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Occupational Training in the
Canada NewStart Program

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Contents

<i>Part</i>	<i>Page</i>
I. INTRODUCTION.....	1
II. THE PROBLEM	
A. The Relation Between Skill and Employment.....	5
B. The Training Scene.....	7
1. The Adult Occupational Training Act.....	8
2. Perceived Shortcomings.....	10
III. PREPARATION FOR EMPLOYMENT	
A. Personal Preparation for Employment.....	13
1. Life Skills Course—Saskatchewan NewStart.....	14
2. Pre-Employment Skills Training—Prince Edward Island NewStart.....	15
3. Life Skills Program—Nova Scotia NewStart.....	15
4. Cultural and Human Relations—Alberta NewStart.....	16
5. Life Skills in Community Interventions—Nova Scotia New- Start.....	17
6. Summary.....	17
B. Academic Preparation for Employment.....	17
1. Saskatchewan NewStart.....	18
2. Alberta NewStart.....	19
3. Prince Edward Island NewStart.....	20
4. Nova Scotia NewStart.....	20
5. Summary.....	21
IV. OCCUPATIONAL TRAINING	
A. Systems Approaches.....	23
1. Comprehensive Manpower Development System—Prince Edward Island NewStart.....	23
2. Family-Centred Program—Alberta NewStart.....	26
3. A Community Typology Study—New Brunswick NewStart.....	27
4. Summary.....	27

B. A New Technique.....	28
C. New Careers.....	30
1. Saskatchewan NewStart.....	31
2. Prince Edward Island NewStart.....	33
3. Nova Scotia NewStart.....	33
4. Alberta NewStart.....	34
5. New Brunswick NewStart.....	35
6. Manitoba NewStart.....	35
D. Training for Business and Industry.....	36
1. Primary Industry.....	37
2. Trades Training.....	41
3. Service Industries.....	45
V. THE RESULTS	
1. Life Skills.....	49
2. Adult Basic Education.....	50
3. Systems Approaches.....	51
4. DACUM Approach to Curriculum, Learning and Evaluation in Occupational Training.....	53
5. New Careers.....	53
6. Training for Business and Industry.....	55
VI. SUMMARY.....	61
VII. BIBLIOGRAPHY.....	65
VIII. ABBREVIATIONS.....	71

PART I

Introduction

The Canada NewStart Program is an experiment in federal-provincial co-operation towards finding ways of alleviating chronic poverty and disadvantage. After almost four years of planning and development, the program emerged in 1967 as a pilot project of the Canada Department of Manpower and Immigration. When plans were made to establish a federal Department of Regional Economic Expansion, the NewStart program was included in the new Department. This change was effected in 1969.

In all, six provinces entered into agreements with the government of Canada to participate in the NewStart program. Nova Scotia, Prince Edward Island, Saskatchewan, and Alberta concluded agreements in 1967; New Brunswick and Manitoba in 1969. For a variety of reasons, agreements were not reached with the other provinces.

A NewStart corporation is a private company set up under legislation of the province in which it operates. Its board of directors is selected jointly by the provincial and the federal governments and it is financed totally from federal funds. Fiscal responsibility is maintained by requiring annual approval by the province and Canada of the operational plans of the corporation. Liaison with the federal government is provided through a branch of the funding department. Under Manpower and Immigration it was the Pilot Projects Branch; for Regional Economic Expansion it has been the Social and Human Analysis Branch.

The specific geographic areas selected for the original agreements were Yarmouth County (Nova Scotia), Kings County (Prince Edward Island), Kent County (New Brunswick), city of Prince Albert (Saskatchewan), North-eastern Alberta (Alberta), and an area within 150 miles radius from The Pas (Manitoba). These areas were all within regions designated as being of slower economic growth and all had populations between 14,000 and 25,000.

From the outset NewStart was designated as a relatively short-term program. The experimental NewStart projects were limited to an operating life of three to four years with six to twelve months additional time for plan-

ning and preparation and for phase-out. Prince Edward Island NewStart surrendered its charter in August 1971; Manitoba NewStart in December 1971; Saskatchewan NewStart terminated its research development and experimental training activities August 31, 1972 but continued to publish its course materials. In September 1972 the Department of Manpower and Immigration established a training research and development station with the facilities, equipment, programs and 24 key personnel from Saskatchewan NewStart. The station will continue the work of NewStart and conduct research in other areas of manpower training. Alberta NewStart terminated its activities in 1972. Nova Scotia NewStart was extended to December 1972 for the specific purposes of preparing consolidated reports and disseminating information on the DACUM¹ approach to curriculum, learning, and evaluation in occupational training. New Brunswick NewStart is expected to surrender its charter in 1974.

The ethnic and economic diversity of the areas, coupled with the freedom of each corporation to develop its own programs, led inevitably to considerable differences in emphasis. In order to record and to disseminate the findings of the NewStart program, the Department of Regional Economic Expansion is preparing and circulating a series of reports on various aspects of the work carried out by the six corporations.

This report deals with occupational training and the place it was given in the NewStart program. Since occupational training courses were seldom given in isolation, adult basic education and life skills development programs are reviewed, to provide an accurate setting. Each of these programs is presented in detail in separate Canada NewStart program reports.

One particular form of occupational training, that of programs for paraprofessionals, has been considered sufficiently important to warrant separate treatment in a Canada NewStart program report entitled *New Careers for the Disadvantaged*. Consequently, the present report will present no more information on these projects than is necessary to give adequate perspective on the total occupational training activities of the NewStart corporations.

Section II of this report deals with the settings in which the NewStart programs operated and discusses both the rationale for experimenting with occupational training and the ways in which government-sponsored occupational training was conducted.

Pre-employment preparation is discussed in Section III under the headings of Personal Preparation (life skills) and Academic Preparation (adult basic education). "Life skills", as defined by Saskatchewan NewStart, the corporation which has done major developmental work in this field, means problem-solving behaviours appropriately and responsibly used in the management of personal affairs [93, p. 10]. Adult basic education covers the range of academic achievement from illiteracy to high school equivalency.

¹ Developing A Curriculum

The methods and the content of the NewStart occupational training programs are discussed in Section IV. It will be noted that much of the innovation was designed to individualize the training process and to adapt it to the needs of the trainee. The sub-section on new careers describes new fields of employment that have been opened up to the disadvantaged adult.

The available results of the occupational training programs are summarized in Section V. For many reasons the documentation of the results is neither as complete nor as detailed as could be wished. The whole matter of research methods in the Canada NewStart program is the subject of a separate consolidated report. In this volume it would be more accurate to say that the results indicate direction but do not necessarily lead to conclusions. In any event, since the operational life of the program was so brief, many of the results are not definitive.



PART II

The Problem

A. THE RELATION BETWEEN SKILL AND EMPLOYMENT

"The objective of the Canada NewStart Program is to develop, through research and experimentation, methods and programs which can be implemented on a widespread basis to prepare unemployed and underemployed adults for stable and rewarding employment. This is based on the hypothesis that those who are not now being assimilated properly into the economy can be when new efforts are made to identify, select, motivate, counsel, train, and place these individuals" [74, pp. 4, 5].

