Second-by-second audience reactions to 'Summative' version.

Chapter 6

Discussion

Overall results of the summative evaluation suggest that the modifications to the film which were carried out based on results of formative evaluation produced the desired result of provoking questioning of attitudes and attitude change in the target audience. Any change in attitude recorded in the test audience as a result of viewing the film suggests that the film is fulfilling its primary goal of stimulating thought on the matters raised by the film in relation to the questionnaire.

Significant differences in the analysis of co-variance performed on post-test scores of the samples tested before modifications (formative evaluation) compared with those of the sample tested after modifications (summative evaluation) indicate that the sample which viewed the final version held attitudes after viewing the modified film which were different from those held by the sample which viewed the unmodified version of the film.

The realization that this change in attitude was not always in the same direction for the two groups as well as the consideration that the two samples showed great divergence on the pre-test on several of the twelve items of the scale suggests that in matters of attitude change, it is difficult to control or predict response or change.

Furthermore, the complexity of the documentary film under consideration, and its characteristic of being a "slice of life" whose objectives are of a generalised affective nature seem to preclude any systematic analysis of its effect on audiences. For this reason, quantitative methods cannot be relied on exclusively as indicators of audience reaction.

In this case, interpretation of results of statistical analysis of test scores obtained during formative and summative evaluation relied on other forms of feedback; qualitative data in the form of answers to questions and outcomes of discussions as well as the data contained in the PEAC graph at both stages of the evaluation. All of these various forms of feedback were taken into consideration in trying to interpret the results of evaluation.

During formative evaluation, the absence of significant differences on any of the twelve items of the Likert scale in addition to answers to open-ended questions suggested the need for modifications to the film (see Modifications). The PEAC graph also pointed to areas in the film where interest flagged. The combination of these forms of input to the process of making alternations influenced subsequent changes made to the film.

Summative evaluation was carried out after final modifications had been completed and the film was completely

finished and finalised. Consequently, results from this evaluation could not be applied to making further modifications. Analysis of co-variance produced significant differences on six of the twelve items. These results, when considered together with the PEAC graph charting audience response during summative testing suggest that the final film was more effective in stimulating thought and change than was the case with the version evaluated at the formative stage.

Results of the analysis of co-variance performed on the post-test scores of the formative and summative groups do point to certain conclusions concerning the two versions of the film; on statements 1, 3, 5, 9, (i.e. on four out of the six items of the scale where significant differences were found) the effect of the film appears to have been to provoke a modification in attitude or a questioning of the previously held attitude. In other words an attitude previously held seems to have been brought into question as a result of seeing the film. Although the former attitudes towards these four statements differed previous to viewing the film, both groups' attitudes shifted subsequently towards greater uncertainty. Given the original objective of the film; to provoke thought and arouse interest in the subject of social and economic poverty, this result suggests that the film is fulfilling its objective. In terms of the two items on the scale which promoted change in attitude by

both groups in the same direction (items no. 11 and 12) it seems fair to conclude that the film in fact promotes agreement with these opinions whereas on the last item the summative group finally exhibited greater uncertainty about this statement than did the formative.

It is important at this point, to distinguish between the effects of the film on audience attitude as reflected by results of the analysis of scores from testing with the Likert scales and the value attributed to these results. Insofar as the film did not have as its objective to promote specific attitudes, there is no established criterion for success or failure in terms of attitudes held by audiences after viewing the film. The results obtained are certainly of interest in terms of research into the effects of the film on these samples. The difference in attitude held by the group viewing the modified version as compared with those of the group viewing the unmodified version, in addition to the greater level of interest in the modified version illustrated by the PEAC graph suggest that the final version was more successful in promoting certain viewpoints than was the unmodified version.

The differences in post-test scores for the samples viewing the unmodified and modified versions of the film were significant on the following items:

1. The poor will always be with us.

The difference of means on the pretest suggests just how much peoples' opinions differ on such abstract, ultimately unverifiable assumptions or convictions. If a film document does manage to alter such views, even to a minor extent, it may be a sign that, due to the film, audience members are questioning some of their basic assumptions.

