TELEVISION AS A CONSUMER HEALTH EDUCATION MEDIUM - A PROJECT REPORT

MARGARET E. BROMLEY

TELEVISION AS A CONSUMER HEALTH EDUCATION MEDIUM - A Project Report

by
Margaret E. Bromley

Submitted in partial fullfillment of the
requirements for degree of
Master of Education

Division of Learning Resources
Faculty of Education
Memorial University of Newfoundland

June, 1985

ABSTRACT

The production described in this report was produced through the facilities of the Educational Television Department, St. Clare's Mercy Hospital, St. John's. It is a twenty-minute videotape entitled Physical Disability and You showing the disabled as a special group with special needs, and outlining the support services available to them after their dismissal from a health care institution.

The program was designed specifically for two groups: (1) those presently hospitalized, or their family members and loved ones; (2) the general public, who might have need of such services now or in the future.

Evaluation of the program was conducted at St. Clare's Mercy Hospital with disabled patients; and at the District Vocational School, Clarenville, with sixty-seven students representing the general public directly and patients' families indirectly.

The results of testing showed that the general response to the program's technical quality was positive. Subjects responded on a positive/negative scale with a Yes or No answer.

The questionnaire on program content required the audience to respond with written comments, as well as give an overall rating on a scale ranging from poor to very good. Using this scale with an assigned numerical value (poor/1; fair/2; good/3; very good/4), the tape received a mean of 3.7 for program content.

This program can be disseminated to a wide audience through cable

television, the hospitals, and local groups who have a specific interest in the welfare of the disabled population.

ACKNOWLEDGEMENTS

The developer would like to acknowledge the health and community support professionals who facilitated production of this program in any way.

Acknowledgement for technical assistance goes to:

Avalon Cablevision
Division of Learning Resources, Memorial University
Extension Media, Memorial University
ETV, Memorial University

The author of this report especially thanks everyone who freely devoted time and thought to the planning, production, and evaluation stages of this program:

Dr. G. Fizzard, Learning Resources, M.U.N.
Gail Gosse, Division of Adult and Continuing Education
Marion Walsh, St. John's Homecare
Anna Guigne, Volunteer Center, C.S.C.
Joanne McDonald, Canadian Paraplegic Association
Al Rose, Canadian Paraplegic Association
Betty Jenkins, Canadian Paraplegic Association
Jim McDonald, Dept. of Social Services
Mrs. R. Rubia, Dept. of Social Services
Darlene Jackman, Group Home, Civic No. 4
Eugene Pike, Canadian National Institute for the Blind
Dr. N. Lush, L.A. Miller Center
John Breen, L.A. Miller Center
Eric Hounsell, Neighbourhood Goodwill Center
Olive Smith, Canadian Red Cross Society
Doug Vicars, The HUB
Rene Wicks, Learning Resources, M.U.N.
Bill Norcott, District Vocational School, Clarenville
Staff of the Rehabilitation Unit of the L.A. Miller Center
Staff of the Neighbourhood Goodwill Center
Staff and Residents of Group Home, Civic No. 4, Escasoni Place
Staff and students of the Business Education Department, District Vocational School, Clarenville

Grateful acknowledgement to Dr. R.T. Braffett and Dr. Mary Kennedy of the Division of Learning Resources, M.U.N., for their tremendous assistance, guidance, and patience.

Special thanks to Brenda Reid who typed and proofread the final version of this manuscript and smiled bravely through it all.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1

INTRODUCTION

Consumer Health Education

Five hundred years ago the world of communications took a giant step forward when Gutenberg invented movable type. One hundred and fifty years ago the telegraph ushered in the era of electronic communication. These two developments produced an expansion of information and knowledge and led to the development of occupational specialism in all areas of human activity, including medicine. "As specialities generate additional knowledge, still more specialities emerge" (Marshall, 1977, p.8). One of the more recent of these specialities has been that of consumer health education.

Mohammed Forouzesh (1983) defines consumer health education as "any program encompassing services involving the education of the public in personal health practices and lifestyle factors as well as the promotion of optimal physical and mental well being" (p.19).

In the early 19th century there was little need for an educated health consumer. The public health officials of the time had to do little more than inform the public of sanitation measures taken in their behalf (Rosen, 1958). Later when immunization techniques were developed, it became necessary to inform the public of infectious diseases, and to try to persuade them to take advantage of the programs offered (Vickers, 1965).

The average patient of 75 years ago was still a relatively

passive recipient of whatever treatment was available. Nader (1981) claims that modern industrial man is more susceptible to chronic and degenerative diseases. There are no preventive techniques for these diseases and they require a high degree of patient participation and co-operation. Such preventive techniques as do exist for chronic illness do not lend themselves to the information and simple behavior models of the past, because they require the individual to convert habits and lifestyles that promote health. This is a difficult process that takes years to effect and then requires the individual to maintain his new behavior for life (Becker and Maiman, 1975). To this end the consumer health education movement tries to encourage people to adopt preventive behavior and become knowledgeable, self-reliant health consumers.

Television in Consumer Health Education

The role of television in consumer health education is to generate interest and disseminate information (Wright, 1975). Television can serve to spark a viewer's interest in a particular subject and inspire him to seek additional information from newspapers, magazines, and other publications specializing in the subject (Marshall, 1977). Television may well be "the single most common and pervasive source of health information" (Gerbner, Gross, and Morgan, 1981, p. 902).

Unfortunately, television has a bad reputation among those interested in health education primarily because of the close ties of television to the advertising industry (Wright, 1975; Gerbner, et al, 1981; Thron, 1982). Too often, deceptive claims and misleading information exert a negative influence on health consumers and health providers alike (Summers & Jeffrey, 1982; Aaker, 1982). Aside from

the valuable - and limited - public service advertising, use of mass communication techniques has been difficult in the past because of the enormous funding levels required. However, an examination of television advertising reveals much that is relevant to consumer health education, notably the fact that advertisers invest large sums to gain very small increases, usually in the order of one or two percent (Marshall, 1977).

Health education efforts rarely seem to meet the extraordinarily high expectations of health professionals (Rosenstock, 1960); yet most do far better than even the most heavily backed advertising campaign (O'Keefe, 1971). For example, the anti-smoking campaigns mounted in the 1970's which relied primarily on television were very effective. They were responsible for changing many people's attitudes about the harmful effects of smoking from one of disbelief to one of genuine concern for health. By the early 1980's cigarette advertising had been banned on all American television stations. By 1984 cigarette sales in North America had declined as evidenced by the tobacco farmers of Southern Ontario. When they were interviewed by CBC Television in June of 1984, the farmers stated that they would not be able to sell all of their tobacco crop because the demand for their product was not as great as it had been in previous years.

There are other recorded examples of health education's successes with television programming.

In the early 1970's the Feeling Good series (described as an experiment in health education and an experiment in the uses of

television) went on the public airways in the United States. It was a major new weekly series on health for adults from the creators of Sesame Street, the Children's Television Workshop, New York. The final product, though much different than the original because of its many changes during the evaluation stage, was not as successful as the developers had hoped. It was, nonetheless, a worthwhile program as evidenced by Mielke (1977) in his evaluation of the series.

> There is, then, a need for an effective health education program, not only to impress upon people the importance of maintaining good health, but to establish wider communication in the field. This need has reached almost crisis proportions. And because television has become perhaps the nation's most potent communication and education tool, a concerted effort to employ its formidable strength in a mass public experiment in health education seems overdue (p. 28).

In the spring of 1980, the nursing faculty and graduate students at California State University began using television as a medium for dispensing information to the community on health maintenance and disease prevention. The half-hour television Health Talk programs dealt with many aspects of health care: stress, heart attacks, emergency procedures, rape, and alcoholism, to name just a few. Timpke (1984), the instructional designer for the program, reported:

> The Health Talk programs are a vehicle for nurse educators to disseminate information on how to maintain good health. Using television as a vehicle for transmitting this information seems to be an effective and efficient mode to assist people in learning about disease prevention and health maintenance (p. 218).

Health education is now a regular feature of the BBC's Continuing Education Television Channel, BBC 4, the newest education channel in Britain (Barnes, 1982).

The health care field has not limited itself to just educational

television programs. Indeed, it has taken modern technology and applied it to communications and education fields on a large scale and in the most imaginative ways.

The Lister Hill National Center for Biomedical Communications in Maryland pioneered in a variety of projects using a low powered satellite capable of transmitting narrow band information (voice communication, no video). The Alaska project served isolated native health care service centers. The Appalachian project and similar efforts in American Samoa and the Pacific Islands were beneficiaries of a cooperative effort between Lister Hill and the University of Hawaii (National Library of Medicine, 1972).

Cable television has also played a role in health communications. Experiments in Denver, Colorado, and New York City were centered on urban ghettos and directed at (1) improving patterns of self-care of the chronically ill and disabled; (2) education dealing with personal and community health; and (3) participation in entry into the health care system (National Library of Medicine, 1972).

In 1970, the National Library of Medicine, through the wireline network at Lister Hill, established "Medline" - a one-line bibliographic searching capability for libraries at medical schools, hospitals and research institutions which is now available through computer links to every medical school in North America.

Computer simulation projects are gaining prominence as a distance education tool in teaching, review, giving and scoring examinations, and in simulating patient cases.

At Memorial University of Newfoundland in 1981, an experiment in teleconferencing (using slow scan television to transmit X-rays and other data) met with such approval in isolated Newfoundland and Labrador communities that the project was expanded in 1983 to include use on the oil rigs operating more than 200 miles off the coast of Newfoundland.

Many of these attempts to harness communications technology to health education could not be performed as effectively without television. Television affords the possibility of operating instructional systems that are organized, authoritative, scientific and effective (NAEB, 1970). And it can do so, if properly designed, in a manner that places in a central position the needs and requirements of the learner.

Instructional Television

Television is a powerful medium in the communications field (Rees, 1980). As our most powerful means of mass communication, television has demonstrated its effectiveness in influencing the opinions and the buying habits of large groups of people (Aaker, 1982; Meyers and Arnold, 1982). In educational programs, however, television has had more limited success.

Educational television was pioneered in the 1930's at the University of Iowa with a series of more than 380 programs, including a health education program on first aid (Kurtz, 1959). During the next twenty years educational television research expanded rapidly. Very little evaluation was done however until the 1960's when at least 393 studies were reported comparing television instruction with classroom

instruction. Schramm (1965) concluded that 255 studies failed to demonstrate significant differences, 83 studies preferred television, and 55 studies preferred classroom instruction.

In spite of this, Schramm, one of the most respected researchers in the field of instructional television, wrote in 1968 that:

> ... there is no longer any reason to raise the question whether instructional television can serve as an efficient tool of learning. This is not to say that it always does. But the evidence is now overwhelming that it can, and under favorable circumstances, does. This evidence now comes from many countries, from studies of all age levels from preschool to adult, and from a variety of subject matter and learning objectives. The questions worth asking are no longer whether students learn from it, but rather (1) does the situation call for it? and (2) how, in what given situation, can it be used effectively? (Chu & Schramm, 1968, p. 177).

As a result of television criticism in the 1960's, educational television improved. However, most educational television projects, though improving in many areas, still "continued to omit defining objectives and gathering adequate evaluation data" (Carnoy, 1976, p. 8).

The first documented research which responded to Carnoy's criticism was the development and evaluation of the nutrition program Foodsense in which the planning included: (1) the development of specific learning objectives; (2) involvement of content experts and production experts in an interdisciplinary team effort; and (3) the implementation of the planning process to determine evaluation criteria and methodology. The evaluation showed that 82% of the viewers liked the presentation and found it understandable. It also demonstrated that 93% of the viewers thought they would be able to use the nutrition information when shopping for and preparing food (Shannon, Thurman, & Schiff, 1979).

Educational television is prominent now on college and university campuses. The first large scale effort to offer open circuit broadcast telecourses for college credit took place in Chicago in 1956 (Wiesner, 1983) and by 1979 more than 600 colleges and universities in the United States were offering telecourses for credit (Munshi, 1979). In 1982 the British Open University became part of the American scene by marketing courses in the United States. Walter Annenberg, former American ambassador to England, provided a fund of millions of dollars for reproducing telecourses to be used in a national "college of the air" (Wiesner, 1983, p. 216). In 1983 the University of New Mexico sponsored a telecourse on basic health education entitled Personal and Community Health. Their optimism for success is indicated by one of the objectives of the course - to achieve a drop-out rate of 10% or less, down from a usual high of 60%-80% for previous telecourses (Kill & King, 1983).

Locally, Memorial University of Newfoundland offers both credit and non-credit courses via its cable television system to students in and around the St. John's area. For students in other parts of the province, courses are recorded at the Channel 13 studio and distributed to centers equipped with monitors and playback units.

Evidence has accumulated during the last thirty years to indicate that TV educational courses can provide an effective and major vehicle for disseminating adult education on a mass scale, providing relevance for both committed students enrolled in formal courses and for the casual viewers tuning in at home.

Implications for Adult Education

Malcolm Knowles (1971) provided insight into the kinds of educational situations in which adults specifically learn:

> It is no longer functional to define education as a process of transmitting what is known; it must now be defined as a lifelong process of discovering what is not known (p. 37).

In other words, there is little point in trying to do what most instructional television programming for adults has tried to do; that is, there is little point in translating the traditional lecture into television format to meet the ill-defined needs of ill-defined learners. Such efforts can be characterized in the words of Edgar Dale, as concentrating on doing better what perhaps should not have been done at all (Ely, 1970).

The opportunities for adult educators to use television technology for communication and instruction are immense. Educational TV stations have put out hundreds of cultural and educational programs. As an example, the BBC's Channel 4, the education channel, has run many shows aimed at adults. Two of its most successful shows, run in 1982, were Play It Safe and Speak for Yourself. The first was a ten-part series for adults on child accident prevention; the latter was a twenty-part series which attempted to provide information and support for those whose first language is not English (Barnes, 1982).

Educational broadcasting provides courses aimed at all segments of the population: workers who wish to upgrade themselves, housewives who are considering part-time employment, and even retired employees who are willing to consider employment (Marshall, 1977).

Almost any subject can be presented via television. As a special

educational aid, TV has demonstrated its usefulness for mass orientation and for reaching those at home. Adult educators can now use this technology not just in the field of education per se, or in the area of adult education specifically, but in other fields in which the education of adults is instrumental to the achievement of specific objectives or missions.

The Adult Learner

For years a favourite question for discussion among adult educators was: is the learning process (theory) different for adults than for children? When it was generally conceded that the process was the same for all learners whether they are six or sixty (Goodman, 1975; Smith, 1978), adult educators turned their attention to the "characteristics" of the adult learner to see how they differed from the preadult. E.V. Jones (1981) suggests that there are three significant differences:

(1) Prior learning. The adult comes to the learning situation with a broad background of experience not possessed by the youthful learner. Simply through such commonplace daily activities as making a living and providing for a family, the adult acquires insights not easily discernible to a child. The adult's prior learning dictates and stimulates his learning objectives.

(2) Self-concept. The self-concept of an individual is a very important factor in the way he approaches every aspect of his life. As he matures his self-concept moves from one of being a dependent personality toward one of being a self-directing human being.

(3) Aging and the ability to learn. An important factor which has discouraged adult participation in formal learning activities is the widespread belief that as an adult advances in age, his ability to learn diminishes accordingly. This is perhaps the most subtle and damaging attitude with which educators must cope in working with adult learners.

Other differences worthy of consideration are language differences,

time constraints, physiological differences, motivation and learning expectations.

Just as educators who work with young learners need to be aware of the child's stages of development, educators who work with adult learners need an understanding of the stages of development at different points during the life span. Knox (1977) suggests that adult educators need to study adult development because:

(1) it provides an understanding of the holistic, comprehensive nature of an individual adult's life;

(2) it provides an understanding of the sequential nature of the successive phases of adulthood;

(3) it aids in understanding the transition from one phase of adult life to a later and successive phase;

(4) it enables individuals to gain greater insight and perspective into their own lives.

"Generally speaking," says Jones (1981), "knowledge of adult development aids the adult educator in understanding the needs, interests and motivations of particular clients and in planning and evaluating instructional activities" (p. 30). Those who plan the instructional activities for adults are often unaware of their learners' developmental stages and tend to view adults as having a straight-line existence from postadolescence to death. The fact is that "an adult learner's position in life, where he is on his own personal development, has a tremendous impact on what he chooses to learn and how much he is able to profit from instruction" (Jones, p. 33).

Illiterate Adults

Adults who are illiterate rarely engage in structured learning

situations. There is a high drop-out rate among those who do because they feel the process is too slow for them to make sufficient progress. Also the cost of further education is borne primarily by the participants, so those with less income (usually the educationally disadvantaged) tend to be excluded.

Disadvantaged adults are not, however, excluded from television. In studies conducted by such researchers as Greenberg and Devin, 1970; Geroner, 1972; Bower, 1973; Cross, 1978, the conclusion was the same: educationally disadvantaged adults are more likely to rely on television as their principal source of information; that they are more interested than better-educated groups in receiving information about opportunities via television. Again in 1981 Gerbner concluded that "television tends to monopolize the free time of less educated, lower income groups" (p. 902). Since television is said to reach 80% of the population of North America (M. Jones, 1982, p. 210), we know that despite their lack of affluence, most poor and undereducated North Americans do own at least one television set.

Television, while it may not help the adult illiterate learn to read, can guarantee him a learning situation in the security of his own home eliminating the fear of failure and embarassment in front of teachers and fellow students. Television enforces no tests at the end of programs nor does it require the learner to speak out in organized discussion sessions. While it is quite possible that the learner may not learn much of the specific content of the average television program, he is exposed to new ideas and concepts and is often provided

with suggestions and guidance in obtaining additional information from other sources.

St. Clare's Project

In March, 1982, the educational televison department of St. Clare's Mercy Hospital, St. John's, Newfoundland, in cooperation with the Newfoundland and Labrador Community Services Council, received federal funding for a summer project. The project involved the production of a series of five television programs, each of 20-30 minutes duration. The series was intended to inform hospital patients, their families, and the general public of various community and health support services for those needing some type of continued care or support following discharge from a health care institution.