The word "training" occurs frequently in early documents associated with the Canada NewStart program. It also appeared in the terms of reference for the program, and in initial plans for each of the six NewStart corporations. It is clear, however, that training is a broad term for: the transmission of manual skills; improvement in basic academic knowledge and in skills required for occupational competence; changes in attitudes and motivation, and, in some cases, changes in social orientation. This report deals with aspects of all of these but is primarily concerned with efforts to develop and improve occupational skills.

For the purpose of this report an occupation is defined as a set of activities in which an individual engages in return for remuneration. "Occupational training" is restricted to the development of the skills essential to entry to a specific occupation and progression within it. Personal, academic, and social skills are seen and treated as additional prerequisites to employment. An occupation is defined here as a set of activities in which a person engages in return for pay. Occupational training is restricted to the development of the skills essential for entry into a specific occupation.

The usual first question asked of an applicant for employment is "What can you do?" Sometimes this question is answered by reference to years of experience, a certificate of competence, or through references from former employers or associates.

This relation between skill and employment is noted by Dr. Sylvia Ostry, who writes [68, p. 15]:

An individual's work, in the sense of his function or what sort of job he does, is a factor of some importance affecting his risk of unemployment. Thus, for example, much of the supervisory, professional and clerical staff in industry is regarded almost as "fixed capital" and employers will lay off production workers much more readily than they will these white collar workers. Further, the "skill" of a worker—skill used broadly to encompass education, training and experience in work performance—also affects his risk of joblessness. An employer, faced with a cutback in production, will be more inclined to discharge an unskilled worker since he has less "invested" in his training. On the same grounds he will try to retain his more skilled workers to avoid both the loss of training costs and the added burden of hiring costs when conditions improve and such workers are likely to be in relatively short supply. Further, a skilled worker can, if the alternative is unemployment, do the work of an unskilled or semiskilled man, whereas substitution in the opposite direction is not usually possible. Moreover, institutionalized protective devices—especially in collective agreements—are likely to apply more to skilled than unskilled workers, although this is less true today than it was in the 1930's. For these and other reasons, the less skilled are more prone to unemployment. Thus, job function and worker skill, which are of course related, are both factors affecting unemployment.

In acknowledgement of this, one of the earliest documents of the Canada NewStart program stated [72, p. 1]:

The objective of the entire research project is to develop and adapt vocational training methods and programs which can be ultimately implemented on a widespread basis by training and educational authorities to motivate and qualify disadvantaged youths and adults for stable and rewarding employment.

There is evidence that in the United States the successful completion of manpower training results in more stable employment and increased income. One study was reported to the 20th Annual Winter Meeting of the Industrial Relations Research Association as follows [99, p. 31]:

The data present the benefits in a favorable light. In 1964 and 1965 the trainees had a post-training employment rate of 75 per cent and 62.5 per cent were in training-related jobs. OJT trainees had an employment rate of over 90 per cent. The median earnings were 21 per cent higher after training than before, and through January 30, 1967, the median post-training earnings were \$1.74; these results were cross-classified by trainee characteristics, and it was found that the level of post-training economic status of the disadvantaged was below average, but the improvement over their pretraining status was greater.

At the same meeting, Michael E. Borus of Michigan State University reported that in a study done in Connecticut "the average gain in earnings for the five-year period was \$5,834"; this "was not influenced by sex, race, marital status, education, number of dependents and prior earnings of the persons selected for retraining". Borus did find, however, that the

gains were greatest for the 30-35 age group. He points out that "the influence of age on the benefits of retraining did not become statistically significant until the third year following the courses" [15, p. 46].

A comment on Professor Borus' paper by David P. Taylor of the Massachusetts Institute of Technology indicates that while the average income of the 196 participants "was in excess of \$5,800 relative to the base group", another 48 workers did not enter the program because they found jobs on their own. For this group, the earnings differential amounted to \$7,700. Taylor raises the question of whether the placement services provided the major contribution [15, p. 57].

A similar situation was noted in the follow-up study by Herzog [40, pp. 37, 51] for Nova Scotia NewStart. These results indicated that, of the sample selected for the study, those who declined involvement in NewStart projects, and presumably secured employment through other means, had larger incomes in 1970 than many who had completed NewStart projects. In fact, from the data available, it appears that only trainees who participated in on-the-job training fared better financially in 1970 than did the non-participants.

Whatever else these findings may indicate, they at least indicate the need for caution against assuming that training, *per se*, is the solution for disadvantage. This report examines the various training programs conducted by NewStart corporations, and, where possible, examines the results. Before discussing specific programs, however, we shall review briefly the legislation governing manpower training, and some of the reasons advanced for including occupational training in the NewStart program.

B. THE TRAINING SCENE

The vocational and economic underachievement of many residents in areas of slow economic growth is caused in part by their failure to adapt to the conditions of modern industrial society. They are by-passed in the industrialization of an area because they lack the skills, attitudes, and orientation required for adequate participation in its changing economy. Usually they do not have access to training programs which are adapted to their particular needs [74, p. 2].

It must not be assumed that the NewStart program was moving into a vacuum; there were already a number of vocational and occupational training programs, many of them supported by the Canada Department of Manpower and Immigration, the same department which in 1967 was setting up the Canada NewStart program. The purpose of this special effort was to find methods of identifying and assisting people who were not being served by current manpower programs. These people were identified as follows [74, pp. 2, 3].

They are often unemployed or underemployed.

They may lack a knowledge of or appreciation for values, associated with other levels of society.

Their families are usually in need of assistance in adapting themselves to changes in the employment level and/or location of employment.
They frequently live on farms which are unproductive or underproductive.
They have usually completed less than eight grades of schooling.
They may possess few, if any, marketable skills.
They usually perform very poorly on standardized placement tests.
They are mainly persons from rural areas and small towns.
They are generally deprived economically, educationally, vocationally, socially, and culturally.

The role of the federal government in manpower training has been gradually increasing. Manpower programs have developed in response to the rapid economic and technological changes that affect people's working lives. Since the federal government has the responsibility for the nation's economic health, it must be able to exercise some influence over the quality of the labour force. Outlining the intergovernmental nature of responsibility for manpower training, Mr. Tom Kent, Deputy Minister of Canada Manpower and Immigration, said [43, p. 5].

I would like to begin by stating one general proposition that seems to me self-evident. It is that, as long as we have anything at all like our present governmental structure, the responsibility for manpower training is bound to be intergovernmental. There may be different views as to how exactly the responsibility should be divided. We may have varying degrees of success in clearly articulating the division. But I do not see how one can imagine circumstances in which federal and provincial governments would not both be concerned and involved.

This means that, whatever the precise division of responsibility, the practical discharge of the responsibility, for the benefit of the public, is bound to require joint action; it requires us to work together. That is the basic truth which we must never allow to be submerged by smaller issues [43, p. 2].

Explaining the federal government's sense of responsibility for manpower programs, Mr. Kent added:

As a nation, our economic success now depends very largely on the flexibility with which we take advantage of economic and technological changes. Rapid change means that, at any one moment, some occupations in some places are becoming greatly more productive, while other occupations in other places are becoming relatively unproductive. In these circumstances, how fast our economy grows depends to a considerable extent on the speed of our response, on how readily people move from low productivity occupations to high productivity occupations.