In terms of attitude after viewing the film, the analysis suggests that on this issue, the film provoked a final attitude of greater disagreement with this statement among those viewing the film at the summative stage than it did among the formative group. Insofar as this indicates an overall reaction of optimism about escaping from poverty, this result suggests that the modified film promotes this conclusion. Ultimately, this may be considered a more constructive attitude than the fatalism of agreeing strongly that "the poor will always be with us". The film seems to leave the impression that there is hope for families like the Baileys, that they can escape from "the circle of poverty". This conclusion is encouraging, whereas it must be recognised that some viewers, after seeing the film, still disagreed with it or even disagreed with it more than previously.

3. People live in poverty because they are too lazy to work.

The comparison of post-test means indicates greater agreement for the summative group with the notion that laziness is a cause of poverty. Certainly, considering the example of the Baileys, this conclusion is not surprising.

5. People on low incomes should have small families.

The ultimate position of the summative group was one of uncertainty compared to the (adjusted mean) of the formative group which reflects agreement modified from strong agreement on the pre-test.

Certainly the film provides strong arguments in favour of agreement and disagreement with this view. This statement calls into question deeply rooted attitudes about which people are inclined to seek confirmation of what they already think. The fact that the film seems to have provoked some questioning or modification of previously held attitudes testifies to its success in reflecting the complexity of applying value judgments to real life as lived (as reflected in this documentary).

9. It is shameful to accept charity.

On this question the two groups differed considerably at the outset. The adjusted group post-test mean for the summative group reflects agreement with this statement

whereas the formative group mean reveals uncertainty. Once again, on this item the two groups differed considerably in their positions previous to viewing the film which, seems to have provoked a general questioning of whatever position was held previously. Again, on a question like this where there is no ultimate "right" or "wrong" opinion, results indicate that the film served to promote the view that it is shameful to accept charity (which for the Baileys it seems to have been).

11. People get what they deserve, and deserve what they get.

The post-test scores indicate agreement for the summative group and uncertainty for the formative group suggesting that the finished film supports agreement with this statement.

12. It's a "dog eat dog" world.

In terms of the post-test scores, the summative group "didn't know" if it agreed with the statement whereas the formative group tended towards agreement. Here again an attitude of uncertainty to this perception is certainly more optimistic than one of agreement which again suggests a more up-beat quality to the film in its modified form. This may well be considered a desirable result as it introduces an element of hope into an otherwise depressing situation.

A comparison of evaluation results obtained with the

PEAC system (see figs. 1 and 3) points to some interesting conclusions. Scenes which reflected lower levels of interest at the formative stage were retained in the modified version because their content was considered important to satisfying the overall objectives of the film. In two specific cases such scenes still reflected less interest than other material even when shortened and placed elsewhere in the body of the film. A scene featuring Mrs. Bailey and her daughter discussing the latter's employment prospects was originally placed towards the end of the unmodified version. In the finished film this scene has been moved to an earlier moment but still provokes a dip in the graph. Equally an interview done with Susan Bailey on the subject of her illegitimate child, given up for adoption reflects lower levels of interest on the graph at both formative and summative stages of the evaluation.

This result confirms the accuracy of the PEAC graph in reflecting levels of audience interest. It also points to the need for testing of the material with different types of audience in order to establish whether interest levels of given scenes are the same for different audiences. Equally it may be noticed that those scenes which reflected high levels of interest on the graph continued to do so when included in the shorter modified version tested during summative evaluation. However, in several cases, the shortening and/or repositioning of a given scene did alter

its effect on the test audience as reflected by the PEAC graph. It may be concluded that depending on the nature of the material, the context in which it is placed may influence its effect on viewers.

Conclusion

In terms of providing a systematic methodology with which to evaluate, modify, and further evaluate media products, formative and summative evaluation techniques such as were applied to the design and production of Courage to Change may be said to provide a valuable tool for the improvement of such products. As a media producer, I have been greatly impressed with the importance of doing systematic evaluation at formative and summative stages in the development of a product.