After completion of the programs, plans called for airing the series on the patient education channel within St. Clare's Mercy Hospital, and on the community access channel of Avalon Cablevision. Additionally, the Community Services Council, a social planning agency working to improve social services through planning, research and liason, retained a copy of the programs for use by groups throughout the province requiring this type of information.

Prior to the commencement of actual production on June 1, 1982, the department hired a production team to research and produce these programs. The team consisted of one executive producer who was E.T.V.'s Director of Television at the hospital, and a television technician also employed in the department. Hired for the project were two masters candidates; one graduate of the Masters in Educational

Communications and Technology program at Memorial University of Newfoundland; and one production assistant, an undergraduate social work student of the same institution.

With the exception of the production assistant, each of the other five members of the team accepted responsibility for the design and direction of one videotape program.

The first program of the series, Community Support Services, presents a general introduction to the concept of support services for those in need of ongoing assistance and care. The four remaining programs deal with services for those with special needs or problems: the sick child, the cancer victim, the alcoholic, and the physically disabled. This developer was responsible for the program on physical disability entitled Physical Disability and You. The video production focused attention on community support services available to ambulatory disabled and visually impaired adults.

CHAPTER II

NEEDS ASSESSMENT

Statement of Needs

In 1977, St. Clare's Mercy Hospital, St. John's, Newfoundland, established a closed circuit television channel. The goal of the channel was health promotion: providing patients and staff with televised instruction so as to increase the level of patient health and/or the proficiency of staff in meeting the needs of patients.

Programs on Channel 5 were either purchased from outside sources, or made within the E.T.V. department which housed a studio production facility. The staff, in consultation with health care professionals from other departments, produced programs on a variety of topics specific to the needs of the hospital, frequently using hospital employees as talent.

The patient-education channel was made available on all television sets throughout the hospital. Each nursing unit has a television lounge. Laboratory and outpatient reception areas are also equipped with television monitors. Additionally, patients can rent individual monitors which are attached to their beds for the duration of their stay. The department also has mobile capability; portable monitors can be used with a video playback unit to show specific programs to patient or staff groups.

The educational television department at St. Clare's, through a summer project funded by the Health Promotion Directorate, evaluated Channel 5 during the summer of 1981. The evaluation was designed to (a) assess the merit and worth of programming presented through the Channel, and (b) give direction to decision-making for future planning and development (Kennedy, 1981, p.2).

A large number of patients involved in this evaluation found that the programs were good but suggested that the channel could be improved if a greater variety of programs were available. Some felt that the programs should remain general in nature, rather than use medical terminology and in-depth medical information. Other viewers felt that patient input during program development would result in better programs.

Patients were asked to express opinions on the future development of programs. Suggestions included "the development of programs dealing with family and societal problems, with special emphasis on community help agencies" (Kennedy, 1981, p. 44). Although the patient channel aired a number of programs on pregnancy and childbirths, viewers expressed the need for programs dealing with problem pregnancies, birth complications, and infant health problems. The study found that specific content gaps in programming included cancer information, coronary information, and diet/nutrition materials.

In general, viewers found the whole idea of patient education an interesting concept. They were enthusiastic about the concept of receiving information about their specific illness, and the provision of general health information through this medium.

Based on the findings of this 1981 Patient Channel Evaluation Study, a project was undertaken during the summer of 1982 to develop further programs for Channel 5. This project, funded by the federal government and sponsored by the Newfoundland and Labrador Community Services Council, was conducted at the educational television department at St. Clare's Mercy Hospital, St. John's, Newfoundland. The project was funded to develop 5 programs and the decision was made, based on the evaluation study, to make a program on each of the following topics:

(1) Community Support Services: A Series Introduction
(2) Physical Disability
(3) Alcohol Abuse
(4) Cancer
(5) Children with Chronic Medical Conditions

This paper describes the procedures involved in designing, developing, and evaluating the program on physical disability entitled Physical Disability and You.

Alternative Solutions

In the development of a project as extensive as this one, a developer should consider one of three available alternatives as the basis for instruction:

(1) search for, procure, and adopt existing materials.
(2) adapt existing materials to suit predetermined needs.
(3) design and produce a completely original package to meet the specific needs of the target audience.

The first two suggestions appear to be the most desirable since the amount of time and money spent is less than that required for the development, production, and evaluation of an original package.

In order to determine the ultimate course to follow, however,

the developer must first examine any existing materials related to the problem and assess their applicability.

Survey of Existing Materials

The developer conducted a search of all existing materials related to community services for the physically disabled. The search was conducted at the following places:

- Canadian National Institute for the Blind
- Canadian Paraplegic Association
- Canadian Red Cross
- Center of Audio Visual Education (CAVE), Memorial University of Newfoundland
- Center for Newfoundland Studies, MUN Library
- Department of Health, Audio-Visual Division
- Department of Social Services, Rehabilitation Services
- Educational Television, MUN
- Educational Television, St. Clare's Hospital
- Leonard A. Miller Center
- MUN Extension Services, Media Division
- Newfoundland Lung Association
- Newfoundland and Labrador Wheelchair Sports Association
- Newfoundland Society for the Care of Crippled Children and Adults
- HUB (Physically Handicapped Service Center)
- Victorian Order of Nurses
- Public Health Nursing, Department of Health

The search revealed that, while there were programs dealing with a physically disabled person per se, there was nothing available in St. John's that dealt specifically with the community services available to the physically disabled as a special group. Furthermore, the requirement for materials specific to needs of patients in the local geographic area immediate to St. John's, Nefoundland, eliminates the possibility of adapting commercially made materials of a general nature.

Decision To Produce Materials

Since the existing materials did not present a detailed account of the many services the community offers to the physically disabled as a special-needs group, it was decided that it was necessary to produce an original information package.

The decision to produce a video for television was based on two factors, the most obvious being that St. Clare's Hospital already had the necessary facilities including a patient channel; and secondly that television appeared to be the "correct" choice of media for this project, and the correct choice of media will "reach the largest audience that will receive the greatest benefit from the instructional system at the most economical cost" (Markle, 1975, p. 201).

Some of the characteristics that make television "correct" are:

(1) it is capable of dynamic, fast moving presentation.
(2) it is widely available as a medium of reception.
(3) it is capable of presenting examples in settings closely related to real life situations.
(4) there are no age limits or social sanctions associated with television.
(5) it has great popular appeal; nonreaders and poor readers are more likely to be reached by a widely publicized presentation on television than by any other available medium.
(6) it is a powerful medium for influencing attitude change.
(7) it can be delivered individually or on personalized time schedules.
(8) it is a delivery system that is adaptable to individuals or groups.
(9) television can use important persons with high status to present content.
(10) many people now allot large portions of their nonworking time to viewing television.
(11) television can employ both motion and sound, with control over synchronization, an advantage shared only by live and filmed presentations.

Summary

The Patient Channel Evaluation Study determined that a need existed for a program on community services for the disabled. The choice of media for the program was determined by the many distinct advantages of television, and by the fact that St. Clare's Hospital had a patient channel. To further develop the program it was necessary to do what Thiagarajan (1974) called a learner analysis in order to determine the general characteristics of the intended audiences.

CHAPTER III

LEARNER ANALYSIS

Once the decision has been made to produce an instructional package, a learner analysis should be conducted as it directly affects all succeeding stages of instructional development. Thiagarajan (1974) defines learner analysis as "the preliminary stage of instructional development in which the characteristics of the target audience which are relevant to the design of materials are identified" (p. 25). The characteristics of the target audience will determine such factors as language, style of presentation, choice of examples, even final packaging and dissemination.

Three different audiences for this package were identified:

(1) primary audience, patients at St. Clare's
(2) secondary audience, patients' families
(3) tierchiary audience, the general public

Primary Audience

The primary audience, or target audience, for this instructional package is identified as adults who are patients at St. Clare's Mercy Hospital and who are victims of an ambulatory or a visual disability. The majority have undergone major surgery; some are severely immmobilized; others are undergoing extensive therapy.

It is virtually impossible to attempt to categorize this group in terms of such factors as educational background, intelligence level,

or socio-economic background. Potential clients could be rich or poor, illiterate or well educated, may live in urban or rural centers, or range in age from 17-70 years. Experience at the hospital indicates that an overwhelming majority of these patients need some information on what community services are available to them upon discharge from the hospital and while undergoing recuperative therapy. It is safe to assume that they all watch television, at least occasionally, and that they can assimilate general information easily from it.

Secondary Audience

Although the information package was designed primarily for hospital patients who have some form of ambulatory or visual disability, there are other groups who may utilize the materials. Patients' families are an important group to consider as they play a vital supportive role during an individual's rehabilitation by providing comfort and encouragement (Litman, 1966). Many families are unable to provide the type of care required by a physically disabled adult; and thus these families could benefit greatly from knowing which community services are available, and how these services can help the disabled family member. Often it is the family who provides the moral support to the disabled person in seeking out what services may be available, either physical or psychological.

Tierchiary Audience

In addition to the patients and the families of patients, a third group for which this program was designed is the general public. Since the general public are prospective clients for the type of services

outlined in this program, it is important that this information be made available to them.

Canadians are told that they are "into fitness" now; but recent research indicates that in fact they are rather complacent about their health, and tend to place high confidence in the medical profession. This leads to a "live-for-today" attitude and a lack of interest in prevention (Gerbner et al, 1981). Because of this research it was determined that an important goal of this program, Physical Disability and You, is to raise the level of awareness of the general public to the need for preventive medicine; and to emphasize that there is no "pill for every ill" - the doctor cannot provide a cure for every problem that arises.

Prevention is an ongoing part of the philosophy of St. Clare's Hospital. They take every opportunity available to make people more aware of the need for prevention either through nutrition, exercise, regular check-ups, or safety practises. Developing and producing programs such as Phsyical Disability and You is an effective way to reach people through television with the message of prevention. The public spends much of its non-working hours watching broadcast television, and more recently, cable television. It was estimated as early as 1975 that television was present in 97% of North American households (Burdman, 1975, p. 14), and is watched by people in all segments of our society, old and young, rich and poor, educated and illiterate.

Summary

Once the characteristics of the three audiences - primary, secondary, and tierchiary - were determined, the next step in the developmental process was to design a content analysis which outlined the topics for discussion in the program.

CHAPTER IV

CONTENT ANALYSIS

Before the actual development of the instructional package took place, it was necessary to delineate precisely what information would be included and excluded, and to arrange this content in a sequential manner.

It was necessary to exclude many disabled groups because it was felt that some of them (e.g. the hearing impaired) needed their own in-depth presentation, and because there were several constraints imposed on the project.

List of Constraints

1) Commercial TV Format Limitations
Media experts suggested that the program be kept to under 30 minutes duration to meet the half-hour standard format of commercially produced TV programs.

2) Attention Span of Viewers
Many of the illiterate adults in the viewing audience would find it difficult, if not impossible, to assimilate information beyond the 30 minute time frame. More importantly, the primary audience for this program (the physically disabled patients at St. Clare's) would lose interest quickly because of their physical discomfort.

3) Budget
Low budget television imposes many restrictions. It forces the producer of the program to use less-than-the-best equipment, hire actors who are willing to work for "scale", and hire the minimum number of personnel. The developer must be responsible for all areas of production from research to final editing.

4) Time
The whole series had to be completed within three months. Since there were five productions everything had to be done on a very tight schedule.

5) Equipment
The ETV department at St. Clare's had no mobile camera equipment. Cameras and other necessary items had to be rented from commercial establishments or Avalon Cablevision. On many occasions Avalon Cable needed its equipment at the same time the St. Clare's team were scheduled to shoot.

The format utilized to describe the content of the materials is outlined in the figures on pages 28 through 49.

Goals and Objectives

The needs analysis indicates a need for programs dealing with societal problems, specifically with the need for information about community help agencies. Indications are that the intended audience has little information about the community services available to them as part of special needs groups. While it is hoped that hospital personnel do inform their patients of such services, discussions with nurses, X-ray technologists, and others at St. Clare's Hospital indicated that such was often not the case. The health care professionals primarily informed their patients of physical rehabilitative services, but frequently lacked information themselves about such things as jobs, housing, and transportation for the disabled.

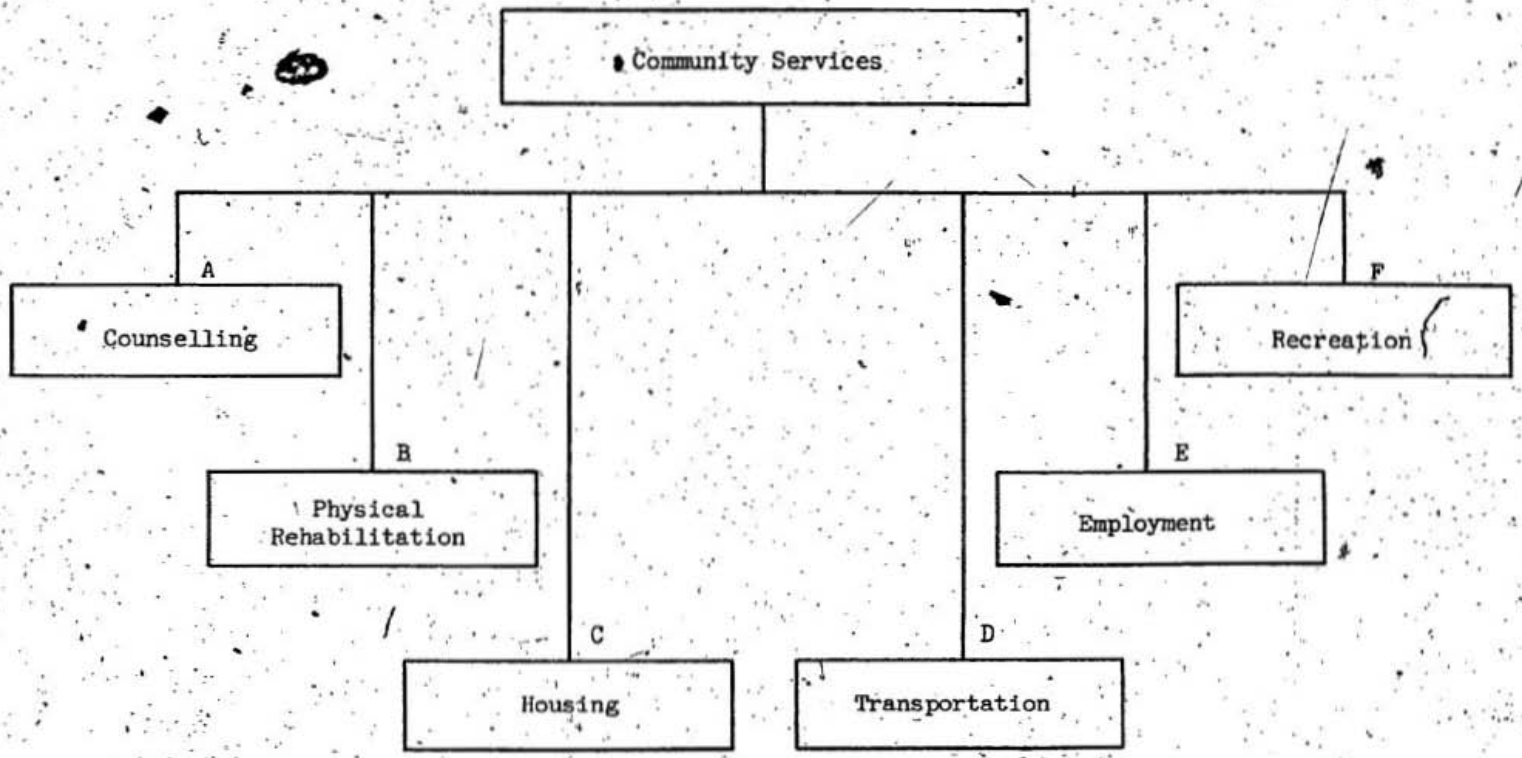
From a practical perspective it was hoped that increased knowledge of community services would generate interest among patients and their families and that such interest would result in requests for further information from the individuals featured in the program, or from the Community Services Information Center. Such goals were general aims of the program, the relative success of which could only be determined after extended use of the program. There were, however, two very definite and specific goals of the program.

Program Goals

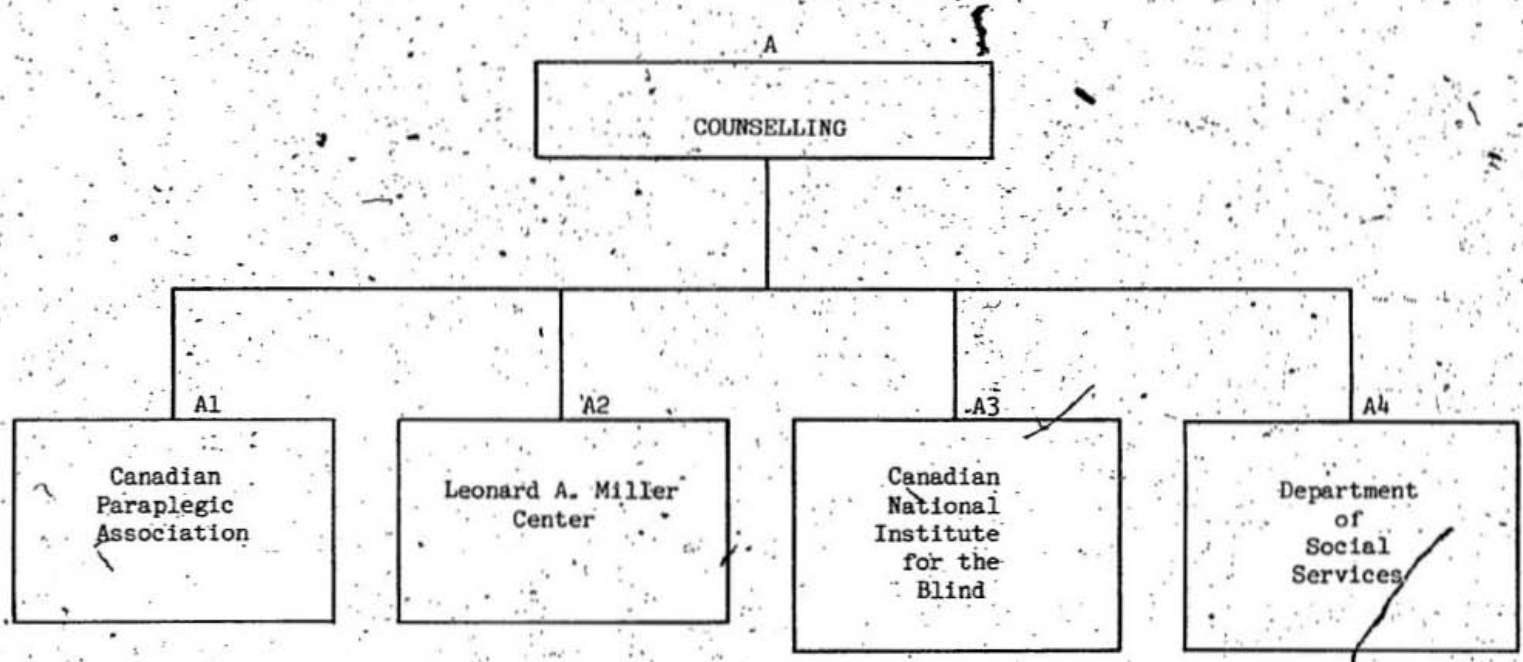
Based on the findings of the 1981 Patient Channel Evaluation Study at St. Clare's, the goal of the program was to inform hospital patients of various community and health support services for those needing some form of continued care or support following dismissal from a health care institution in St. John's. These patients were the primary target audience of the program. The videotape was designed to reach a secondary audience, namely the families of patients at the hospital; and a tierchiary audience who included all adults in Newfoundland and Labrador who might have need of hospitalization in St. John's, or who might, in the future, require the assistance of various support agencies whose services exist in other parts of Newfoundland (e.g. Newfoundland Paraplegic Association).