These statements were made about the time that new federal legislation was being adopted to change and clarify the respective roles of the federal and provincial governments.

1. THE ADULT OCCUPATIONAL TRAINING ACT

In January of 1966 the federal government created the Department of Manpower and Immigration, bringing together various manpower services

that had formerly been a part of the Department of Labour and the immigration services for which the Department of Citizenship and Immigration had been responsible. The new department concentrated, in a single agency, the responsibility for creating, co-ordinating, and implementing manpower policies and programs.

Shortly after the new department was set up, the Adult Occupational Training Act replaced the Technical and Vocational Training Act which had been in existence over the five-year period from 1961 to 1966. The Technical and Vocational Training Act involved a shared-cost program which provided cash for both capital and operating costs for vocational and technical training. The two major criticisms levelled at this program were: it provided the greatest benefits to the richer provinces who could afford the shared-cost arrangement; and it could be regarded as federal involvement in education, because much of the money was going into vocational high schools.

The Adult Occupational Training Act overcame these two objections. The Act defines an adult as a person who is at least one year older than the legal school-leaving age in the province in which he resides; to avoid enticing young people out of school, it restricts training allowances to adults who have been in the labour force for three years or who have at least one dependent.¹

The Adult Occupational Training Act also pays the capital and operating costs for adult occupational training, but places the responsibility for the choice of course and the choice of trainee with federal officials in the Canada Department of Manpower and Immigration. The institutions providing the training are still operated by provincial departments of education [73].

In effect, the present legislation makes a clear distinction between "education" and "training" and so avoids encroaching on provincial autonomy in educational matters. Mr. Kent offered his interpretation of this distinction [43, pp. 2, 3]:

To appreciate the roles of governments in manpower training, we must first be sure what we are talking about. In practice, this is a question of how and where we draw the line between training and education. Training is instruction designed to bring a person to some standard of efficiency in performing the tasks of an occupation. Education, by contrast, is concerned with the systematic development of a man's capacities as a whole.

Obviously, there is a distinction, which perhaps is best clarified by the fact that we would never dream of talking about a "fully educated man", whereas we refer quite naturally to a "fully trained mechanic". Latin is not, nowadays taught to train people for work. And welding is not taught for the sake of what it does to expand a man's intellectual horizons.

In assuming the responsibility for manpower programs in Canada, the new department of Manpower and Immigration are well aware of the prob-

¹The three-year limit was removed in 1972.

lems associated with the existing system. The Department of Labour exhibited a similar awareness; discussions leading to the establishment of the Pilot Projects Branch, and eventually to the Canada NewStart program, were initiated while that department had the responsibility for manpower training. There was concern for the large number of people who were not served by adult training and retraining programs.

2. PERCEIVED SHORTCOMINGS

Many reasons have been suggested for the failure of people to benefit from the training system or, conversely, for the failure of the system to benefit the people. Among the reasons commonly advanced were:

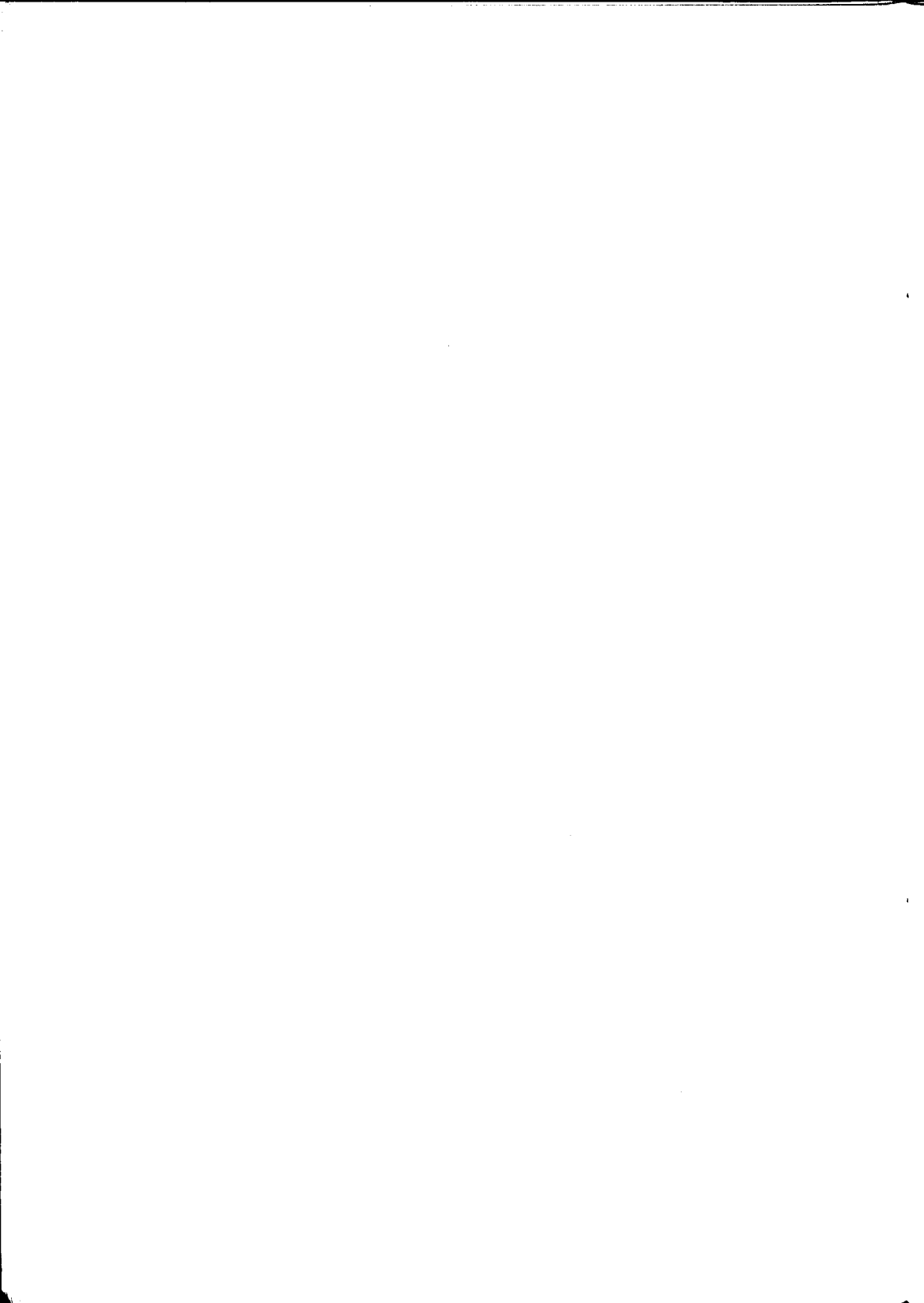
- a) course offerings are limited to a few standardized subjects;
- b) many programs were simply modified elementary school courses, with no appeal for adults;
- c) academic entry levels were sometimes unnecessarily high;
- d) rigid scheduling of classes made it impossible for some people to attend;
- e) most courses were group-oriented and group-paced and made insufficient allowance for variations in rate of learning or previous knowledge;
- f) evaluation was based more on knowledge components than on performance components;
- g) there was little opportunity for the exercise of self-direction or adult independence in learning;
- h) much of the material was unrelated to practical work situations;
- i) people were often poorly motivated except by the training allowances, to enter or to persist in training;
- j) training was dominated by the needs of industry rather than by the needs of the individual;
- k) retention rates were low;
- l) minority groups, including native populations, were not adequately represented;
- m) courses for women were few and stereotyped.