Indeed, where possible I would suggest that the opportunity to test and to apply the results of testing to making modifications more than once during the critical formative phase of a production would increase the opportunity to make important modifications which would improve the effectiveness of the final product. In this particular case, due to the constraints of scheduling and budget, only two stages of formative evaluation were carried out. It is largely due to this testing and to the application of test results to making changes in the product at each stage of its development that the product could be

modified in accordance with audience feedback and in such a way as to promote maximum effectiveness in maintaining audience interest, encouraging viewers to question their attitudes and in stimulating attitude change.

Finally, I would emphasise the importance of formative and summative evaluation and research in terms of providing a framework for analyzing the dynamics of the interaction between a media presentation and its audience. The perception of this interaction as a cybernetic system in which feedback plays a key role allows for the integration of evaluation results into a production system which can only bring about an improvement in the quality of the product.

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Appendix I

Audience Analysis

The Things I Cannot Change

N.B. Numbers on table refer to number
to number of bookings per region.
Percentages refer to percentage of
total number of bookings per region.

Appendix I

Audience Analysis
THE THINGS I CANNOT CHANGE

Breakdown of : Across Down	Bookings Region Code		Bookings Canada's Regions Audience User Codes				Total	
	BC	Prairies	Ontario	Quebec	Nation. Capital	Atlantic Region		
U.S.H.	1.	2.	4.	5.	6.	7.		
19.	1,429 19,000	1,200 12,000		1,000 2,000	1,000 2,000	1,000 2,000	1,317 22,100	Consumer Sector
22.		10	3,000 3,000				3,100 3,100	Elementary School
23.	1,000 2,000	1,000 14,000	1,250 10,000	1,000 1,000	1,000 6,000	1,182 12,000	1,185 46,100	Secondary School
24.	1,500 6,000	1,500 24,000	1,500 15,000	1,750 7,000	1,323 12,000	1,692 44,000	1,521 107,100	College or University
25.	1,333 4,000	1,000 3,000	1,200 6,000			1,000 1,300	1,100 12,100	School Board or District
31.	1,000 1,000	1,000 1,000	2,000 2,000				1,333 1,000	Industry
40.	1,571 12,000	1,300 12,000	1,000 1,000		1,667 5,000	1,236 9,000	1,373 39,100	Health Service Organizations
42.	1,000 1,000	1,200 24,000	2,500 10,000			1,333 4,000	1,367 41,000	Social Service Organizations
43.		1,000 2,000	1,000 2,000				1,000 4,000	Legal Service
44.	2,000 3,000	2,000 3,000					2,000 4,000	Women's Groups
51.	1,000 1,000	2,000 16,000	1,333 8,000	1,300 1,300	1,000 2,000	1,300 5,300	1,455 32,000	Community Groups & Institutions
53.	1,000 3,000	1,000 1,000	1,300 11,000				1,214 17,000	Public Libraries
54.	1,000 1,000						1,000 1,000	Fed. Govt. Dapts.
56.	1,000 1,000	1,000 1,000	1,000 1,000				1,000 3,000	Religious Groups
70.	4,000 4,000	3,000 15,000	2,337 14,000	11,000 11,000	3,000 3,000	2,500 2,000	3,267 49,000	NFB
	1,400 9,000		1,545 83,000	2,444 22,000	1,474 28,000	1,422 80,000	1,485 392,000	
	35	90	55	9	19	56	264	

Appendix II

PRE-TEST

Thank you for your help in this study. Your answers to these questions will greatly help us in our test of the film we will be showing you. All the information you give will be anonymous and confidential.

PLEASE LOOK AT EACH OF THE SENTENCES 1-12 AND TELL US IF YOU AGREE WITH THEM OR NOT. IF YOU ARE NOT SURE, GIVE THE ANSWER WHICH IS CLOSEST TO WHAT YOU THINK. BUT PLEASE GIVE US AN ANSWER FOR EACH ONE.

Tell us how much you agree or disagree with each sentence. CIRCLE ONE RESPONSE ONLY.