Drawing on previous research done by both the Institute for Research in Human Abilities and Extension Media (Memorial University of Newfoundland), and the developer's own work experience with illiterate adults, a further goal became implicit: to ensure that the program also met the needs of adults who are functionally illiterate (Grade 8 and under according to the Newfoundland Division of Adult and Continuing Education), and who frequently do not seek health information per se.

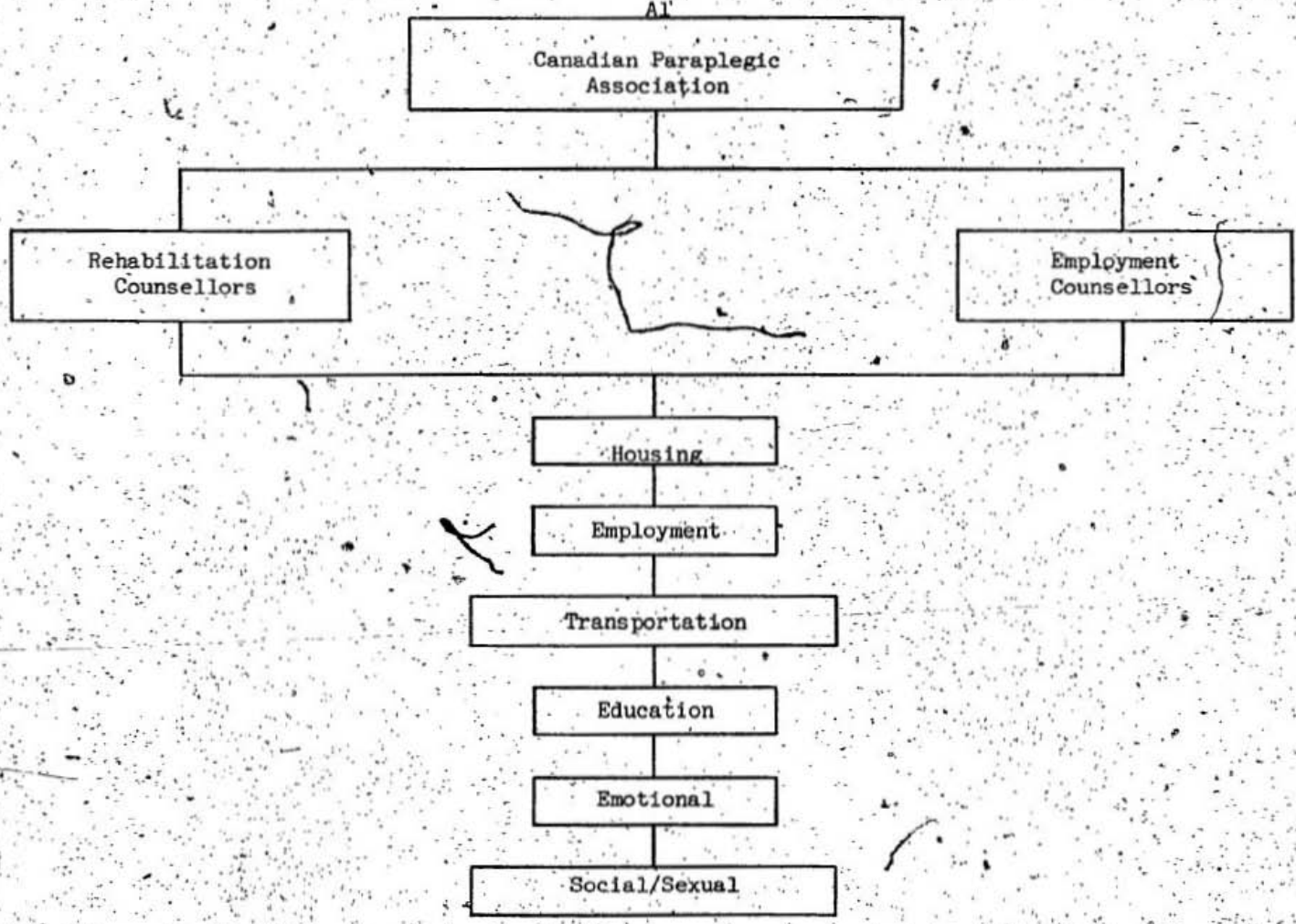
Content Analysis (1)



Content Analysis (2)

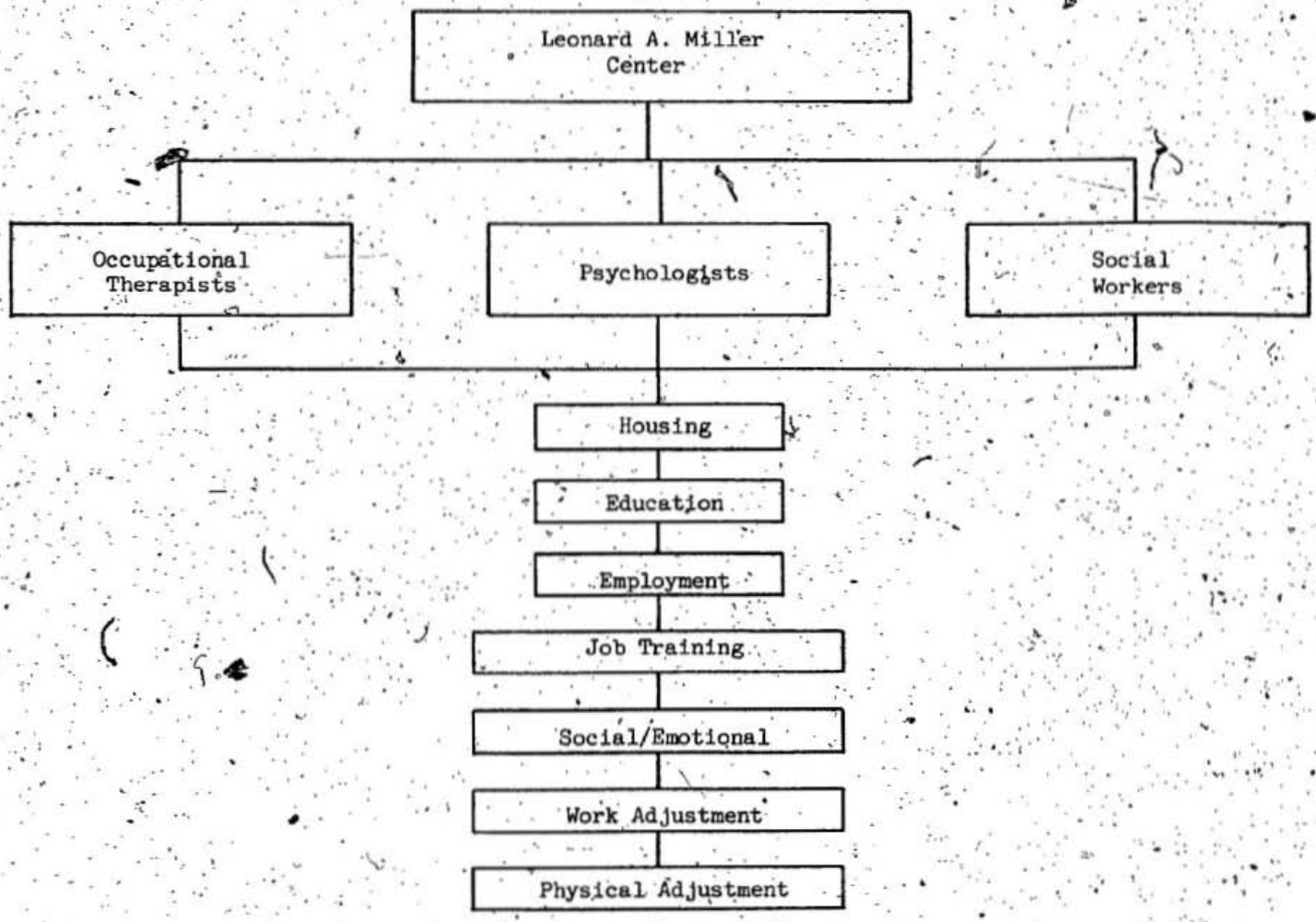


Content Analysis (3)



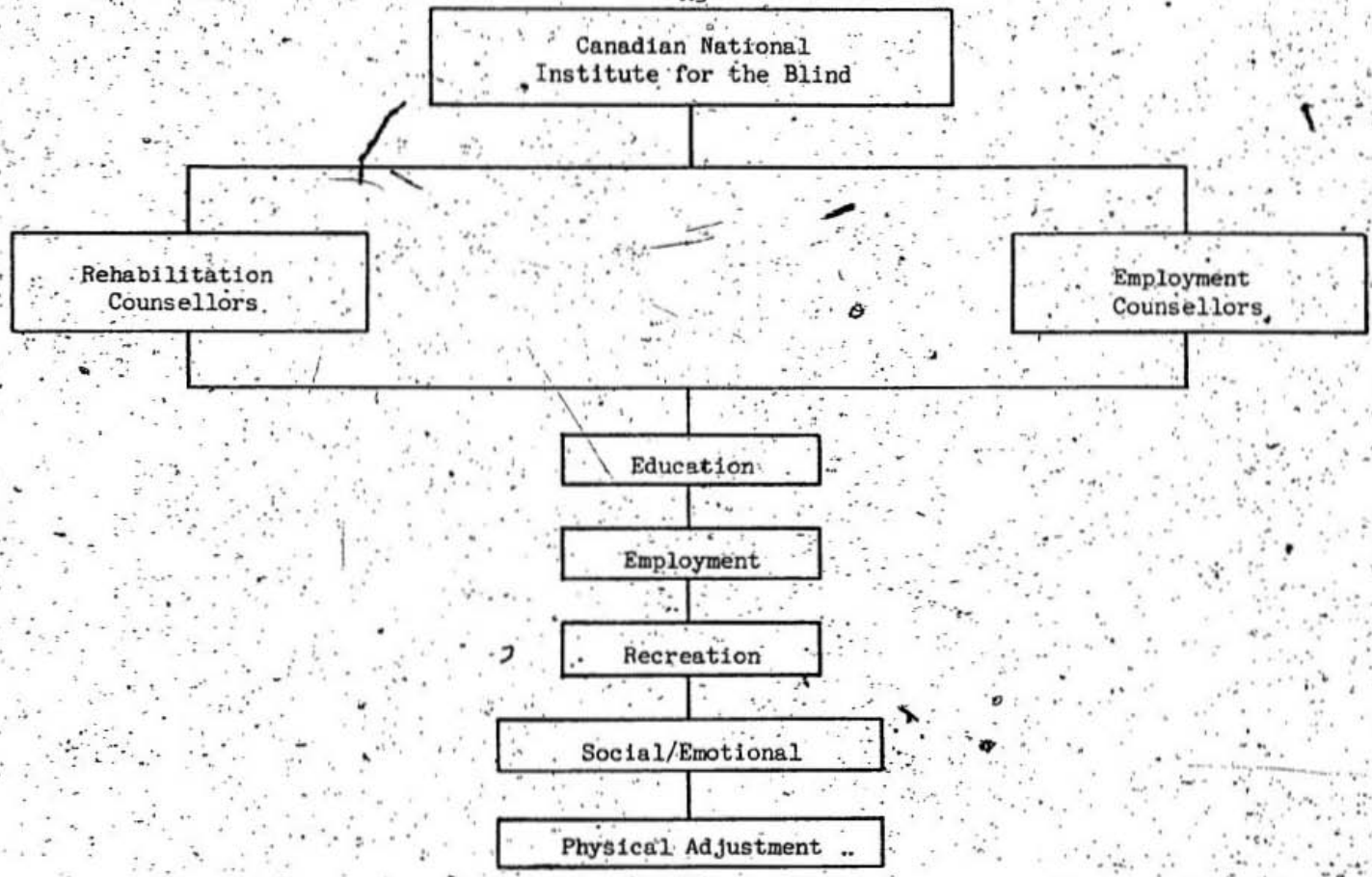
Content Analysis (3)

A2

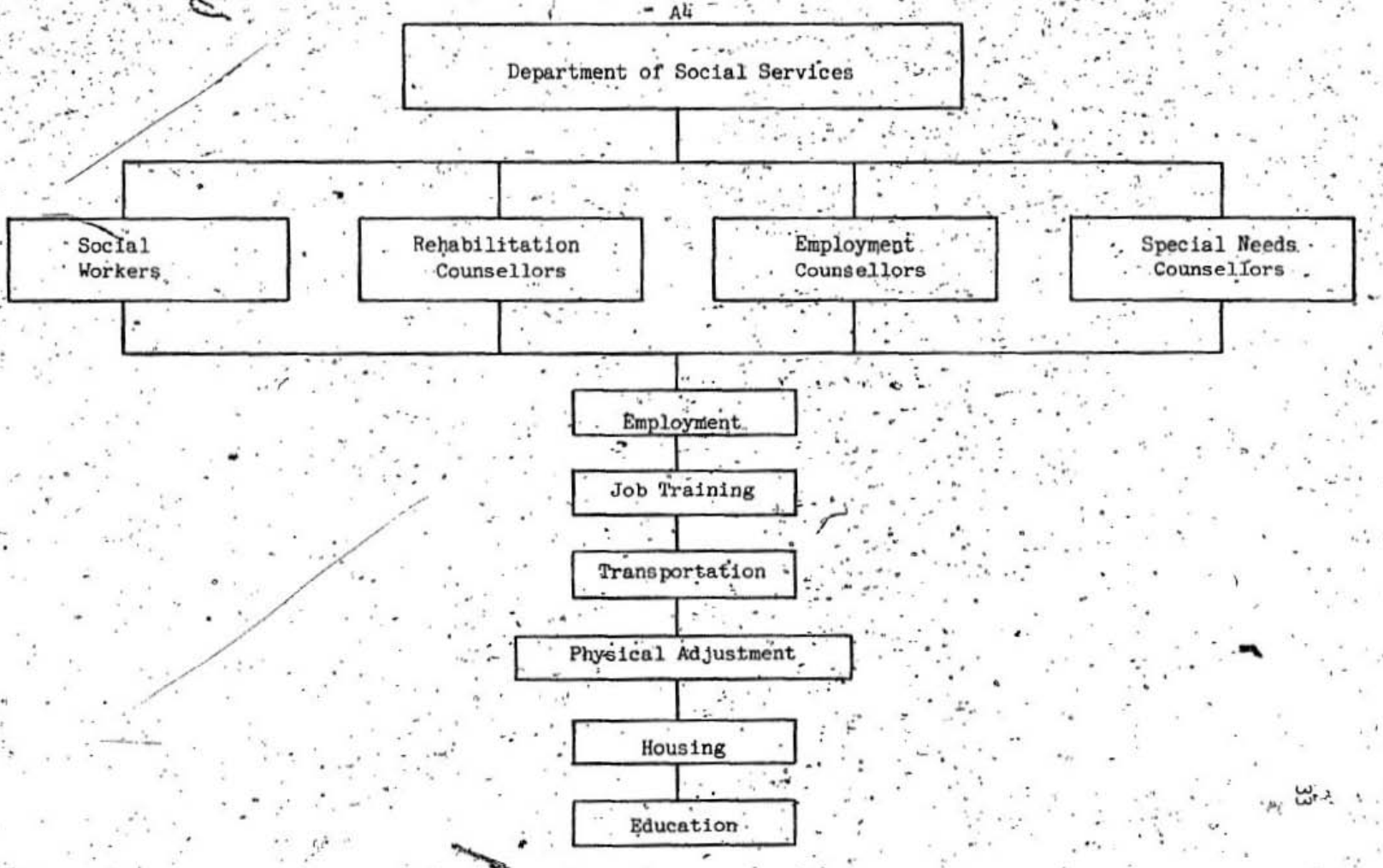


Content Analysis (3)