There was little evidence to confirm or deny these allegations. True, individuals could be found who were unemployed, and who were not taking advantage of the training programs for one of the reasons stated. But it was also possible to find individuals in much the same circumstances who had taken courses and had benefited from them. In short, a great deal more had to be learned about people who did not benefit from existing programs. One objective of the NewStart program was to find out *which*

people were being bypassed by the standard programs and to determine *why* they were not involved. The next step was to develop programs and techniques in an attempt to remove some of the constraints.

Each NewStart occupational training program may be viewed as a test of one or more of the hypotheses advanced to explain why certain disadvantaged people did not benefit from the existing manpower training programs. Some of the NewStart schemes tackled the problem of motivation; some attempted to adapt training to the needs of the individual rather than to the convenience of a training institution or the demands of business and industry; some concentrated on the importance of integrated or co-ordinating occupational training with other remedial programs; and some worked on the assumption that social and community changes were needed to accompany attempts at improving occupational competence.

Without exception, the NewStart corporations agreed that occupational training must be preceded or accompanied by other forms of preparation for employment. The following section provides an overview of such programs under two headings: personal preparation, generally designated as life skills; and academic preparation, usually presented as basic training for skills development, but sometimes adult basic education.



PART III

Preparation for Employment

A. PERSONAL PREPARATION FOR EMPLOYMENT

You are on a new adventure whether you are using the Life Skills Course for the first time or whether you have used it many times before. You start a new adventure because each group of students brings new opinions, perspectives and insights and in this course these become part of the content as the students practice new skills to deal with problems arising out of their life situations. You, too, change, and as you add your new perspectives to the problems studied, the outcome of the lessons can be as exciting and fresh as you and the group wish to make them. [Note to Life Skills Coach (89, p. 1).]

It has long been recognized that personal attributes have much to do with getting and keeping a job. This was substantiated by responses to the economic opportunities surveys conducted by various NewStart corporations. In replies to the question "What factors do you consider most important when hiring an employee?", employers ranked personal qualifications over skill factors by about three to one [42, p. 54; 41, p. 16]. Similarly, responses to the question, "What is the most common reason for some employees proving unsatisfactory?" indicated that lack of ability or training accounted for about 15 to 20 per cent of the cases [*idem*].

On this basis alone it seems justifiable to give attention to what Saskatchewan NewStart has described as "developing problem-solving abilities". This seems to be the consensus, because all corporations which engaged in occupational training provided supplementary life skills development. This section presents a brief overview of the various life skills programs as they relate to occupational training. A separate Canada NewStart report, "Life Skills: A Curriculum for Counselling", describes life skills programs in detail.

An early reference to a life skills program is found in a project proposal, Training Resources for Youth (TRY), which was designed for work with out-of-school, out-of-work male youth in the Bedford-Stuyvesant area of Brooklyn, N.Y. The main purpose of the life skills component of that

program was seen as providing disadvantaged adolescents with "the understandings and concrete skills they need to handle their life responsibilities more effectively" [100, p. 49].

The areas of life responsibility were identified as: developing and maintaining the self, psychologically and physically; preparing for a career; using leisure time productively; managing home and family responsibilities; and participating effectively in the community [100, pp. 52-3].

Dr. Winthrop Adkins and Professor Sidney Rosenberg, associated with the development of the TRY proposal, were involved as consultants with the NewStart program and brought to it some of their ideas on life skills. They contributed significantly to the development of the NewStart Life Skills programs of Saskatchewan and Nova Scotia.

A full description and discussion of the Life Skills programs developed in the Canada NewStart Program are contained in another report of this series [79]. The following brief summaries are presented to indicate the importance such programs assumed in relation to the more traditional forms of occupational skill development.

1. LIFE SKILLS COURSE—SASKATCHEWAN NEWSTART

Essentially, a life skills course is, as Saskatchewan NewStart defines it, an exercise in applied problem-solving. Ideally, the problems are those recognized and acknowledged by the trainee. In practice there is a need to accommodate the needs of individuals within a manageable framework of time, leadership, and materials.

Saskatchewan NewStart, having worked intensively on the production of a life skills package, has produced a process which is being tested throughout Canada. The course consists of 60 lessons relating to the areas of self, job, family, leisure, and community. The lessons are organized in such a way as to conduct the trainee through five phases of problem-solving: recognizing a problem; defining a problem; choosing among alternatives; implementing the chosen alternative; and evaluating the results.

The use of the words "course" and "lesson" are somewhat misleading in this context since they carry the connotation of a classroom/instruction situation. It would be more apt to think of the process as an exercise in group dynamics, using the "lessons" as points of departure for group problem-solving sessions. The leader of these group sessions is designated as a *coach* and is trained for this role by the use of a detailed course also prepared by Saskatchewan NewStart [89].

It is impossible in a brief overview to convey the full dimensions of Saskatchewan NewStart's life skills program. A few examples, however, will indicate the scope of the course. In the area of self, the trainee explores areas such as: listening to others; describing feelings; portraying oneself;

and giving a talk. In the job area some of the skills developed are: surveying marketable skills; exploring expectations of employers; and quitting a job. In the realm of the family there are lessons on: getting out of a financial trap; setting goals for guiding children's behaviour; and telling children about sex. Among the subjects covered in the section on community area: interacting with police; voting in an election; and taking responsibility in the community [89].

The coach is provided with a wide variety of material that can be used to maintain interest and involvement. It is intended that the participants will not only discuss their problems but will also practice the skills developed throughout the course, thus achieving the maximum transfer to life situations.

2. PRE-EMPLOYMENT SKILLS TRAINING—PRINCE EDWARD ISLAND NEWSTART

After experimenting with a form of life skills training involving group discussions in the areas of home, community, and job, Prince Edward Island NewStart concluded that emphasis should be placed on skills related to employment, and that the course should be more highly structured [72, p. 100]. The result was a pre-employment skills training (PEST) program which focussed on self-preservation, money management, job performance, job search, career choice, and preparation for mobility. The PEST program, together with adult basic education and occupational training, became part of the comprehensive manpower development system (CMDS) (Part IV, Section A).

To determine whether a trainee should participate in the PEST program, the corporation developed and refined a screening test which led to 81 per cent of the persons involved in the CMDS taking the PEST program. A general knowledge test was also developed, designed to: indicate to the course counselor what sections or parts needed to be emphasized during the program; aid in the continued revision of the PEST program; and serve as a pre-post measure of progress [95].