SECTION A

1. The poor will always be with us.

strongly agree agree don't know disagree strongly disagree

2. The unemployed should receive government assistance.

strongly agree agree don't know disagree strongly disagree

3. People live in poverty because they are too lazy to work.

strongly agree agree don't know disagree strongly disagree

4. It is the responsibility of the government to ensure that everyone has a job.

strongly agree agree don't know disagree strongly disagree

5. People on low incomes should have small families.

strongly agree agree don't know disagree strongly disagree

6. The sins of the fathers are visited on the children.

strongly agree agree don't know disagree strongly disagree

7. The children of low income families have as much chance as anyone to be successful.

strongly agree agree don't know disagree strongly disagree

8. People without special skills are destined to live in poverty.

strongly agree agree don't know disagree strongly disagree

9. It is shameful to accept charity.

strongly agree agree don't know disagree strongly disagree

10. The poor are victims of an unjust social system.

strongly agree agree don't know disagree strongly disagree

11. People get what they deserve and deserve what they get.

strongly agree agree don't know disagree strongly disagree

12. It's a "dog eat dog" world.

strongly agree agree don't know disagree strongly disagree

SECTION B - GENERAL INFORMATION CIRCLE ONE RESPONSE ONLY

13. SEX - Male 1 Female 2

14. AGE _____ years

15. MARITAL STATUS - Single 1 Divorced 3

Married 2 Separated 4

16. RELIGION

Anglican 1

Baptist 2

Jehovah's Witness 3

Jewish 4

Pentecostal 5

Roman-Catholic 6

Salvation Army 7

Seventh Day Adventist 8

United Church 9

Presbyterian 10

Other 11

No Religion 12

No Response 13

17. Your OCCUPATION

Unemployed 1 Trade 5

Housewife 2 Profes./Manag. 6

Student 3 Other 7

Clerical 4

PREVIOUS EDUCATION

CIRCLE ONE OR MORE RESPONSES

- | | |
|---|---|
| a) Completed part elementary school | 1 |
| b) Completed elementary school | 2 |
| c) Completed part High School | 3 |
| d) Graduated High School | 4 |
| e) Completed part of a special training program | 5 |
| f) Graduated from a special training program | 6 |
| g) Completed part of a University degree | 7 |
| h) Graduated from University | 8 |
| i) Obtained post-graduate qualifications | 9 |

19. POLITICAL AFFILIATION

In the last election, I voted:

- | | |
|-----------------|---|
| a) Liberal | 1 |
| b) Conservative | 2 |
| c) NDP | 3 |
| d) Other | 4 |
| e) Didn't vote | 5 |

20. AMOUNT OF TELEVISION WATCHED PER WEEK

- | | |
|---------------------------|---|
| a) More than five hours | 1 |
| b) More than ten hours | 2 |
| c) More than twenty hours | 3 |
| d) More than thirty hours | 4 |

Appendix III

POST-TEST

The same twelve point Likert scale was used in the post-test as in the pre-test, with the order of the scales reversed. The questions pertaining to demographic data were omitted from the post-test questionnaire.

Appendix IV

Following are the open-ended questions used to elicit qualitative feedback during formative evaluation.

1. Please describe in 25 words or less the predominant impression you have received from seeing this material.
2. Please identify the part or parts which interested you
 - (a) the most
 - (b) the least.
3. What is included in this version that you definitely think should not be in the finished film? Why?
4. Is there any omission or confusion you would like to point out?

Appendix V

Table 6

Scope Tests and Analyses of Co-variance on Summative Scores for Groups Tested with and without PEAC System

	F Ratio	T Value
Pre vs. Groups		Group 1 (Summative/No PEAC) vs. Group 3 (Summative/PEAC)
1.	0.70	- 1.75
2.	2.31	- 1.19
3.	1.45	1.03
4.	2.26	- 0.15
5.	0.17	- 0.49
6.	0.43	0.97
7.	2.42	- 0.70
8.	1.77	- 1.43
9.	1.54	1.48
10.	0.12	0.09
11.	1.21	1.56
12.	0.71	1.19

P < .05 **

P < .01 *

Table 6 illustrates results of the analysis of co-variance performed on post-test scores of the two groups tested during summative evaluation, one with and one without the use of the PEAC System. The absence of significant differences in this study suggests that there is no threat to internal validity posed by the use of the PEAC System by test subjects.

Appendix VI

NFB Production Budget
Courage to Change

(see following two pages)