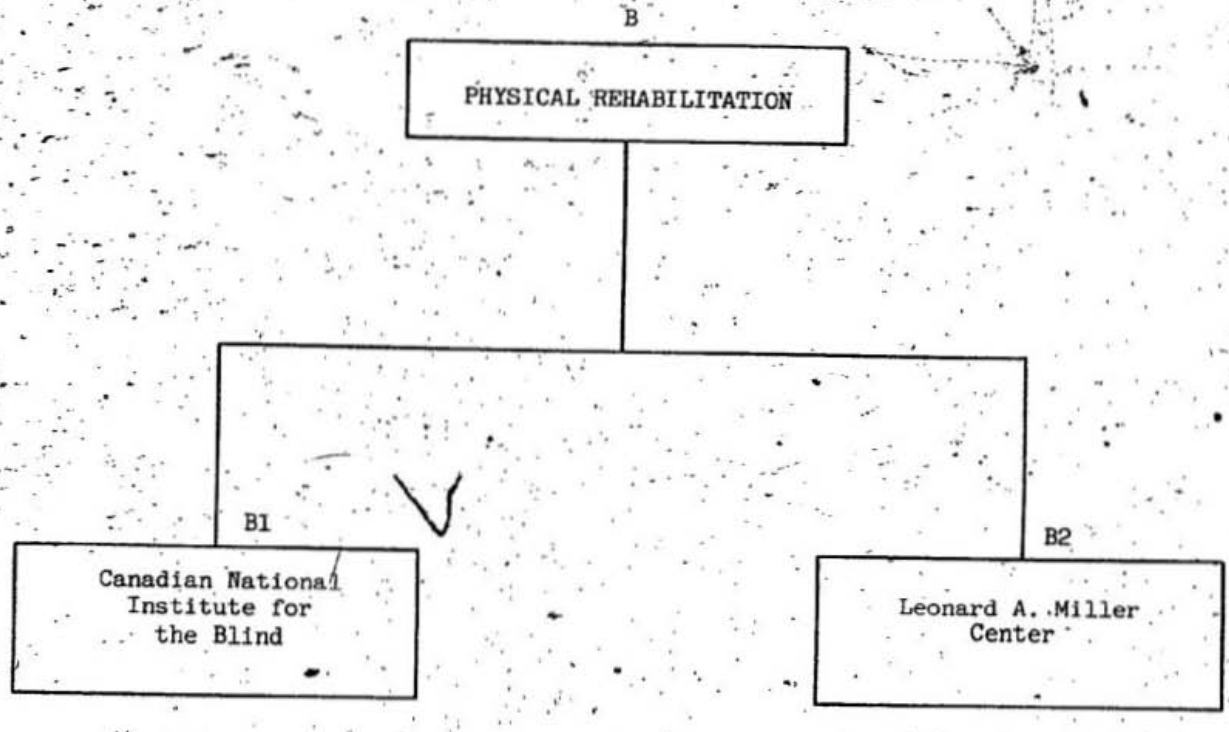
A3



Content Analysis (3)

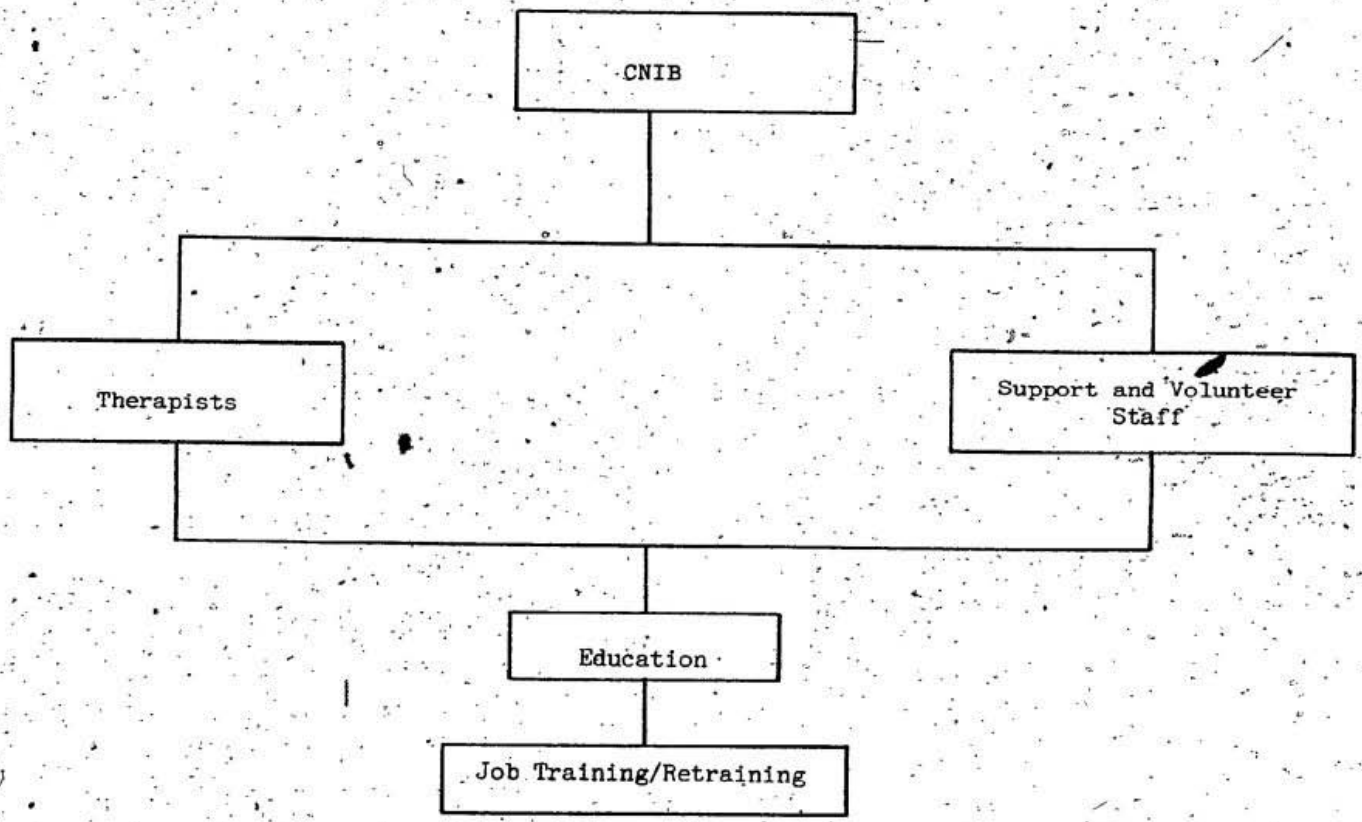


Content Analysis (4)



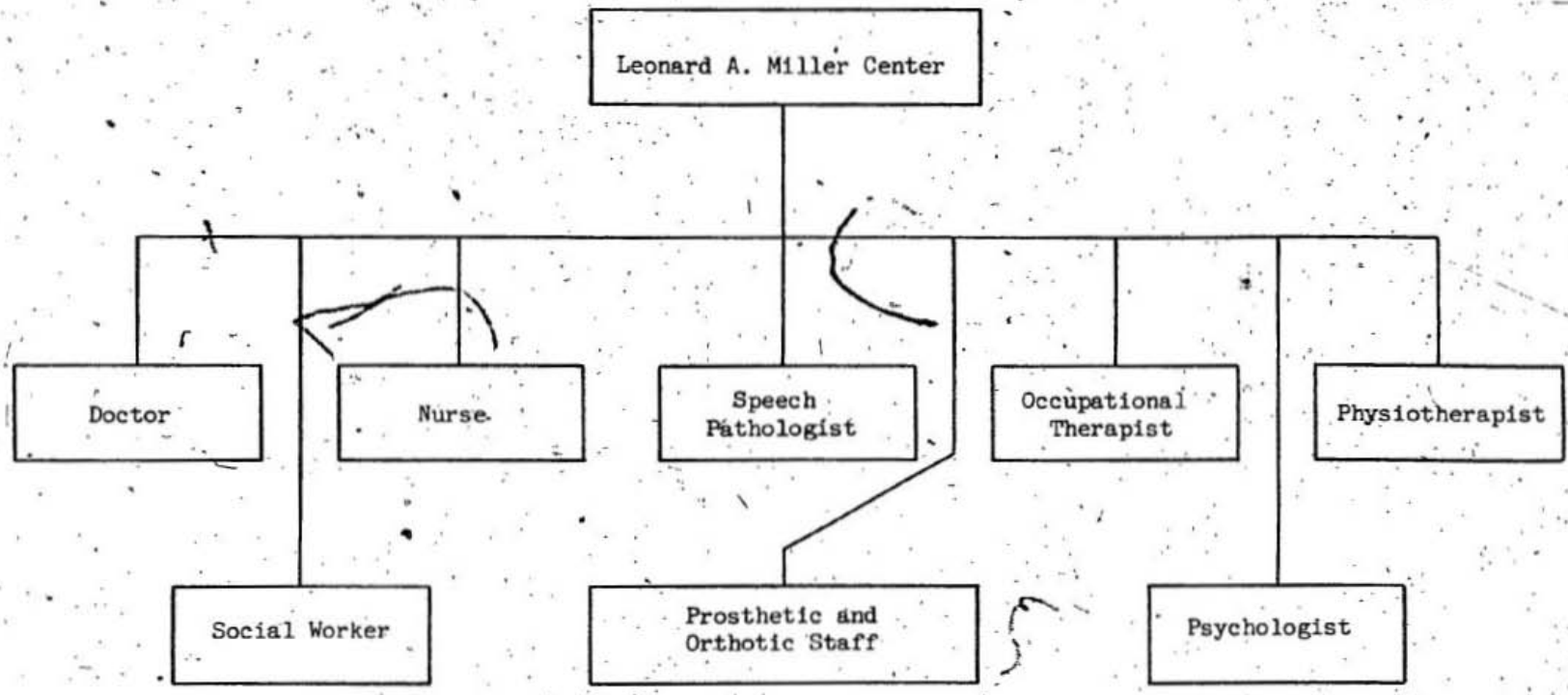
Content Analysis (5)

B1

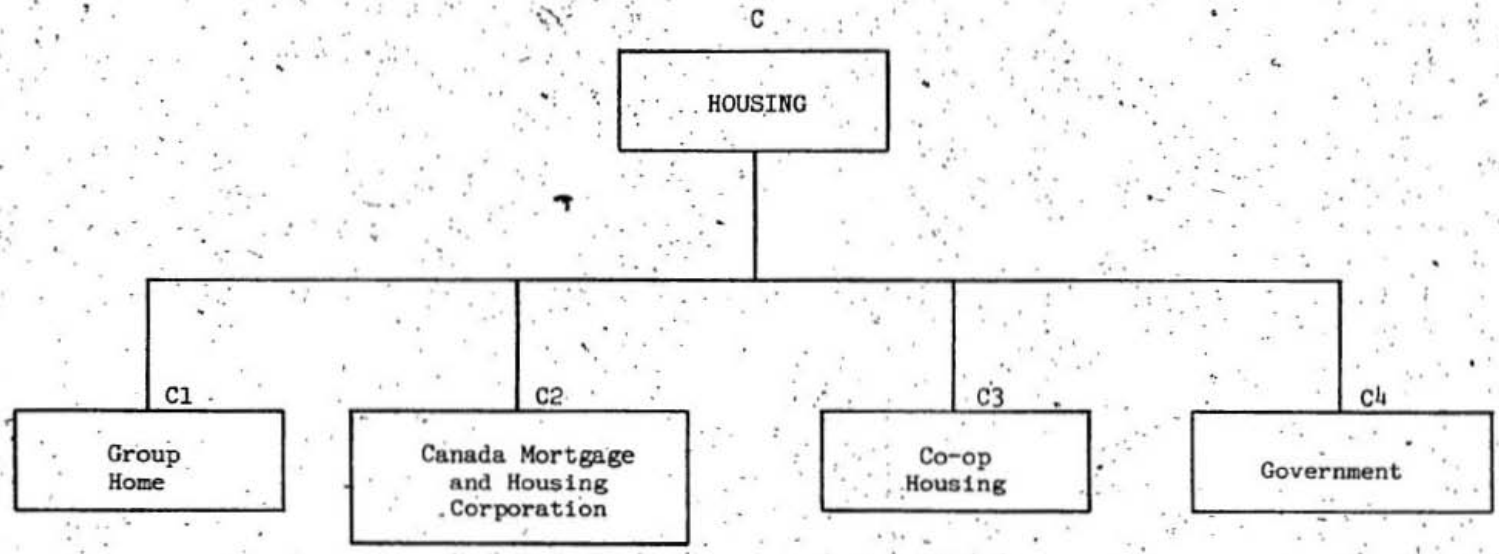


Content Analysis (5)

B2

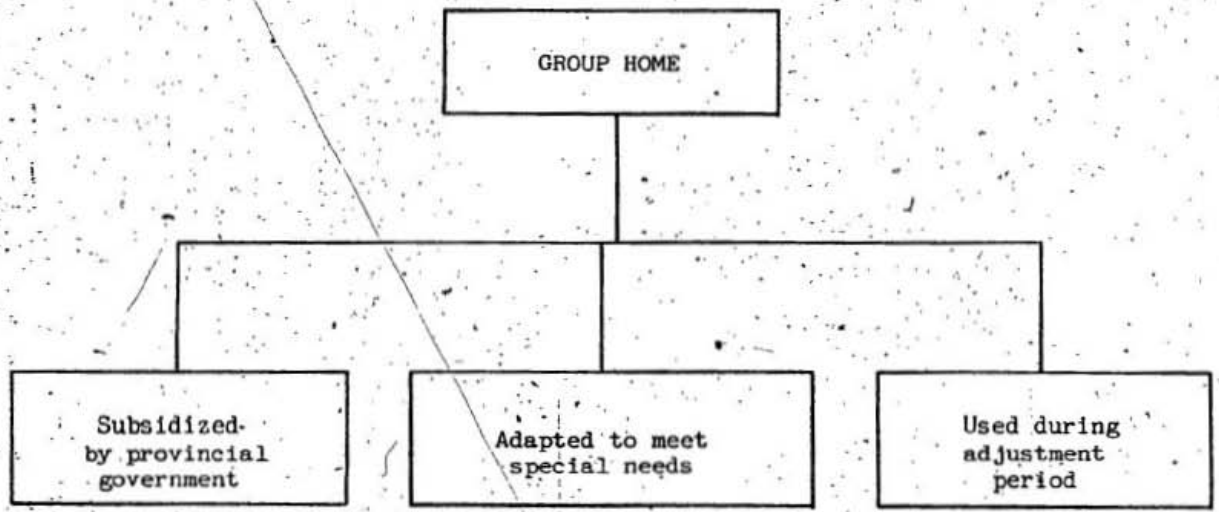


Content Analysis (6)

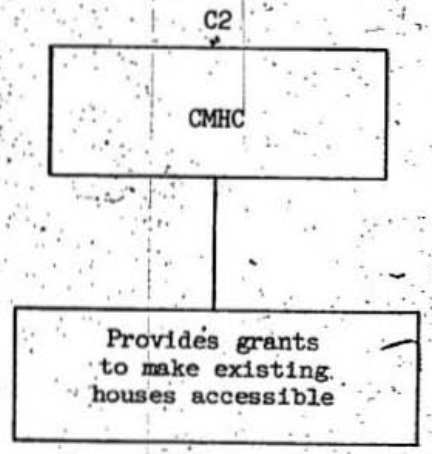


Content Analysis (7)

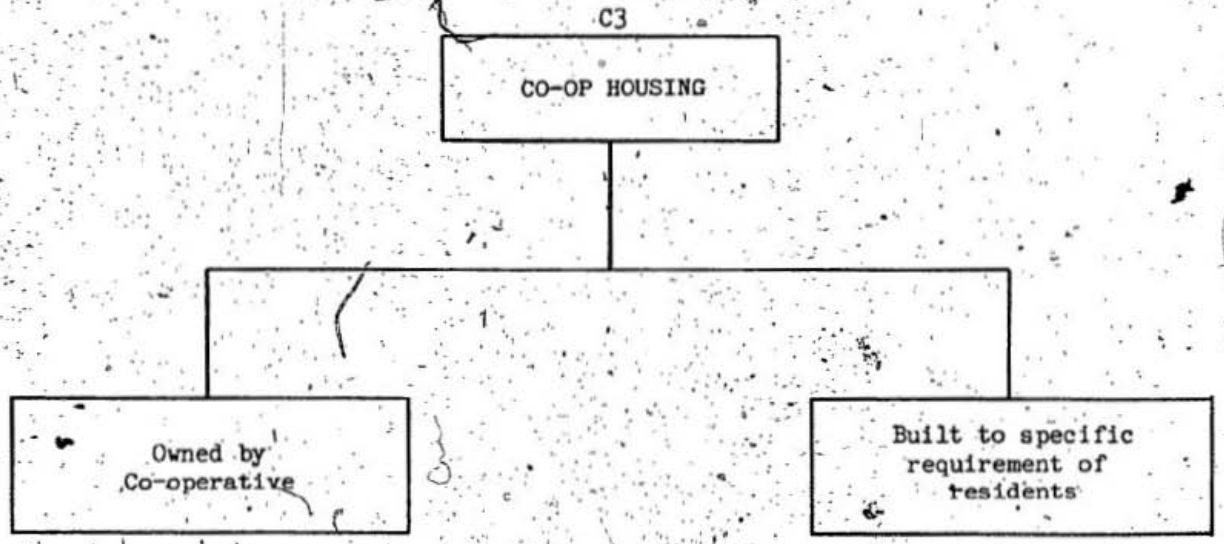
C1



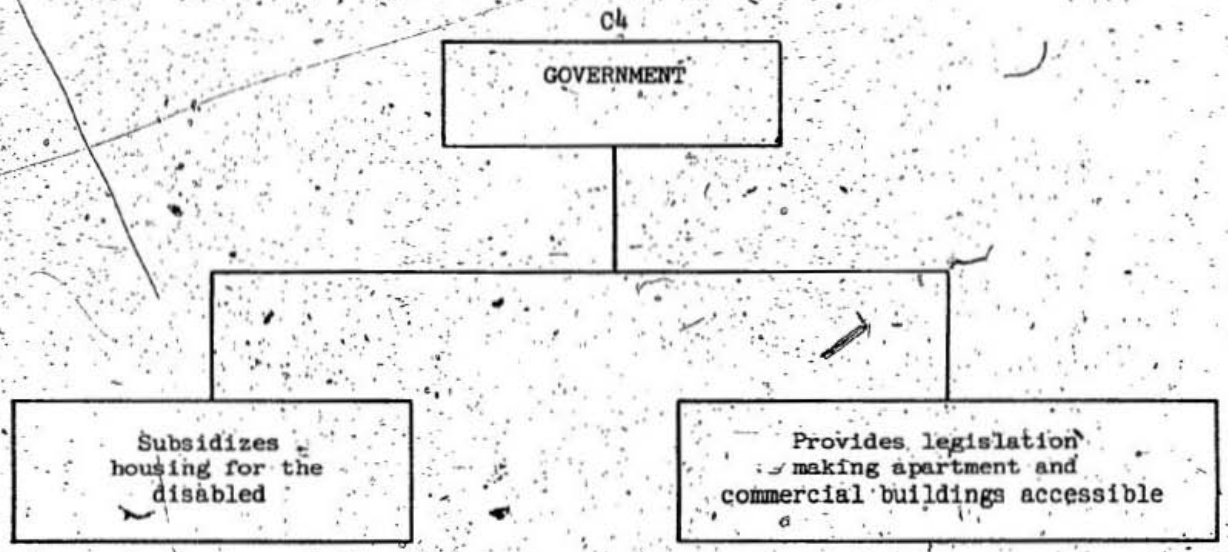
Content Analysis (7)