3. LIFE SKILLS PROGRAM—NOVA SCOTIA NEWSTART

The Life Skills program at Nova Scotia NewStart was developed as an integral part of the adult basic education program. The emphasis was on designing a system with sufficient flexibility for adaptation to the needs of each individual. The basis for this flexibility was a DACUM chart (Part IV Section B) which showed on a single sheet a broad range of behaviours from which the trainee could select those he wished to develop. The chart contained a total of 105 skills grouped in ten general areas of competence as follows [67, p. 133]:

- a) Maintain living environment.
- b) Lead a constructive home life.
- c) Participate and fit into community.
- d) Lead a constructive working life.
- e) Manage personal finances.
- f) Be a wise consumer.
- g) Practice and contribute to social order.
- h) Use community resources and services.
- i) Continually change and develop.
- j) Maintain personal well-being.

Materials, representing a variety of media, were assembled and filed in learning activity batteries related to each of the 105 behavioural skills. Trainees were encouraged to select from these LAB's the material, and the method, best suited to their needs. Group discussions evolved when trainees expressed interest or need.

While the life skills program was used primarily in conjunction with programs in mathematics and communication, the DACUM chart also served as the basis for life skills development in the corporation's fisheries training project.

4. CULTURAL AND HUMAN RELATIONS—ALBERTA NEWSTART

The family-oriented program conducted by Alberta NewStart included a formalized curriculum embodying the major human relations situations likely to confront the Indians and Métis. Topics were grouped under six headings:

- a) Basic law and treatment of illegal behaviour.
- b) Health, personal, and social development.
- c) Banking and budgeting.
- d) Work adjustment.
- e) Government.
- f) Parliamentary procedure.

The purpose of this course was "to increase the trainee's knowledge, understanding, and skills in coping with factors that focus on daily living requirements and personal patterns of behaviour" [6, Preface].

It was hypothesized that participation in the Human Relations program would enable the trainee to:

- a) Develop and sustain a positive self-image.
- b) Cope adequately with home and family responsibilities.
- c) Exercise rights and responsibilities in his own community.
- d) Use leisure purposefully.

- e) Participate harmoniously in group situations.
- f) Make responsible decisions affecting his own work-future.
- g) Understand the nature and functioning of the Canadian political system.

5. LIFE SKILLS IN COMMUNITY INTERVENTIONS—NEW BRUNSWICK NEWSTART

In the Kent County (New Brunswick) community of Saint Paul, New Brunswick NewStart decided to offer a life skills program along with an adult basic education program conducted in co-operation with the provincial Department of Education. The project used Saskatchewan NewStart's material translated into French.

After some preliminary planning, the New Brunswick corporation found that extensive preparatory work would have to be done before the community would be ready to accept a life skills course. Consequently, the introduction of the course was delayed until other needs expressed by citizens of the community had been met [57, p. 42].

6. SUMMARY

Recognizing that more than academic and vocational skills are needed as preparation for employment, the NewStart corporations engaged in the development and testing of a variety of programs designed to enable disadvantaged people to cope with their personal and social problems. These programs, generally classed under the heading of "life skills", were presented in a number of ways and with considerable variation in materials.

B. ACADEMIC PREPARATION FOR EMPLOYMENT

The principal device for the limitation of occupational choice is the educational system. It does this in two ways: first, by forcing the student who embarks upon a long course of training to renounce other careers which also require extensive training; second, by excluding from training and eventually from the occupations themselves those students who lack either the intellectual qualities (such as intelligence, docility, aptitude) or the social characteristics (such as ethnic background, wealth, appropriate conduct, previous education) which happen to be required. The more strongly the functional system affects occupational choice, the more efficiently will it function in this way. Indeed, education cannot serve as a channel of vertical mobility unless it also serves to exclude those who are not educated in the appropriate way [18, p. 216].

The association between low income and lack of education beyond the elementary level is particularly strong. It is reported that [27, p. 20]:

A special survey of the educational attainments of the unemployed was made in February 1960. The results indicated clearly that job opportunities

and level of education are closely related. The unemployment rate for persons who did not finish primary school was more than double the rate for persons who finished primary but not secondary school, and seven times the rate for persons who finished secondary school or better. The second relation between unemployment and level of education was evident in all age groups. The joint effect of youth and inadequate education is evident in the very high unemployment rate—about 30 per cent—for persons under 25 who did not finish primary school. In the February 1960 survey, it was found that while persons who had not finished school accounted for only about 21 per cent of the labour force, they accounted for about 44 per cent of those unemployed. Roughly 92 per cent of unemployed persons had not finished secondary school; only eight per cent were persons who had finished secondary school or better.

At least part of the relation between low income and lack of education seems to be attributable to the fact that educational certification is used as a screening device for most employment. Whether or not a particular job requires certain academic competencies, the effect will be the same if a specific grade level is given as a prerequisite. The possession of academic certification, relevant or not, opens doors to many opportunities that would otherwise be unattainable.

It is here that the distinction between education and training becomes most obvious. For educational purposes a high school certificate should cover a wide range of knowledge; for training purposes it need include only those skills required on the job. For this reason most of the adult basic education carried out by NewStart corporations consisted of training in mathematics, science, and communication skills. In those instances where certification was necessary there was usually the opportunity for trainees to write examinations that would provide grade equivalency standing.

The purpose of this section is to present a brief overview of the programs that were developed or adapted by the NewStart corporations to provide the necessary basic training in academic skills to complement occupational training.

1. SASKATCHEWAN NEWSTART

The variety of programs and materials developed by Saskatchewan NewStart provides an excellent example of how a process can evolve in response to need if the resources are available. At the outset, the requirement was for adult basic education (ABE) component to complement the life skills program that was then being developed. Those responsible for the ABE program were not satisfied with available materials, and proceeded to create new ones.

The first area to receive attention was the span between the fifth and tenth grade, since grade 10 was the prerequisite for most occupational training. The result was the development and refinement of the adult 5-10

program including separate volumes on mathematics, developmental reading, and functional reading [84, 85, 88].

While the adult 5-10 program was being tested and revised, the needs of trainees with less than grade 5 competency were becoming apparent. Again, new materials were developed to fill this gap and a program of basic literacy for adult development (BLADE) was produced. This program had the dual purpose of preparing functionally illiterate individuals to enter the adult 5-10 course, and developing the ability to read functionally for information or for pleasure [102, 87].

The problems associated with learning English as a second language (Saskatchewan NewStart was working extensively with Indian and Métis peoples) led to the conclusion that oral facility with the language was a prerequisite for reading and writing it. The result was a program of oral English known as Fluency First. As with the other Saskatchewan NewStart ABE programs, this was subjected to a series of trial runs and revisions in order to develop the most practical and efficient approach [86].

A special adaptation of the Fluency First approach is LEREC (learning English as a second language through recreation). This is a plan "to make use of summer recreation programs in order to raise the standard of accurate and naturally fluent use of English by exploiting the opportunities for language use that are inherent in participatory activities" [54, p. 5].

While the fluency aspect of Saskatchewan NewStart's basic education program were being developed and tested, the adult 5-10 program was undergoing further refinement, leading up to an individualized program called Learning Individualized for Canadians (LINC) which is now available in the form of student kits and teachers' manuals [92]. Information on this and other Saskatchewan NewStart products is contained in the publication "Methods for Human Resources Development" [93].

2. ALBERTA NEWSTART

Alberta NewStart was involved in adult basic education with Indian and Métis peoples in four mobile centres in northeastern Alberta. For the most part, standard commercial materials were used for these programs. At the Kikino Métis colony and at the Indian settlement of Janvier the basic program was MIND [51], a series of taped lessons in mathematics and language (English). These materials were supplemented by other materials including some of the Mott [10] readers. The Mott program was also used at Fort Chipewyan for teaching reading but the texts "Refresher Arithmetic" [11] and "Applying Mathematics" [47] were used for mathematics instruction.

The training at the northeastern Alberta mobile centres was related to the family groupings, associated with occupational training, and designed to

lead eventually to further training, usually at the Alberta vocational centre at Fort McMurray.

Alberta NewStart also provided a basic educational and vocational training program at Lac La Biche, for single persons. The program was phased out but the facilities were taken over by Alberta Pe-Ta-Pun Development Inc., a native organization that emerged during 1970 after Alberta NewStart Inc. closed the Lac La Biche training centre [8, pp. 69-76].

To meet the problem of learning English as a second language, Alberta NewStart developed and revised a program of developing skills in English (8, p. 33). The main characteristics of this program were that it started with those sounds that are common to English and Cree; it used pictures to reinforce the sounds of letters, and concentrated on words and experiences familiar to the trainees.

3. PRINCE EDWARD ISLAND NEWSTART

Some of the earliest programs conducted by Prince Edward Island NewStart were in the field of adult basic education. At first the "Mind" [51, 52] program was used almost exclusively but modifications were made and new material produced to provide a more phonetic approach to word-attack skills and to provide more of a Canadian and Maritime orientation. Another reason for the introduction of modifications was to permit a more individualized technique.

As Prince Edward Island NewStart developed its comprehensive manpower development system (Part IV Section A) it gradually introduced additional materials and equipment into the process. Among these were the Mott programmed texts [10], the Sullivan series [48], various SRA (Science Research Associates) materials [93], Dorsett Audio-Visual machines [29], and the Bell and Howell Language Master [14]. Attempts were made to identify and incorporate material with adult themes and with as much Canadian content as possible [53]. As part of the individualizing process, extensive use was made of cassette tape recorders.

Two volumes of text material were prepared specifically for use in conjunction with a farm management course: *Communication Skills for Farmers* [16], and *Advanced Math Skills for Farmers* [98]. They provided material relevant and interesting to the participants in the course.

4. NOVA SCOTIA NEWSTART

The essential characteristic of the adult basic education programs conducted by Nova Scotia NewStart was the individual or personal orientation that was attempted. Both the mathematics and communication objectives were committed to DACUM charts (Part IV Section B) and a variety of

materials utilizing several media were assembled for each objective in learning activity batteries [67]. The core was the Educational Developmental Laboratories (EDL) system [30], which combines a variety of audio-visual equipment with a wide range of text material and is adaptable to individual use.

As was the case in other corporations, the need for programs for the functionally illiterate became obvious and a modified DACUM chart covering the skills associated with functional literacy was developed. The collection and cataloguing of materials was done in collaboration with the Nova Scotia Department of Education which then conducted trial runs of the process.

5. SUMMARY

This brief summary of the adult basic education programs conducted by the NewStart corporations is included to provide some idea of the framework in which occupational training programs were developed. The objective was to provide the trainee with opportunities to overcome obstacles standing between him and stable and rewarding employment. In most cases, the result was a combination or "package" of courses designed to suit the needs of the individual.

Adult basic education and life skills were prerequisites for some courses and were available as supplementary aids in others. Occasionally they were sufficient, without specific occupational training, to enable a person to secure a job. In any event, their development and refinement was an acknowledgement of the fact "that Canada's disadvantaged are multi-problem individuals and groups, and that much more than occupational training will be needed for their social and economic rehabilitation" [97].



PART IV

Occupational Training

A. SYSTEMS APPROACHES

The growth of social services forms one of the most striking developments of this century. These services have grown as a piecemeal and haphazard response to the crises of war and depression, as offshoots from existing institutions, the product of varied movements, campaigns and electoral necessities, reflecting the character of the emergencies that shaped them and the hopes of the diverse individuals who played a part in their development. This patchwork system now forms an integral part of our economy, our society and our way of life.

The organizations that make up the system are well known. Their constitution, administration, staff and finances, their techniques of service, the people they serve, the needs of these people, and the extent to which these needs are met—all have been separately examined. But this is not enough. We need to piece together our knowledge of all these parts of the system so that we may see the whole machine, what it does, how it works and where it is going. Otherwise it will roll on, with a crew of experts to tend its every part, and no one to steer it [28, p. 3].

1. COMPREHENSIVE MANPOWER DEVELOPMENT SYSTEM— PRINCE EDWARD ISLAND NEWSTART

An examination of the literature on manpower training shows clearly and quickly that occupational training does not guarantee jobs and that a trained person with only job skills is not necessarily employable. The New-Start corporations either recognized this or learned it very early; there were few, if any, instances where disadvantage was considered to have been overcome if occupational training alone had been provided. On the contrary, practically all training was integrated into a broader plan or concept which considered the total needs of the individual. A pertinent example is the way in which Prince Edward Island developed its comprehensive manpower development system. The problems are best described in the words

of Dr. Thomas R. Connor, Research Director for Prince Edward Island NewStart [20, pp. 6-7]:

Prince Edward Island NewStart was established in Montague, Prince Edward Island, in late 1967. Organization and planning went forward and by summer of 1969 they had several innovative programs of training for unemployed and underemployed people of the area.

These projects were all based on similar findings and hypotheses but were conducted independently of each other.

It very soon became clear to researchers and shortly thereafter to operating staff that these disconnected projects were not achieving the quite modest objectives that had been set for them.

... specifically, the following problems began to come to light:

- i) ... there were several misfits in each program, who had no suitable alternative to continuing in a program they did not like, than to drop out ...
- ii) Each project ... suffered a lack of some needed component(s).
- iii) ... there was no realistic outlet for graduates.

By early 1970, the corporation had developed ... a Comprehensive Manpower Development System ... designed to attend to the individual needs of the disadvantaged adult, ...

The major components of the system consist of (1) variants of some standard manpower training programs, (2) innovative recruitment and assignment techniques, and (3) various placement methods.