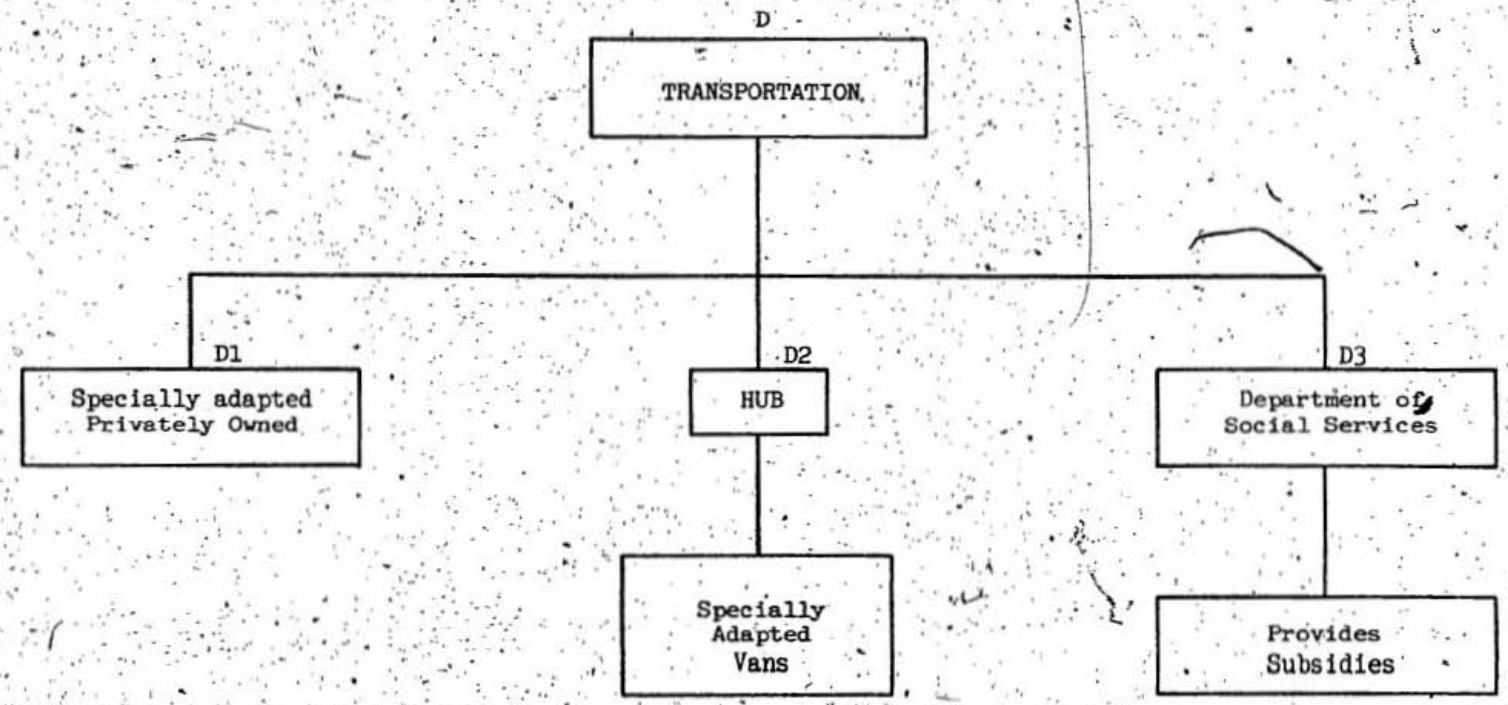
Content Analysis (7)



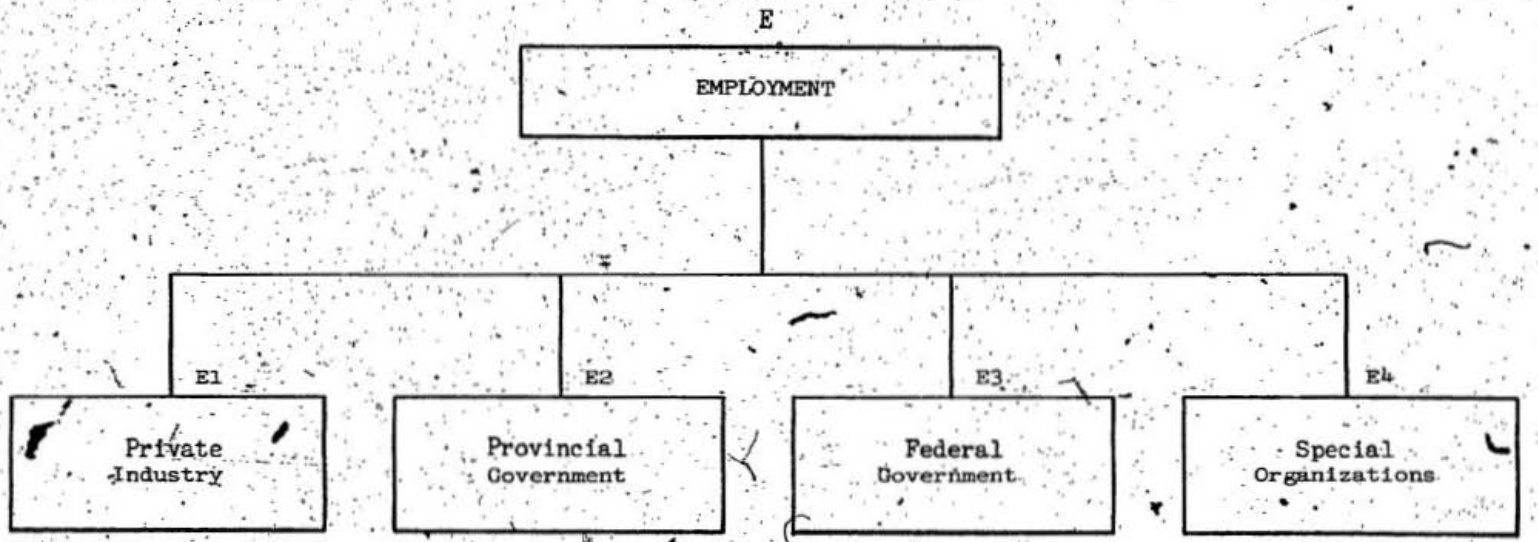
Content Analysis (7)



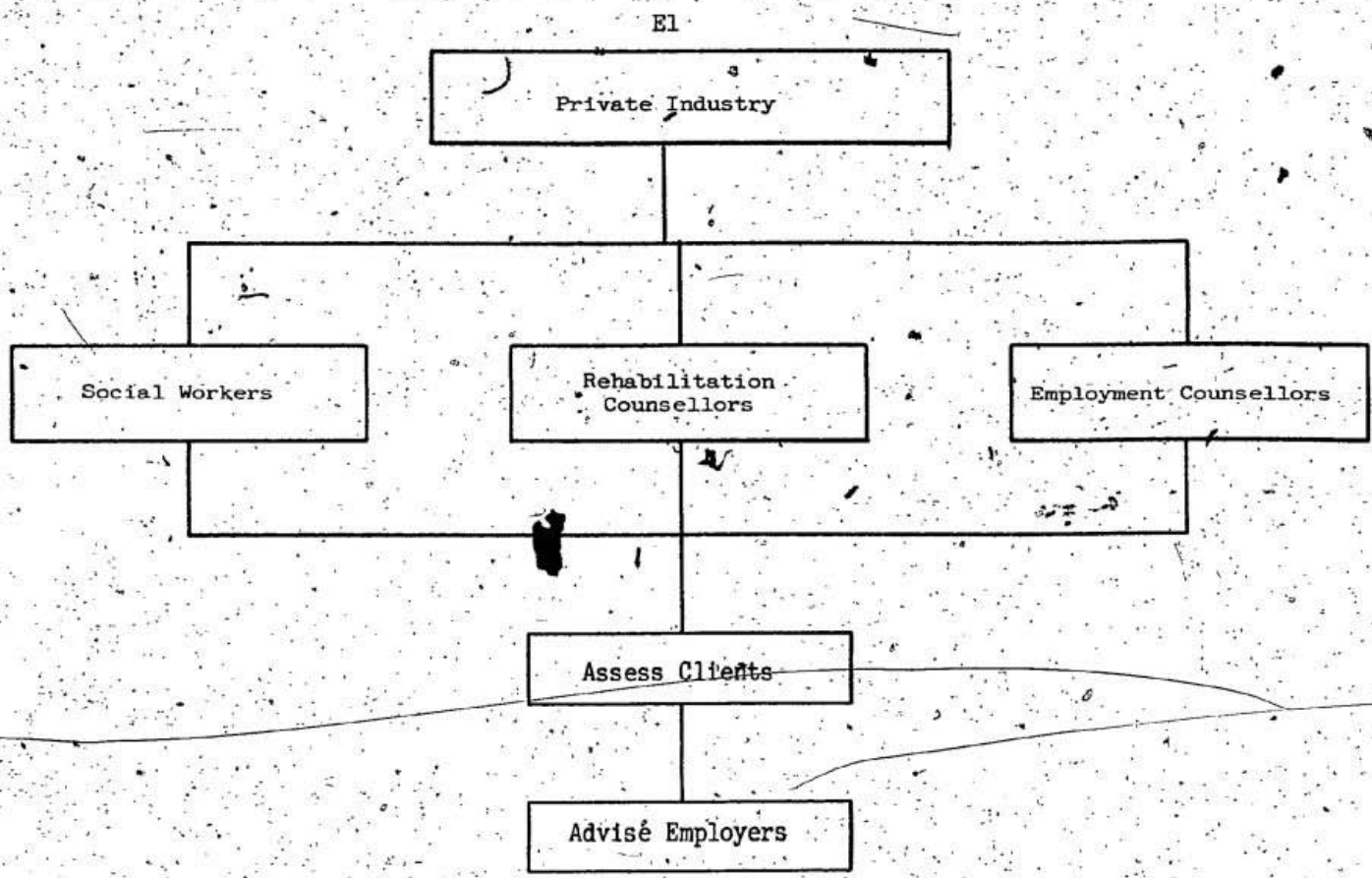
Content Analysis (8)



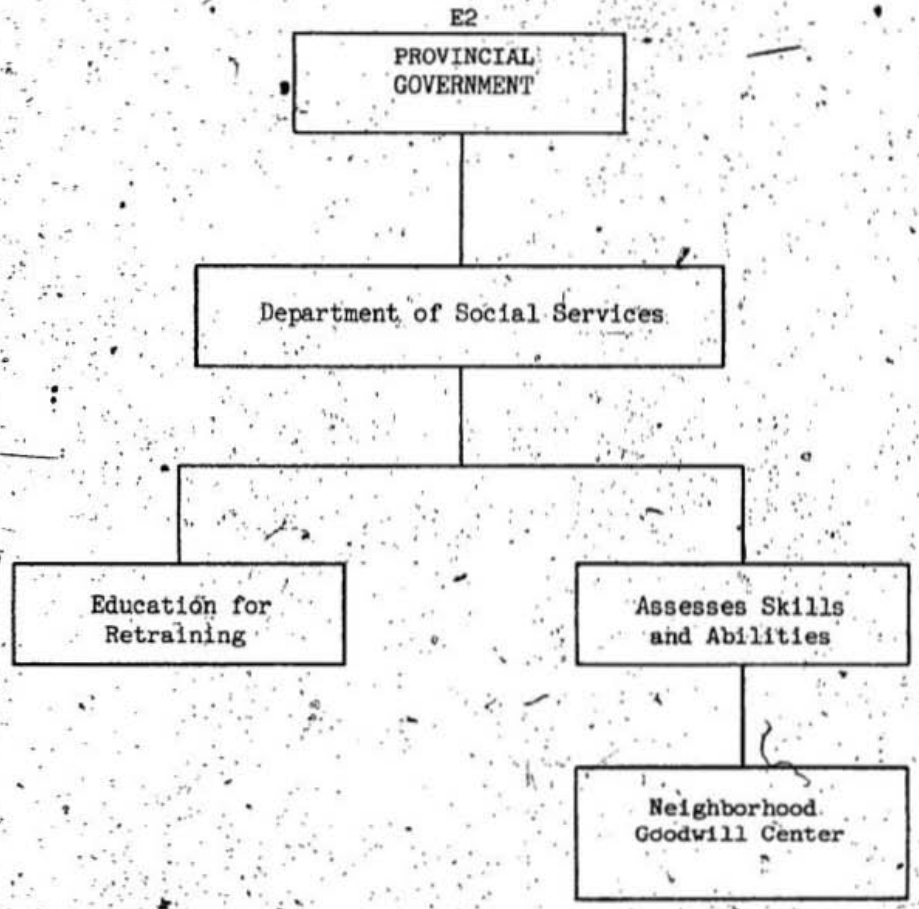
Content Analysis (9)



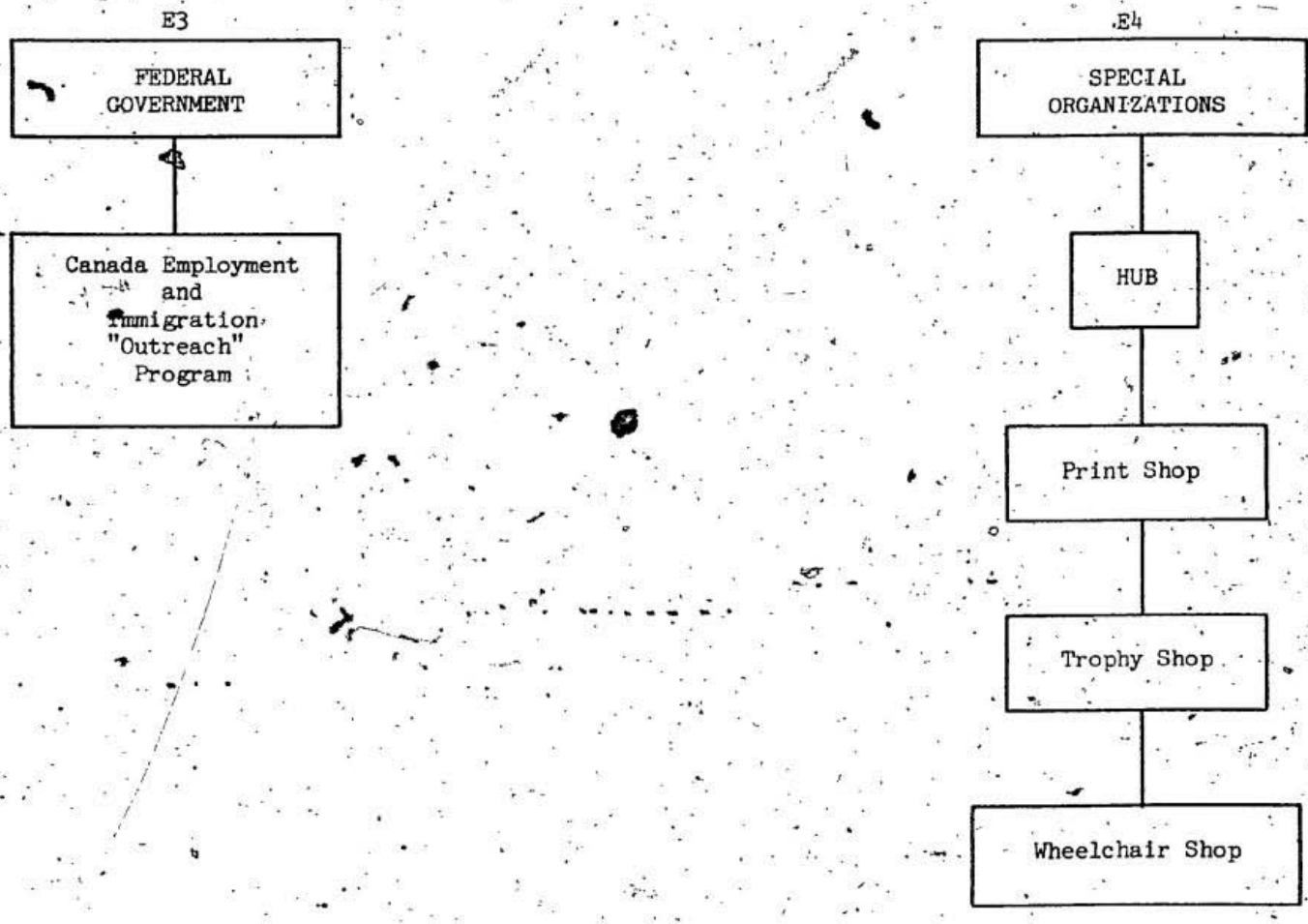
Content Analysis (10)