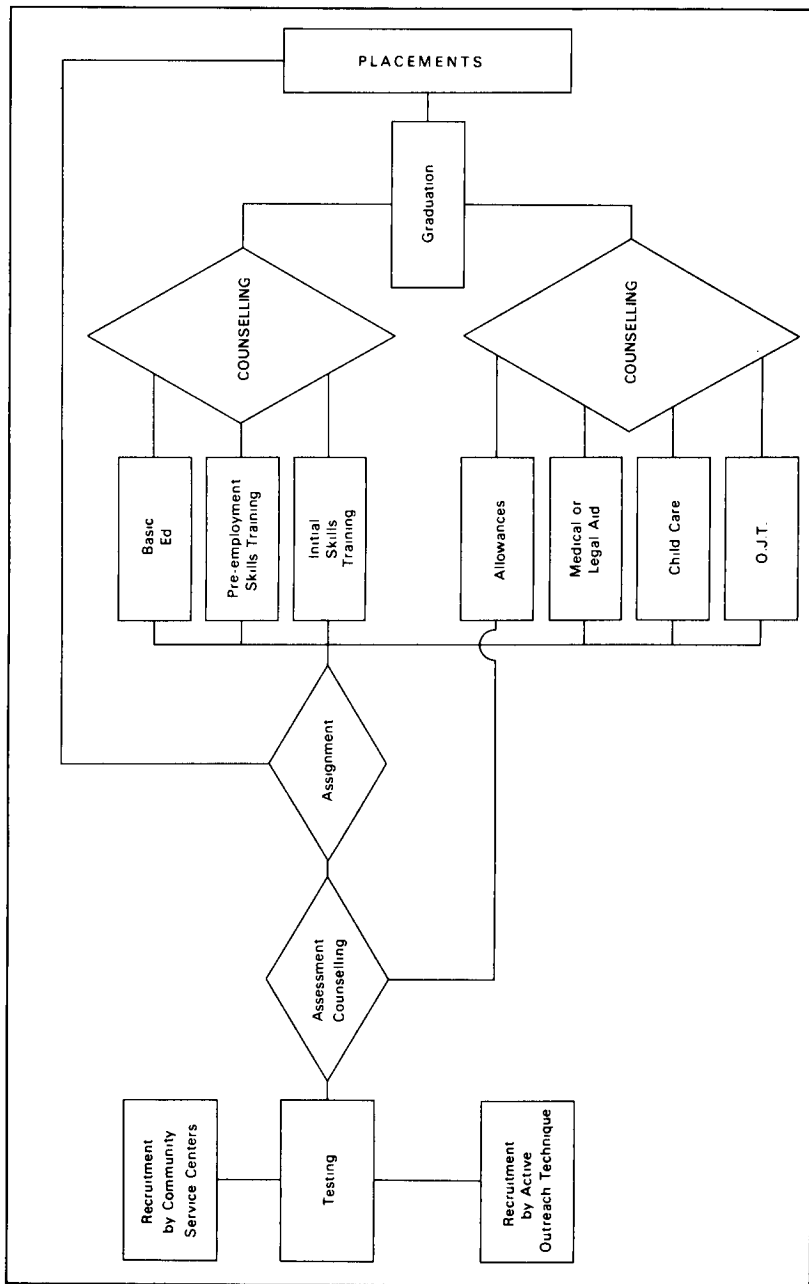
... individuals are contacted through some form of active recruitment techniques and come to the NewStart offices for testing, assessment counselling and proper assignment in the program. Assignment may include anything from immediate job placement to participation in the full program in the sequence which seems to be best suited to the participant's needs. Placement is the ultimate goal for all entrants. Internal program variables are basic education upgrading (from illiteracy through grade 10), initial skills training (sub-professionals and entry trades), prevocational training, and combinations of these.

The participant may also receive assessment and assistance counselling, which help to determine his eligibility for training allowances, supporting services provided by the Corporation, and job development and placement activities in his behalf.

When he has entered the system, the industrial relations arm is alerted and begins a search for a proper eventual on-the-job training or final job placement slot for him. In many cases, employers have been invited to observe and interview prospective employees while they are still in training. The participant is hired by such an employer when all three parties, i.e., the trainee, the employer, and NewStart, agree that he is ready.

Dr. Connor's comments, amplified by the flow chart (Figure 1) show that Prince Edward Island NewStart considered it important to provide assistance counselling all the way through the process from recruitment to placement. He emphasized that while all of the services shown in the figure

Figure 1



PRINCE EDWARD ISLAND NEWSTART INC.
COMPREHENSIVE MANPOWER DEVELOPMENT SYSTEM

were available, only those relating to the needs of the particular person were utilized.

The occupational training programs conducted by Prince Edward Island NewStart were designed only to complete the comprehensive manpower development system. In practice, the courses would be determined by the needs of the program participants and would be those offered by a convenient vocational school or technical institute.

The hypothesis being tested was that training programs are more effective when they are integrated with other necessary services, particularly placement services, and that the participant is more competently served by one multi-purpose agency than by a multiplicity of non-correlated agencies.

2. FAMILY-CENTRED PROGRAM—ALBERTA NEWSTART

Alberta NewStart's program operated on much the same philosophy, using the family rather than the individual as the participating unit. It was based on four principles:

- a) the development process should begin in the student's own physical and social environment;
- b) the family unit should be the focus of development programs;
- c) the training process should be arranged in graduated stages relative to the developmental level of communities and students;
- d) the training environment should approximate normal employment conditions found in industry.

In developing action programs to implement and test these principles, Alberta NewStart set up three mobile training centres to serve as the focus of intervention among the native people. These mobile centres provided the base for a variety of training functions including adult basic education, vocational exploration, social relations, home management, and child care. Interested families were enrolled as trainees with the object of eventual transfer to Fort McMurray for training at the adult vocational centre.

In addition to their function as training facilities, these mobile centres soon came to be regarded as a community resource. From this orientation emerged such activities as a school lunch program, a house-building project, and commercial fishing and woodcutting operations [8, p. 51].

Fort McMurray was the hub of the Alberta NewStart training programs. To this place, families progressed from the three mobile centres; to it also came individuals from the Lac La Biche centre and from other points in the NewStart area. The Fort McMurray program offered: vocational training at the Alberta Vocational Centre; a married couples' instructional program; a day care centre; a human relations program; a leisure time program; a

dormitory counselling program; and an on-the-job orientation program [8, pp. 56-64]. In short, Alberta NewStart was offering, beyond vocational training, an integrated system of services designed to enable the native people to participate in the economic progress of the region.

3. A COMMUNITY TYPOLOGY STUDY—NEW BRUNSWICK NEWSTART

New Brunswick NewStart's involvement in occupational training was incidental to, and to some extent the consequence of, a broad community typology approach. The corporation set out to study several communities within Kent County, New Brunswick, with respect to internal dynamics and linkages with other communities and levels of government. For evaluation purposes, communities were paired, interventions being undertaken in some communities and not in others.

The interventions were based on needs observed by the corporation or presented by the citizens. They included: the establishment of information centres; organization of a Boys' Club; setting up day-care and baby-sitting services; collaboration with government agencies in such programs as the Opportunities for Youth and the Local Incentive Programs; establishment of an Oyster Co-operative.

As these new programs were started it was obvious that it would be necessary to train people to operate and staff them, thus getting New Brunswick NewStart into the occupational training field. Each training project will be examined in more detail elsewhere in this report or in other Canada NewStart program reports; they are noted here to illustrate the relationship that developed between occupational training and the community study.

To meet some of the requirements for staffing its projects, New Brunswick NewStart instituted training programs for community workers, day-care attendants, and community counsellors. To meet community needs and to increase employment opportunities, the corporation conducted a training course for teacher aides. Involvement in the oyster co-operative resulted in collaboration with the New Brunswick Departments of Fisheries and Welfare in an on-the-job training project [12].

4. SUMMARY

These three examples of systems approaches to the problem of disadvantage indicate how differently a problem may be handled. The differences are functions of the locality, of the specific needs of the people, of the economic conditions, and of the program planners. The first two examples are quite similar in that the systems were built to achieve stated objectives for the disadvantaged participants. In the third case, the programs were more in the nature of a response to, or an effect of, the establishment of a system.