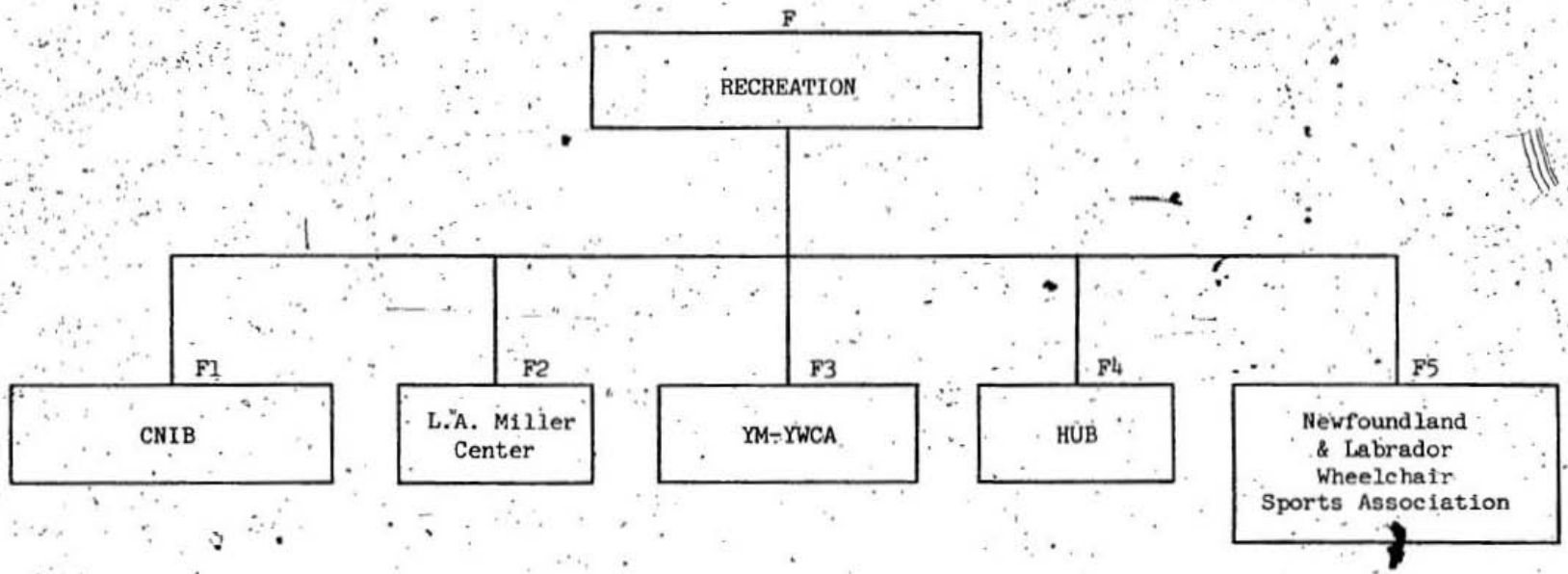
Content Analysis (10)



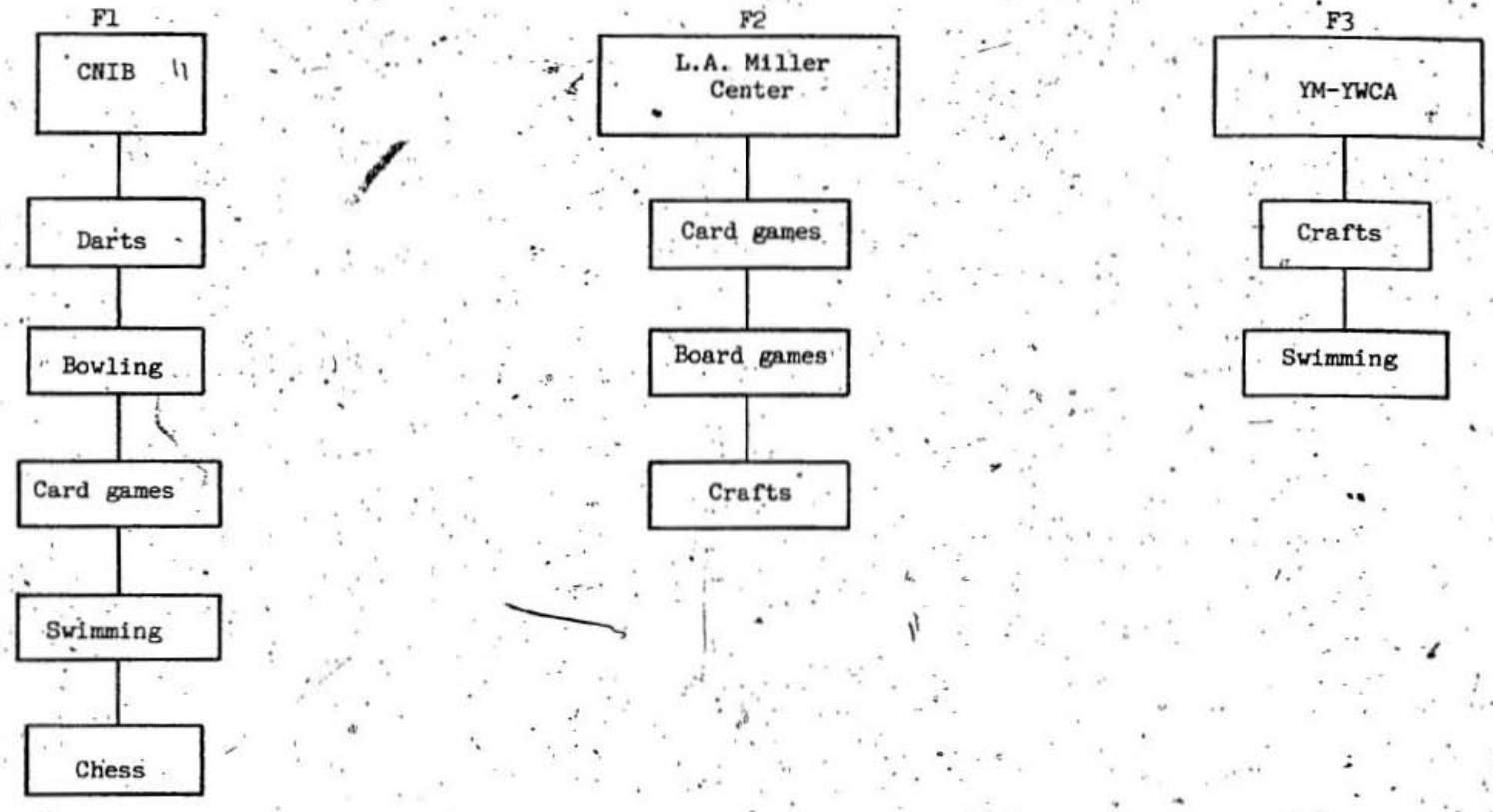
Content Analysis (10)



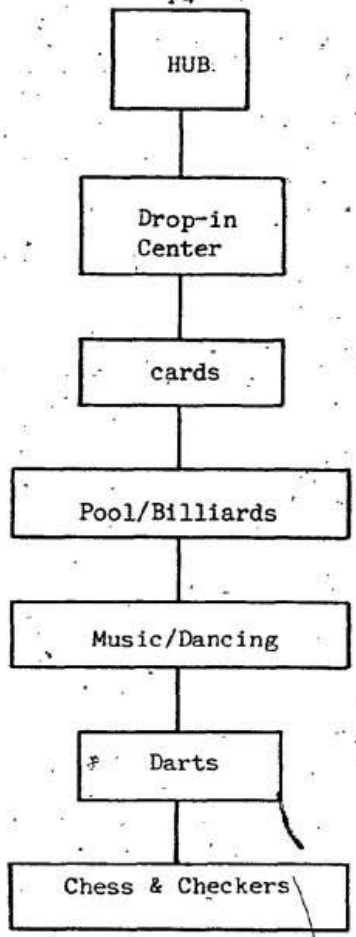
Content Analysis (11)



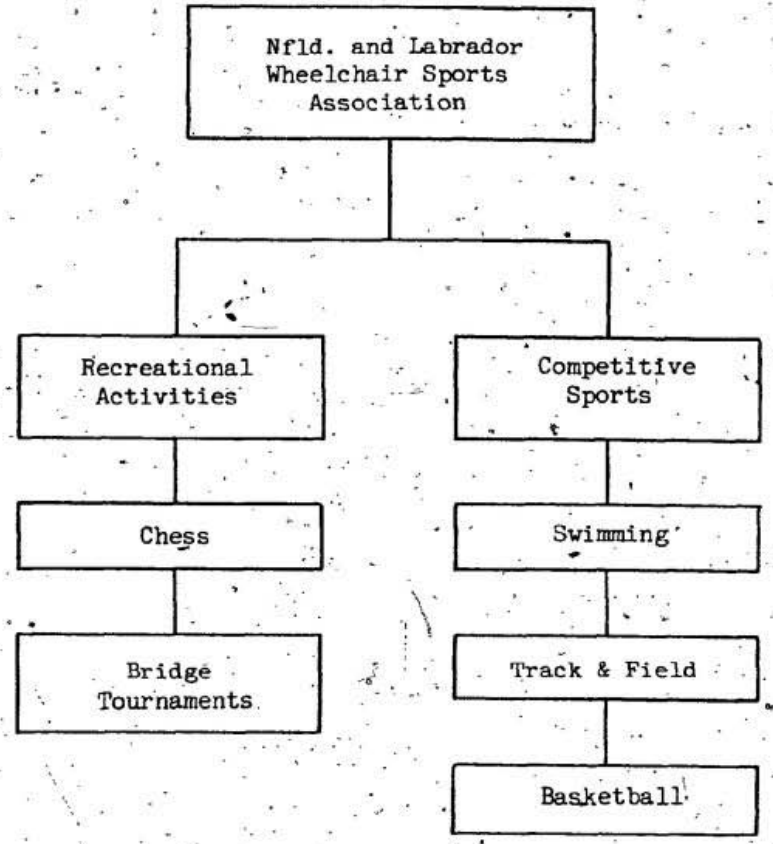
Content Analysis (12)



F4


HUB
Drop-in Center
cards
Pool/Billiards
Music/Dancing
Darts
Chess & Checkers

F5


Nfld. and Labrador Wheelchair Sports Association
Recreational Activities
Competitive Sports
Chess
Bridge Tournaments
Swimming
Track & Field
Basketball

CHAPTER V

DEVELOPMENTAL PROCEDURES AND FORMATIVE EVALUATION

The television program, Physical Disability and You, was designed within the framework of an established instructional development plan. Once the initial planning procedures of needs assessment, learner analysis, and content analysis had been completed, the production phases began including scripting, taping, editing, and evaluation.

Prior to the start of production in June, 1982, the production team met with the Executive Producer who briefed all members on the findings of the Patient Channel Evaluation Study of the previous summer. Each instructional developer, who would function as a producer/director of one component of the project, embarked on exploratory research in one of the subject areas recommended by the report. Several findings emerged.

While information does exist in the community on a variety of family and societal problems and the support services related to them, no central distribution center with public visibility is clearly designated in St. John's, Newfoundland. In an effort to get a clearer picture of the situation, a meeting of the instructional development production team with the Community Services Council and their Information Referral Center was arranged. Developers were advised as to what information was available at the center, and given access to the Council's directory which provided a listing with addresses and phone numbers of voluntary associations, private agencies, community services, government programs serving individuals, day care centers, church groups, senior citizens'

clubs and boarding houses. Also included were cross-listings for the Burin Peninsula, Corner Brook, Gander, Grand Falls/Windsor, Stephenville, Labrador West, and Happy Valley/Goose Bay.

Development of the Program - Phase I

The second production meeting followed a month (May, 1982) of interviewing experts in health care delivery and health education, and critiquing existing video materials of a community support service nature. A program format was proposed and content outlines of a general nature were drawn up by each of the five instructional developers.

Meetings were then arranged between the developers and experts in each broad subject area who had been previously ratified as "experts" during the exploratory research. Among those with whom the developers met were: a social worker, Waterford Hospital; a psysiatrist, Leonard A. Miller Center; staff of the Janeway Community Outreach Program; the director of Talbot House; staff of the Newfoundland Cancer Clinic; the rehabilitation supervisor of the CNIB; and the Director of Nursing, Department of Public Health. Content outlines were examined by experts as a means of indentifying specific subject areas and ways to treat them.

In an evolutionary process which extended into Phase II, the production team used these meetings and other inputs in selecting five priority topics:

(1) Community Support Services: A Series Introduction
(2) Physical Disability
(3) Children with Chronic Medical Conditions
(4) Alcohol Abuse
(5) Cancer

Until these five areas had been identified, the five developers worked as a team in gathering and analyzing information. The decision to make an individual presentation on each of these topics was made and each of the developers was assigned to one component of the project. The developer of the presentation reported upon here was assigned full responsibility for the production and evaluation of the program, Physical Disability and You.

The story line, followed by the appropriate script and narration emerged as the developer narrowed the content area to manageable proportions. A second group of Expert Appraisers, this time a user group at the field level, were solicited. They included a rehabilitation counsellor, Department of Social Services; a medical doctor specializing in rehabilitative medicine, Health Science Complex; an occupational therapist, Leonard A. Miller Center; the executive director, Canadian National Institute for the Blind; and the manager of the Neighborhood Goodwill Center. They ratified scripts and narration as accurate and a comprehensive portrayal of services offered in the community.

The formative script was ratified with only minor changes, although the individuals involved remarked frequently that they were unfamiliar with television at the script stage and would be better able to judge the rough edits. In consultation with the Executive Producer, it was decided to arrange an audience pilot of the same user group during Phase II of evaluation when the rough edits would be field tested.

During Phase I the developer met with a faculty member of Memorial University's Learning Resources Division who approved the program format

and the scripting of the opening and subsequent sequences; and with the Director of Special Projects of the Division of Adult and Continuing Education who did an adult literacy/language appraisal of the written narration. She suggested minor changes based on Fry's Readability Technique (1968-69) - a standardized procedure which projects the grade level required by a given prose passage. The number of words, syllables, and sentences in the passage are ascertained, and its appropriate grade level identified in relation to the different grades known reading abilities. The narration according to the Special Projects Director, was at a Grade 7-8 level and assumed appropriate for a general audience in Newfoundland.

Development of the Program - Phase II

In the weeks following the Phase I Evaluation, videotaping took place in and around the St. John's area. The Executive Producer arranged for mobile camera and recording equipment - some on loan from Avalon Cablevision (eg. a JVC Ky 2000 camera and a Sony video recorder, as well as sundry lights, power cords, etc.). While videotaping progressed through the months of July and August, 1982, the script was finalized and ratified by the Director of Rehabilitation Services, Department of Social Services. The director had only one objection to the script: it failed to mention that the Department of Social Services assesses the mental and physical capabilities of clients referred to the Neighborhood Goodwill Center. After consultation, it was determined that the term "Assessment" would not be understood or appreciated by the intended audience, and it was concluded that this information would not be included.

In August, 1982, rough editing began at the Division of Learning Resources, Memorial University. Previous arrangements had been made to pilot the material on the same user/appraiser group who had evaluated the formative script in Phase I. Personal interviews were conducted and the responses were detailed and illuminating.

Overall, the responses were very favourable. The appraisers expressed approval that the developer had handled a difficult topic with perception and sensitivity, avoiding the usual popular misconceptions and stereotypes about the disabled.

Some of the comments made by the user/appraiser group included:

"Would like to have a copy for use in my organization" (CNIB, CPA).

"Might try some 'home' shots of blind people to personalize that section."

"Quite motivational."

"Music is great."

"Very upbeat; doesn't bog down in the more depressing aspects of disability, but still covers the issues of housing, transportation, and employment."

"Technically very good; nothing distracting. The pictures are attractive."

"There is a need for newly disabled to see this."

Phase II: General User Appraisal.

The reaction of this small user group audience to the pilot tape was seen by the developer as an indicator of how other user groups would

view the program. It was therefore decided to evaluate the program with a larger and more varied audience of field professionals.

In October the Newfoundland Hospital Association agreed to the showing and evaluating of the program by questionaire at their annual conference. The videotape was shown to a random audience of twenty health care professionals who responded to eleven written statements evaluated on a four point agree/disagree scale (see Appendix 1). These statements were designed to elicit opinions on critical aspects of the videotape (e.g. interest value, information, technical quality - visuals, sound, and program design). These statements were grouped in four attitude clusters, which were designed to identify the tape's strengths and weaknesses prior to final editing. The first grouping concerned information output and is referred to in Table 1 as the 'relevance' cluster. The second grouping concerned visual stimulation and interest level, and is referred to as the 'motivation' cluster. The third grouping included visual and sound quality, appropriateness of music, and program length; it is referred to as the 'technical' cluster. The fourth grouping included language level, organizational need and suitability of the program, and commitment to recommend the tape; it is referred to as the 'utility' cluster.

The group rated the tape at a mean of 3.4 on the four point scale. The high points were those concerning utility, in which the scoring for the 'need' aspect was very positive at 3.5. Motivation and technical quality both represented a medium positive rating of 3.4. The lowest rating was the informational element or relevance cluster at 3.3.

Table 1
Rating of Attitudes

Rating of Attitudes	Physical Disability & You
Attitude Cluster	Mean
Relevance	3.3
Motivation	3.4
Technical Quality	3.4
Utility	3.5
Overall Rating	3.4

The overall rating of 3.4 is well within the acceptable positive range on the four point agree/disagree scale. Few members at the conference were actively involved in Rehabilitation Medicine which may explain the lower rating on the 'relevance' cluster. Areas of weakness which emerged with item analysis were noted by the developer prior to final editing and the title/credit stage of completion.

Table 2
Item Analysis

		Item Range				
		strongly agree	agree	disagree	strongly disagree	
No. of Items	No. of Subjects	4	3	2	1	Mean
1	20	6	14			3.3
2	20	8	12			3.4
3	20	8	12			3.4
4	20	8	12			3.4
5	20	10	9	1		3.45
6	20	9	11			3.45
7	20	9	11			3.45
8	20	11	9			3.55
9	18	7	11			3.4
10	20	9	11			3.45
11	20	12	8			3.6

Phase II: Media Evaluation

A media expert at Memorial University's Division of Learning Resources supplied a number of recommendations at this stage, and although they were independent of either user appraisal, his recommendations bore a striking resemblance to both these audiences. His directions were clear and to the point:

1) Re-edit opening sequence to repair small 'jump-cut'.
2) Add interest to lengthy interview with the blind social worker with clips of him at home and work.
3) Get rid of badly-behaved seeing-eye dog.

Development of the Program - Phase III

The developer made the necessary changes (which emerged from the evaluation data). Because of personnel, and equipment-rental limitations, no new video footage was taken after mid-August, 1982. All subsequent changes were achieved through re-editing of the old material, and by reviewing and adding some of the unused footage from the original videotaping. When all corrections had been completed on the script, the video images, and the audio track, the program was titled and credited, and prepared for evaluation with the target audience.

CHAPTER VI

SUMMATIVE EVALUATION

Testing of the program on a representative primary audience was conducted on a relatively small sample of ambulatory patients at St. Clare's Mercy Hospital. Since this is an acute care setting with the bulk of patient care revolving around surgery and acute illness, many patients are unsuitable for questionnaires. This group consisted of eight adults 23-72 years of age; they were diabetic convalescents, many of whom have had amputations. The patients were asked to respond on a two-part questionnaire (see Appendix 2). Part one, made up of six questions, required a Yes or No response to statements dealing with technical quality. Part two was comprised of seven questions on program content. The first six questions required the patients to respond with open-ended comments while question 7 asked for an overall rating on a scale ranging from "poor" to "very good."

Technical quality received a positive rating as can be seen from the item analysis in Table 3.

Table 3
Item Analysis (Technical Quality)
Primary Audience

Item No.	No. of Subjects Responding	No. of Positive Responses	No. of Negative Responses
1	8	8	
2	7	6	1
3(a)	8	8	
(b)	8	8	
4	6	6	
5	8	8	
6(a)	7	7	
(b)	7	7	

Program content was viewed favourably as evidenced by some written comments which emerged from the open-ended questions on part two of the questionnaire:

"I think more of these programs should be seen by the public."

"It fills people like myself with a better understanding of what people really have to go through and the go people have."

"I liked the whole program."

"Would have liked more information; weren't enough details about any one service."

"Easy to watch - not boring."

On the overall rating scale, program content received a good - very good rating. Six respondents gave the program a "very good" rating and two responded with a "good" overall rating.

Tierchiary Audience

In the analysis stage of this presentation, three different target audiences were identified:

(1) primary audience - hospital patients
(2) secondary audience - patients' families
(3) tierchiary audience - general public.

The decision was made to conduct summative evaluation with two groups, the primary audience and the tierchiary audience. The secondary audience (patients' families) were not directly included as a distinct group in the evaluation, but were included indirectly as part of a much larger group, the tierchiary audience. This tierchiary audience was considered important because included among them would be (a) families of disabled patients and (b) prospective clients for the

types of services outlined in Physical Disability and You. Additionally, it was deemed necessary to collect data from a much larger group than the primary audience, in order to determine the relative success of the program.

The tierchiary audience chosen as representative of the general public was a group of 67 students from the District Vocational School, Clarenville, Trinity Bay. This group ranged in age from 17-52 years and represented a good cross-section of the population of the province of Newfoundland.

The students were asked to respond to a two-part questionnaire on technical information and program content (see Appendix 3). They responded to technical information on a positive/negative scale with a Yes or No answer. From the analysis in Table 4 it can be seen that the response was in a very positive mode.

Table 4
Item Analysis (Technical Information)
Tierchiary Audience

Item No.	No. of Subjects Responding	No. of Positive Responses	No. of Negative Responses
1	65	65	
2	64	64	
3(a)	67	64	3
(b)	67	64	3
4	63	63	
5	67	66	1
6(a)	64	62	2
(b)	64	62	2

The responses to part two, questions 1-6, were also very positive. These questions required the audience to respond with written comments

to open-ended questions. Some representative comments were:

" The one thing I particularly liked about the program was the information on the CNIB and the things they do to help the blind."

"I liked to see the handicapped working hard to make a better life for themselves."

"I enjoyed the way they used the first person point of view!"

"... to see people helping other people who are disabled." (like).

"It shows the public how hard it is for handicaps and lets them help and understand them better."

"Handicapped people can live an active life."

"To see how others have to s[illegible]fer." (dislike).

"I liked seeing the idea of the disabled having access to places which were not before equipped for wheelchairs."

"The way they actually showed the disabled at work and proving that they can be like everybody else."

"People are doing things to help the physically disabled and a lot of people are cooperating."

Question 7 of part two of the questionnaire asked the audience to give an overall rating to program content on a scale ranging from poor to very good. The rating scale had an assigned numerical value for each item e.g. poor/1; fair/2; good/3; and very good/4. Using this scale the tape received a mean of 3.7 for program content (Table 5).

Table 5
Analysis of Overall Rating (Program Content)
Tierchiary Audience

Item No.	No. of Subjects Responding	Item Range				
		poor	fair	good	very good	
		1	2	3	4	Mean
7	67			19	48	3.7

Summary

From a technical standpoint, the tape received a highly acceptable rating; the rating for program content was also high.

CHAPTER VII

CONCLUSIONS, RECOMMENDATIONS, IMPLEMENTATION

An examination of the program's evaluation data showed that the program entitled Physical Disability and You met with approval by the audiences exposed to it. It was successful in presenting an overview of the various community services available to the disabled in the areas of rehabilitation, housing, transportation, employment, and recreation. The audiences found the concept of community support services an interesting one, and they regarded as beneficial the concept of receiving information about the support services available for specific health problems.

From the data collected it is clear that the target audiences of this program responded primarily to informational content which was mostly visual, rather than narrative. Indications are that too much narration with relatively unstimulating visuals are perceived as dull and boring rather than informative.

In health education programs, narrators who represent the target audience (e.g. a paraplegic employment counsellor with the Canadian Paraplegic Association) appear to inspire high credibility. Audiences like to hear them "tell their story."

One of the biggest problems with this production, other than time and budget constraints, was in the technical quality of the finished product. Low budget television is not noted for its technical precision.

Visual and sound quality tends to suffer and there may be numerous electronic mishaps, some unexplained. In order for St. Clare's Mercy Hospital or any other local health care institution to contemplate further mobile television production of broadcast quality, a large outlay of capital in camera, sound and editing equipment would be highly recommended.

Implementation

There are a number of channels through which the program can be disseminated to a wide audience - to family members, to health care specialists, to health educators, to the general public - as well as to the physically disabled patients.

At St. Clare's Mercy Hospital, a closed-circuit television system allows broadcast to monitors in private rooms, and to television receivers located in patient and staff lounges. This allows for viewing by a large portion of the primary audience as well as the secondary audience. Although many hospitals do not have a broadcast facility, it is still possible to present this program to patients in other hospitals. A television monitor and a video playback unit are the only pieces of equipment needed. Both the Grace General Hospital and the Health Sciences Complex in St. John's have this equipment and can therefore make use of this program.

Local groups with a specific interest in the welfare of the disabled have already used the program. Such groups include the CNIB (Canadian National Institute for the Blind); HUB (the physically handicapped service center); CPA (Canadian Paraplegic Association); and the information Referral Center of the Community Services Council.

The availability of community cable networks allows for dissemination to a wide general audience. Broadcast on the St. John's community channel or Memorial University's Education Channel, makes it possible for family members and prospective patients to learn of the services available to them.

Although the program was originally designed to meet the needs of a specific group at a particular hospital, there is no reason why the information presented cannot be of use provincially. It is hoped that other hospitals outside St. John's, other community cable channels (in Conception and Trinity Bays), or any local group such as the Newfoundland Division of the Canadian Red Cross, might use the program thus giving it the widest dissemination possible in Newfoundland and Labrador.

REFERENCES

Aaker, D.A. (1982). The social and economic effects of advertising. In D.A. Aaker & G.S. Day (Eds.), Consumerism (pp. 190-209). New York: The Free Press.

Barnes, N. (1982). The BBC's role in adult education - a matter of collaboration. Adult Education (NIAE), 55, 147-151.

Becker, M., & Maiman, R. (1975). Social and behavioral determinants of compliance with medical care and medical care recommendations. Medical Care, 7, 49-54.

Bower, R. (1973). Television and the public. New York: Holt, Rinehart and Winston.

Burdman, R. (1975). The media and health needs of the elderly. Health Education, 6(4), 14-15.

Carnoy, M. (1976). The economic costs and returns to educational television. In R.F. Arnove (Ed.), Educational television: A policy and guide for developing countries. New York: Praeger Publishers.

Chen, M.S. (1980). Choices for health education. Health Education, 11(1), 31-32.

Chu, G., & Schramm, W. (1968). Learning from television: What the research says. Eric Clearinghouse on educational media and technology. California: Stanford University, Institute for Communication Research.

Cross, K.P., & Zusman, A. (1978). The needs of non-traditional learners and the responses of non-traditional programs. In C.B. Stanford (Ed.), Papers on non-traditional education, 1977. Washington: National Institute of Education.

Dale, E. (1954). Audiovisual methods in teaching (rev. ed.). New York: Holt, Rinehart and Winston.

Ely, D.P. (1970). Toward a philosophy of instructional technology. British Journal of Educational Technology, 1, 81-85.

Fry, E. (1983). Graph for estimating readability. In N. Zigmond, A. Vallecorso, and R. Silverman (Eds.), Assessment for instructional planning in special education (pp. 216-217). Englewood Cliffs: Prentice Hall.

Gagne, R.M. (1977). Instructional programs. In M.H. Marx & M.E. Bunch (Eds.), Fundamentals and Applications of Learning (pp. 404-407). New York: Macmillan Publishing.

Gerbner, G., Gross, R., Morgan, M., & Signorielli, N. (1981). Health and medicine on television. The New England Journal of Medicine, 305, 901-904.

Geroner, G. (1972). Communications and the social environment. Scientific American 227.

Goodman, K.S. (1975). The reading process. In S. Smiley & J.C. Towner (Eds.), Language and reading (pp. 19-28). Bellingham, Washington: The Sixth Symposium on Learning.

Greenberg, B., & Devin, B. (1970). Mass communications among the urban poor. Public Opinion Quarterly, 34, 224-235.

Jacobs, J.A. (1982). News from health research: Toward a better understanding. Journal of School Health, 52, 614-618.

Jones, E.V. (1981). Reading instruction for the illiterate adult. Chicago: American Library Association.

Jones, M.G. (1982). The cultural and social impact of advertising on American society. In D.A. Aaker & G.S. Day (Eds.), Consumerism. New York: The Free Press.

Karnes, F.A., Ginn, C.N., & Maddox, B.B. (1980). Issues and trends in adult basic education: Focus on reading. Jackson: University Press of Mississippi.

Kaye, A., & Harry, K. (1982). Using the media for adult basic education. London: Croom Helm.

Kemp, J.E. (1980). Planning and producing audiovisual materials (4th ed.). New York: Harper and Row.

Kennedy, M. (1981). Patient channel evaluation study. Unpublished report, Health Promotion Directorate, Federal Government of Canada, Ottawa.

Kill, B., & King, L.S. (1983). Historical trends in the use of television in health education. Journal of School Health, 53, 312-315.

Knowles, M.S. (1971). The modern practice of adult education. New York: Association Press.

Knox, A.B. (1977). Adult development and learning. San Francisco: Jossey-Bass Publishers, pp. 5-9.

Kurtz, E.B. (1959). Pioneering in educational television. USA: State University of Iowa, pp. 12-15.

Litman, T.J. (1966). The family and physical rehabilitation. Journal of Chronic Diseases, 19, 211-217.

Markle, N., Markle, D., & Maccoby, N. (1975). The role of television in literacy programs. In J.B. Carroll & J.S. Chall (Eds.), Toward a literate society. New York: McGraw-Hill.

Marshall, C.L. (1977). Toward an educated health consumer: mass communication and quality in medical care. Fogardy International Series on the teaching of preventive medicine, 7, 1-70. Bethesda, M.D.: Fogardy International Center. (ERIC Document Reproduction Service No. ED 151 510).

Meyers, S., & Arnold, A.J. (1982). Contemporary issues for young citizens: teaching about consumerism. Learning, 2(5), 34-57.

Mielke, K.W., & Swinehart, J.W. (1977). Evaluation of the Feeling Good television series. New York: The Children's Television Workshop. (ERIC Document Reproduction Service No. ED 134 227).

Monsma, C. (1983). Citizen participation: Concepts in consumer education. National Association of Secondary School Principals (NASSP) Bulletin, 67(467), 31-38.

Mohammed-Forouzesh (1983). Community health education: Where we stand today. Health Education, 14(5), 18-22.

Munshi, I.S. (1979). Telecourses: Reflections '79: Station-College executive project in adult learning. Washington, D.C.: Corporation for Publish Broadcasting.

Nader, R. (1981). An early look at health and safety regulations under the Reagan administration. In M. Green and N. Waitzman (Eds.), Business war on the law: An analysis of the benefits of Federal health/safety enforcement (pp. VI-XX). The Corporate Accountability Research Group.

National Association of Educational Broadcasters (1970). Television in instruction: What is possible? Washington, D.C.: NAEB.

National Library of Medicine (1972). The Lister Hill National Center for Biomedical Communications report to the Congress. Washington, D.C.: D.H.E.W., 72-268.

O'Keefe, M. (1971). The anti-smoking commercials: A study of television's impact on behavior. Public Opinion Quarterly, 35, 242-248.

Rees, B. (1980). Television talk shows: An untapped resource for nursing. Nursing outlook, 28, 562-565.

Roessler, R., & Bollon, B. (1978). Psychological adjustment to disability. Baltimore: University Park Press.

Rosen, G. (1958). A history of public health. New York: M.D. Publications.

Rosenstock, I. (1960). Why people use health services. Milbark Memorial Fund Quarterly, 44(2), 94-127.

Schramm, W. (1965). What we know about learning from instructional television. In Educational television: The next ten years. U.S. Department of Health, Education and Welfare, p. 54.

Schramm, W. (1973). Men, messages and media. New York: Harper and Row.

Shannon, B., Thurman, G., & Schiff, W. (1979). Foodsense: A pilot TV show on nutrition issues. Journal of Nutrition Education, 1(1), 15-18.

Smith, F. (1978). Understanding reading: A psycholinguistic analysis of reading and learning to read. New York: Holt, Rinehart and Winston.

Summers, J., & Jeffrey, D.B. (1982, January). Health and medicine on television (Letter to the editor). New England Journal of Medicine, 306, 243-244.

Thiagarajan, S., Semmel, D.S., & Semmel, M.I. (1974). Instructional development for training teachers of exceptional children: A sourcebook. Bloomington: Center for Innovation in Teaching the Handicapped, Indiana University.

Thron, C.D. (1982, January). Health and medicine on television (Letter to the editor). New England Journal of Medicine, 306, 244.

Timpke, J. (1984). Television - A resource for nurse educators to teach the community about health maintenance and disease prevention. Journal of Nursing Education, 23, 217-218.

Vickers, Sir G. (1965). What sets the goals for public health? In A. Katz and S. Felton (Eds.), Health and the community. New York: The Free Press.

Wade, S., & Schramm, W. (1969). The mass media and sources of public affairs, science and health knowledge. Public Opinion Quarterly, 33, 197-209.

Wiesner, P. (1983). Some observations on telecourse research and practice. Adult Education Quarterly, 33, 215-220.

Wright, R. (1975). Mass media as sources of medical information. Journal of Communications, Summer '75, 171-173.

APPENDICES

APPENDIX A

Evaluation Form

EVALUATION FORM

The program that you just viewed is one of a series on Community Support Services, produced by St. Clare's Mercy Hospital.

The series was designed specifically for those who have recently been ill or hospitalized, and for those with family members in need of extended care and support.

There are six programs in the series. The initial program provides an introduction to the concept of support services. Others deal with services for specific health needs.

Anticipated users are health care workers in social service and referral departments and in patient teaching roles.

Please respond to the following statements by circling the number which reflects your opinion.

		strongly agree	agree	disagree	strongly disagree
Relevance	1. The program presented pertinent information.	4	3	2	1
Motivation	2. The program was interesting.	4	3	2	1
	3. The visual messages were stimulating.	4	3	2	1
Technical	4. The visual quality was acceptable.	4	3	2	1
	5. The sound quality was acceptable.	4	3	2	1
	6. The music was appropriate to the content.	4	3	2	1
	7. The program was of good length.	4	3	2	1
	8. The language level was suitable for the intended audience.	4	3	2	1
Utility	9. The program is suitable for my organization.	4	3	2	1
	10. I would recommend that clients view this program.	4	3	2	1
	11. There is a need for this type of program.	4	3	2	1

APPENDIX B

Evaluation Form - Primary Audience

EVALUATION FORM

- Primary Audience -

Introduction

The series Community Support Services, consists of five television programs. The first program presents a general introduction to the concept of support services for those in need of ongoing assistance and care.

The four remaining programs deal with services for those with specific needs or problems -- the sick child, the alcoholic, the physically disabled, the cancer victim.

The programs were designed specifically for two groups: (a) those presently hospitalized or their family members and loved ones, (b) the general public, who might have need of such services now or in the future.

Background Information

1. Age _____

2. Single _____ Married _____ Children _____

3. Home Community _____

4. Occupation _____

5. These programs were designed for those who have been ill, or those whose family or loved ones have needed care. Have you or your family ever needed these kinds of services? _____

Technical Information

Please circle YES or NO for each item.

1.	Sound was good - easy to hear	YES	NO
2.	Choice of music was good	YES	NO
3.	Pictures were - clear, good colour	YES	NO
	- pleasant to see	YES	NO
4.	Pictures matched the content	YES	NO
5.	Program was right length	YES	NO
6.	Titles/credits were - easy to read	YES	NO
	- attractive	YES	NO

Program Content

Please answer in your own words. Make any comments you would like to make.

1. Was the program interesting? _____

2. Was the content/message important? _____

3. Do you think the program is useful to the general public? _____

4. Would you like to see this kind of local programming on television?

5. List one to three things you particularly liked about the program, if any. _____

6. List one to three things you particularly disliked about the program, if any. _____

7. Overall rating. (Check one)

very good ___

good ___

fair ___

poor ___

APPENDIX C

Evaluation Form - Tierchiary Audience

EVALUATION FORM

- Tierchiary Audience -

Introduction

The series Community Support Services consists of five television programs. The first program presents a general introduction to the concept of support services for those in need of ongoing assistance and care.

The four remaining programs deal with services for those with specific needs or problems -- the sick child, the alcoholic, the physically disabled, the cancer victim.

The programs were designed specifically for two groups: (a) those presently hospitalized or their family members and loved ones, (b) the general public, who might have need of such services now or in the future.

Name of Program _____

Background Information

1. Age _____
2. Single _____ Married _____ Children _____
3. Home Community _____
4. Program of Study _____
5. These programs were designed for those who have been ill, or those whose family or loved ones have needed care. Have you or your family ever needed these kinds of services? _____

Technical Information

Please circle YES or NO for each item.

1. Sound was good - easy to hear	YES	NO
2. Choice of music was good	YES	NO
3. Pictures were - clear, good colour	YES	NO
- pleasant to see	YES	NO
4. Pictures matched the content	YES	NO
5. Program was right length	YES	NO
6. Titles/credits were - easy to read	YES	NO
- attractive	YES	NO

Program Content

Please answer in your own words. Make any comments you would like to make.

1. Was the program interesting? _____

2. Was the content/message important? _____

3. Do you think the program is useful to the general public? _____

4. Would you like to see this kind of local programming on television?

5. List one to three things you particularly liked about the program, if any. _____

6. List one to three things you particularly disliked about the program, if any. _____

7. Overall rating. (Check one)

very good ____

good ____

fair ____

poor ____

APPENDIX D

Script

PHYSICAL DISABILITY AND YOU

1. MS Patient lying on a bed in hospital room.	1. Music up.
2. Orderly and patient's husband help patient into a wheelchair; they leave the room.	2. Music.
3. Super Community Support Services over LS of the three leaving elevator and crossing hospital foyer.	3. Music.
4. MLS Leaving hospital via main entrance.	4. Music.
5. Super title Physical Disability and You over their making their way to a waiting car.	5. Music continues.
6. Super Sponsored by Community Services Council over scene of patient being lifted from the wheelchair to car.	6. Music.
7. Super Produced by St. Clare's Mercy Hospital over MLS of orderly returning wheelchair to hospital while husband puts patient's luggage into car's back seat.	7. Music.
8. Pan car driving away.	8. Music.
9. LS Parking lot; front entrance of building.	9. Fade music.
10. LS A car enters parking lot; parks near entrance.	10. Narrator: The physically disabled are a special group of individuals in our society who, despite their disability, contribute much to our way of life.

11. Car door (passenger side) opens slowly.	11. N: Because of their disability, be it ambulatory or visual,
12. MS Driver removes a wheelchair from the car's back seat.	12. ....they require certain services from various organizations....
13. She places chair on pavement; unfolds it.	13. ....so that their lives are disrupted as little as possible.
14. She helps herself from the car to the wheelchair; closes car door.	14. One such group involved in assisting the disabled is the Canadian Paraplegic Association.
15. She moves toward the door of the building.	15. Their clients are not only paraplegics and quadraplegics,
16. She opens the door and enters the building.	16. ....but also included are accident victims and people with spina bifida, multiple sclerosis, or muscular dystrophy.
17. She is in conversation with a rehabilitation counsellor.	17. Joanne McDonald is the rehabilitation counsellor with the association and she explains the kinds of services CPA provides.
18. Hold #17.	18. Joanne McDonald: "We don't provide any major direct service as such.
19. CU Joanne McDonald, rehabilitation counsellor.	19. "We attempt to assist the individual in coping with, and often times accepting, their disability, and helping them to get back into the work force, getting an education, assisting with housing problems and this sort of thing. So we don't provide any major direct service.

20. LS L.A. Miller Center.	20. "We work with a tremendous amount of community agencies such as the L.A. Miller Center....
21. Lady helping a man in a wheelchair across L.A. Miller Center parking lot.	21. "....which is now providing rehabilitation for newly injured people in the province.
22. Hold #21.	22. "And prior to the Miller Center coming on stream, many of the people who were injured....
23. They move up a wheelchair ramp towards Miller Center entrance.	23. "....had to go outside the province for rehabilitation and this was oftentimes very difficult....
24. CU Joanne McDonald.	24. "....because they were being sent away from their home and their families, and I'm sure the rehabilitation probably was a lot more difficult for them.
25. Hold #25.	25. "Now they are able to be rehabilitated here in their familiar environment with family, relatives and friends, and spouses. So we're pretty pleased about that".
26. Same as #23. Couple enters Miller Center.	26. Narrator: The Miller Center, besides its many other services, has a 15-bed rehabilitation unit....
27. Zoom to L.A. Miller Center sign.	27. ....serving physically disabled clients from Newfoundland and Labrador.
28. Hold #27. CU sign.	28. The Director of the Unit is Dr. Norman Lush.
29. CU Director, Dr. N. Lush.	29. Dr. Lush: "When we set up the rehabilitation program here we were none of us experts in the field of rehabilitation at all.

30.	Hold #29.	30. "So to avoid mistakes wherever possible and at the same time to provide a better service to those requesting information of us and service of us, we decided we would have a team and that team to consist of all the people who would ultimately treat a person in the rehabilitation program".
31.	Dr. Lush and team in conference.	31. Narrator: The team is made up of eight members each one responsible for a specific part of a person's rehabilitation.
32.	CU Dr. Lush at conference.	32. This team meets to discuss a client who has been referred by a health care professional....
33.	LS Team at Conference Table.	33. ....and decides if he is to be accepted for treatment. If he is accepted, then a plan is drawn up by the group for the client's rehabilitation program.
34.	MS Patient being assisted by two nurses in transfer from bed to wheelchair.	34. Besides the doctor who initially examines the client, there are a staff of nurses who are involved in the day-to-day activities of their patients.
35.	Hold #34.	35. They are on duty in the unit 24 hours a day and assist patients with things such as nutrition, bed baths, and bed transfers.
36.	MCU Young woman in wheelchair using electric mixer.	36. There are occupational therapists whose main concern ....
37.	She moves from table to oven, opens oven door.	37. ....is helping the client become as independent as possible, both at home....
38.	Disabled man using typewriter adapted for his use.	38. ....and at work. Clients are taught new skills and the use of adaptive equipment.

39. MCU Speech pathologist working with client.	39. Speech Pathologist Voiceover: "The first thing we're going to do, Cathy, is your tongue and lip exercise, OK?"
40. Hold #39.	40. Narrator: The speech pathologist sees clients who have problems with such things as poor tongue and lip control, understanding the spoken word, and pronouncing words.
41. MLS Man fitted with prosthesis practices walking.	41. The prosthetic and orthotic staff provide services in three main areas:- providing and fitting artificial limbs,
42. Man being fitted with back brace.	42. ....manufacturing and fitting braces for the legs, hips, chest or back;
43. Orthotic staff fitting shoe with metal brace.	43. ....and building devices that help correct disorders of the feet.
44. MCU Psychologist working with client.	44. The psychologist works to help the client face and adjust to any emotional difficulty she may have as a result of her disability.
45. Hold #44.	45. She helps her client understand that these difficulties are normal reactions to a very difficult situation.
46. Paraplegic client using exercise bike ... strengthen upper body.	46. The physiotherapy staff teach their clients how to use their bodies to maximum efficiency,
47. Same client as #46 displaying wheelchair maneuverability.	47. ....and generally how to become as mobile as possible using the resources available.
48. CU Social Worker.	48. Then there is the social worker....

49. Pan from #48 to both social worker and client in conversation.	49. ....whose job is to help clients and their families adjust to the physical and emotional impact of disability.
50. CU Client. (from #49).	50. Social workers advise their clients in such matters as housing, employment and education.
51. MLS Wheelchair client approaching van with ~~mechanical lift.~~	51. When it has been determined that a client has adjusted, and has progressed in rehabilitation as much as possible,
52. Attendant operates mechanical lift; client boards van.	52. ....then the team members make the decision to discharge that client.
53. MLS Kitchen Scene (stove, counter, etc.).	53. Upon discharge, many clients are able to return to their own home.
54. Client (from #52) preparing lunch in adapted kitchen.	54. Some are not, and need a place where they can practice the new skills they have learned and to do so in an adaptive environment.
55. Lunch is served to residents of Group Home.	55. There is one such place in the St. John's area, a home where the residents are encouraged to live as independently as possible.
56. MCU Wheelchair (Group Home) resident at a desk in a bedroom.	56. This is not an institution. It is a home just like any other except....
57. Pan resident's room showing adaptations (e.g. lowered sink).	57. ....that adaptations have been made to meet the particular needs of the disabled who live there.
58. MCU Two Group Home residents watching TV.	58. This house cannot accommodate all the disabled so many must find regular housing wherever they wish to live.

59. Same as #58.	59. Finding a house that is accessible may be a problem.
60. LS Front view of a house accessible by wheelchair.	60. Canada Mortgage and Housing will give some financial assistance to homeowners if they wish to make their house accessible.
61. CU Entrance to building (easy access by wheelchair).	61. Apartment buildings must now be made accessible according to the new accessibility legislation.
62. LS Co-op housing unit.	62. Another alternative is co-operative housing where houses are owned by a group, and may be single units, double units,
63. MCU Apartment building showing accessibility by wheelchair.	63. ....or apartment type dwellings.
64. Hold #63.	64. The individual has a say in the type of home he wishes to own.
65. CU of a house; zoom to entrance.	65. In the case of the disabled, the house would be made accessible on the outside and adapted to meet specific needs on the inside.
66. Young paraplegic woman, sitting in passenger side, loads her wheelchair into the back seat of her specially adapted car.	66. Housing is not the only problem that the disabled face; a major area of concern is transportation.
67. From #66; she closes her car door and moves to driver's seat.	67. Some are lucky enough to be able to drive their own cars, but most must depend on vans or buses that have been adapted to accommodate them.
68. LS Able bodied man assists young paraplegic man (in wheelchair) across a parking lot to a waiting HUB van.	68. The HUB has several such vans and, while it does not claim to answer all the transportation needs of the disabled population, it does offer a much needed service.

69. MCU Employment Counsellor in discussion with disabled client.	69. Another major problem for the disabled is that of employment.
70. Hold #69.	70. Social workers, rehabilitation counsellors and employment counsellors from many organizations work with the disabled assessing their abilities and advising them on job possibilities.
71. MCU Social worker in discussion with disabled client.	71. These counsellors also work with employers to help them understand the problems the disabled face.
72. MCU Rehabilitation Counsellor, Jim McDonald.	72. Jim McDonald is a rehabilitation counsellor with the Department of Social Services.
73. Hold #72.	73. Jim McDonald: "The client is usually referred to our division by a school -
74. LS Construction Site.	74. "....when they are school age - for counselling, and for registration in specific programs;
75. Pan construction site (machinery, workcrew, etc.).	75. "....or referred to us by Workman's Compensation when people are actually hurt on the job and cannot, because of injury, return to former employment and need retraining ....
76. CU Jim McDonald.	76. "....or have been referred to us from various agencies around the city.
77. Hold #76.	77. "These clients then register with the division after the referral is made, fill out an application, and provide us with the information necessary to process them.

78. Same as #77.	78. "Then we get involved in the counselling aspect and try to come up with some practical means of training and funding so they can pursue a given goal.
79. LS St. Clare's Mercy Hospital.	79. "We are in contact with all the agencies in the city,
80. MLS Building that houses the offices of the Canadian Paraplegic Association.	80. "....and in the province,
81. LS Grace General Hospital.	81. "....who service the physically and mentally handicapped:
82. MLS the HUB building.	82. "....Goodwill Center, HUB, all upgrading schools,
83. MCU Jim McDonald, Rehabilitation Counsellor.	83. "....District Vocational Schools, Memorial University, Trades College, and any other programs that we can utilize.
84. Same as #83.	84. "We are sort of a division that can channel these people to the proper institution or the proper training facility that can help them best".
85. MCU Three young men operating a printing press at the HUB.	85. Narrator: The HUB offers the disabled an opportunity....
86. CU Girl using a computer.	86. ....to train or work in three different areas.
87. CU HUB employee doing layout work for a book.	87. Their print shop is like any other commercial print shop in that it can handle all aspects of commercial printing....
88. MCU HUB employee running newspaper copies.	88. ....from layout, to camera work, to finished product.
89. MCU Trophies - zoom to employee engraving plaques.	89. The trophy shop employs people who assemble component parts for all kinds of trophies; they also do all the necessary engravings.

90. MCU Visually impaired employee repairs wheelchair.	90. The wheelchair shop not only provides employment....
91. CU Hands working on spokes of a wheel.	91. ....but also provides a valuable service to the disabled community.
92. Fade back from #92 showing wheel and employee.	92. It can assemble and repair all models and sizes of wheelchairs.
93. LS Center employees working with used clothing (washers, dryers, ironing boards).	93. The Neighbourhood Goodwill Center accepts clients referred by the Department of Social Services.
94. MLS Employee ironing clothes.	94. Here they may be trained to work at a number of different jobs such as washing and ironing used clothing,
95. Employee assorting used clothing for repair and resale.	95. ....making souvenirs, manufacturing nets and twine for the fishing industry, or hobby carpentry.
96. MCU Employee working in the hobby carpentry shop.	96. For some individuals the Goodwill Center means employment in an environment which lacks the stress of the regular job market.
97. CU Hands (hammering).	97. For others it is just a stepping stone until they are able to find profitable employment elsewhere.
98. Visualy impaired lady working in an office setting.	98. Finding employment is a problem for another group of disabled people as well, those with visual problems or those totally blind.
99. MCU Jim McDonaald, Rehabilitation Counsellor.	99. Jim McDonald: "I did experience some problems in competing in the regular employment market for positions and I had to seek some assistance from the employment officer at CNIB as to what areas I should be actually looking in.

100. Jim with seeing eye dog crossing a busy intersection and continuing on down the street:

100. "As she told me it depended on the degree of sight being lost, and in my case, being totally blind I had to stay away from areas such as where a lot of paperwork was involved,

101. Hold #100.

101. "I had applied for some jobs, as staffing officer for example, which was virtually impossible because of the amount of screening....

102. CU Jim McDonald.

102. "....that would be involved with printed applications that would come over your desk.

103. Same as #102.

103. "It would be necessary for you to have a full time secretary and employers are not usually ready to layout an extra allotment of money to hire an extra person when they can find someone that can fill that position without going to those extremes.

104. Hold #103.

104. "So the employment officer then gave me some examples of areas of employment that would be most feasible and areas that I could actually screen out myself as being impractical for a person with my disability.

105. Same as #104.

105. "CNIB, I think, get involved in this area quite often, and sometimes, as well as helping the employee be practical with regards to his actual applications and areas of interest he could probably fit into, she will go and help the employer understand some of the problems that may occur once the employee goes to that firm, and how these problems can be overcome, if any".

106.	Woman standing at a counter; rings bell for service.	106. Narrator: The Canadian National Institute for the Blind....
107.	Visually impaired lady leaves her desk (where she's been typing) to answer the bell.	107. ....provides jobs in outside industry for qualified blind persons with the co-operation of the Canada Employment and Immigration Commission through an outreach employment grant.
108.	The lady thumbs through forms, selects the appropriate one.	108. The Outreach Officer identifies jobs that can be done by blind persons and tries to place them in positions available.
109.	She returns the form to the waiting customer.	109. Besides giving employment assistance to the blind, the CNIB offers many other rehabilitative and support services. Eugene Pike is the Executive Director of the CNIB in Newfoundland.
110.	CU Eugene Pike, CNIB Director.	110. Eugene Pike: "CNIB has two aims: one to provide rehabilitation services for blind persons, and also to prevent blindness.
111.	MCU Receptionist (lobby, CNIB).	111. "In the prevention of blindness field we provide counselling and information on good eye health,
112.	CU Wall plaque CNIB.	112. "....and care and control of eye disease.
113.	MCU Eugene Pike.	113. "We do have a mobile unit which travels into rural parts of the province providing full medical eye examinations for people who are referred to us with an eye problem.

114.	Hold #113.	114. "Our rehabilitation services are available to anyone who are registered or in fact who have a serious eye condition. Our services are available regardless of age.
115.	A lady teaching brail to a visually impaired child.	115. "We provide counselling for parents of visually impaired children; we can provide advice on proper training, good toys for helping the child to develop concepts.
116.	MCU Eugene Pike.	116. "We also act as liason between the family and community groups that could provide services for children and help the parents plan training programs to provide the proper stimulation for the child.
117.	CU of an unopened package.	117. "The CNIB library is a recreational reading library.
118.	Jim McDonald, visually impaired counsellor, opening package of cassette tapes.	118. "It is located at Toronto, our national office. It provides books on tape recording (what we call our talking books) and also in brail.
119.	MS Jim loading cassette into machine.	119. "In the case of the talking books, we provide talking book machines which can play the books.
120.	Jim manipulating controls (volume, play, etc.) on the machine.	120. "They are provided on permanent loan to any registered person that is interested in the service.
121.	Jim listening to tape.	121. "They can select the reading material, and while there may not be as many titles available in any category as you find in a regular library, we do have the same kind of material that is available to anyone else".

122. MLS Two women playing cards.	122. Narrator: Other forms of recreation available to the blind are such things as playing cards,
123. LS Swimming pool.	123. ....playing darts, bowling, and swimming.
124. MCU Girl being instructed in the art of weaving.	124. For some physically disabled the first introduction....
125. CU girl's hands on weaving machine.	125. ....to organized recreational activities is at the rehabilitation unit of the L.A. Miller Center.
126. MLS Girl in wheelchair leaving a van via mechanical lift.	126. Here they are not only encouraged to participate in activities inside the unit,
127. She enters the YM-YWCA.	127. ....but are encouraged to get involved outside the unit in things such as craft classes at the YM-YWCA or swimming at the Aquarena.
128. MLS Physically disabled man playing darts.	128. Others take advantage of the HUB's drop-in center where they can socialize with disabled and able-bodied alike.
129. LS Group of wheelchair athletes playing basketball.	129. For others who are into more recreational activities or competitive sports,
130. CU Referee (basketball game).	130. ....the Newfoundland and Labrador Wheelchair Sports Association....
131. MLS Game in progress.	131. ....offers everything from chess and checkers to weight lifting and basketball.
132. Same as #131.	132. Some of these athletes have achieved national and even international recognition.

133. LS Basketball game.	133. Music up. Narrator's Voiceover: They are individuals who are rehabilitated in every sense of the word - physically, mentally, and socially.
134. LS Wheelchair athlete "running" an obstacle course at track meet.	134. Music., Narrator's Voiceover: They are making the most of their abilities and are thereby able to lead active and productive lives.
135. Super over athlete continuing through obstacle course: Community Services Council Information Referral Center Telephone 753-9863.	135. Music. Narrator's Voiceover: For further information regarding any of the services mentioned, the Community Services Council Information Referral Center can provide the necessary phone numbers and contact person.
136. Credits.	136. Music up.