B. A NEW TECHNIQUE

A radical transformation occurs in the classroom when one knows how to subordinate teaching to learning. It enables us to expect very unusual results from the students—for example, that all students will perform very well, very early and on a much wider area than before.

There are no gimmicks in this approach. Only the intelligent use of the powers of the mind in all the individuals involved, both teachers and students. But it is so different from what has been going on for so long that it requires a true conversion from the educator, so that he no longer neglects to consider the most important component of education, the learner himself [36, p. ii].

About the time the first four NewStart corporations were being organized, the Canada Department of Manpower and Immigration was working with the General Learning Corporation of New York on a new approach to developing and evaluating curricula. The system was being tried in a Women's Job Corps program at Clinton, Iowa, and was called DACUM, an acronym for *Developing A Curriculum*. The new system was introduced to the NewStart corporations in 1968 and was used by several of them in the organizing of new curricula.

After having used the process in several early projects, Nova Scotia NewStart undertook to develop and test it and subsequently concentrated a substantial portion of its resources on this objective. The results of this work are contained in that corporation's publication "DACUM Approach to Curriculum, Learning, and Evaluation in Occupational Training" [1].

The core of the system developed by Nova Scotia NewStart is a large chart containing an analysis, in performance terms, of the training objectives under consideration. The chart, which is prepared by a small group of expert practitioners in the particular trade or skill, serves both as a curriculum guide and as a measure of progress for the trainee. With achievement levels recorded on it, it can subsequently become part of a certificate or diploma and can even serve to record "post-graduate" achievement.

Under optimum conditions, the process is individualized and enables each trainee to work at his best speed on the skills most relevant to his requirements. Credit is given for previously acquired skills, and new achievements are recorded as they are verified. Resource materials are available in learning activity batteries, and the instructor acts as a resource person rather than a teacher.

The developers of the DACUM process state that it seems to have potential for most career-oriented training programs, but warn that it will not work in a traditional environment of tests, authoritarian instruction, and rigidly-structured sequencing of activities; these require group techniques, whereas the DACUM process will only work well in a self-directing learning environment. It requires and promotes an environment having many of the characteristics long considered by many educators to be favourable to optimum conditions for learning:

Replication or reasonable simulation of the job situation, in which trainees encounter "real" problems and have the tools, equipment, and materials to solve them.

A curriculum that is a description of terminal behaviour after completion of training.

A self-determining or self-directing attitude toward learning.

A program completely individualized to accommodate and take advantage of individual differences in adult learners.

Trainee selection of goals and sequencing of activities.

Trainee evaluation, and promotion of confidence in this evaluation by avoiding imposition of instructor's evaluation.

Evaluation based on performance rather than on retention of information for test purposes.

Avoidance of necessity to continue program learning for skills already acquired.

In this process the instructor's role changes to that of a facilitator of learning and he responds primarily to the trainee's initiative. He helps the trainee find solutions to problems and evaluate and record his progress.

Among the advantages claimed for the DACUM process are: immediate feedback of results to the trainee; self-evaluation by the trainee; self-planning and goal setting; and credit given for previously acquired skills.

It is claimed that DACUM also overcomes many of the shortcomings of traditional vocational training programs. The comparison can be summarized as follows:

TRADITIONAL	DACUM
Limited to relatively few standard occupations	Can be quickly adapted for any occupation
Can respond only to large demands	Suitable for use even in low-demand occupations
Carried on primarily in large centres or in well-equipped institutions	Adaptable to small community with limited resources
Cost-efficiency depends on processing large numbers	Can be cost-effective even with small groups
Developmental process is long, involved, and costly	Developmental process is brief, simple, and relatively inexpensive
Instruction processes are largely based on general educational procedures	Learning processes primarily related to industrial settings
Instruction is usually group oriented	Learning is completely individualized
Evaluation is primarily of cognitive material	Evaluation is primarily of behavioural skills
Course duration is governed by the covering of specified material	Course duration is governed by the trainee's acquisition of skills
Entry requirements usually standardized and based on certification	Entry requirements flexible and related to performance
Learning rate usually controlled by the instructor or by the group	Learning rate is controlled by the individual
Programs are presequenced	Learning sequence is flexible
Group process fosters dependency	Individualization encourages self-direction

Entry and exit dates controlled by the system
Evaluation occurs at the end of the course

Entry and exit dates at the convenience of the trainee
Evaluation is immediate and continuous

The DACUM process was used by Nova Scotia NewStart in most of its occupational training programs and also for adult basic education and life skills. Saskatchewan NewStart presents the contents of its LINC mathematics course in a DACUM matrix [91] and Prince Edward Island NewStart used a modified version in parts of its homemaker program [75]. Alberta NewStart's report on curriculum developments presents an analysis of its courses in a DACUM format [2]. New Brunswick NewStart used the DACUM chart produced by Nova Scotia NewStart as the basis for training community workers.

C. NEW CAREERS

"Few people anticipated the force with which the movement for new careers would sweep through the nation. Four years ago it was only an idea. Today in all parts of the country tens of thousands of individuals, without previous experience and without professional credentials in the human services, are working in schools, welfare bureaus, employment agencies, hospitals, community action and other agencies. The idea has become an indisputable fact" [10].

Since the publication in 1965 of the book, *New Careers for the Poor* [69] by Arthur Pearl and Frank Riessman, there has been a phenomenal spread of the use of non-professional staff in human service institutions and agencies. The role of the non-professional was explored by each NewStart corporation and training was provided for a wide variety of occupations. The term "paraprofessional" has been applied to this group of occupations and covers any task that may relate as auxiliary to a profession. In general it covers a wide range of skills up to and including the immediate sub-professional level. In NewStart terms it refers almost invariably to careers involving less than high school level prerequisites. There is usually the intention, however, that introduction to a paraprofessional career will be only the first step up the ladder to technical or professional competence.

Because paraprofessional training formed such a significant part of the Canada NewStart Program and because of its potential for career opportunities for the disadvantaged, it is the subject of a separate report: *New Careers for the Disadvantaged*. A brief overview of paraprofessional training is given here in order to maintain an adequate perspective on the occupational training activities of the individual NewStart corporations.

In a field as new as that of paraprofessional training it is inevitable that there will be some confusion in terminology. Each NewStart corpora-

tion initiated training programs—some to meet their own needs for staff, some to fill community needs. In each case, the name applied to the paraprofessional was an attempt to describe the function performed. School aides and teacher aides, for example, have some tasks in common and some which are separate. Paraprofessionals working with the poor were variously designated as community counsellors, guidance workers, and social work aides. On the other hand, the term community worker, which was used by three corporations, meant different things in each place.

To avoid any confusion, paraprofessional training programs will be considered by corporation rather than by function. A more detailed picture of the field can be obtained through the report *New Careers for the Disadvantaged*, and from the reports of the individual corporations.

1. SASKATCHEWAN NEWSTART

Because systematic and thorough efforts in new careers training were carried out by Saskatchewan NewStart, the work of this corporation is reported first, to provide insight into the philosophy and the potential of paraprofessional training. The program postulates three levels of human service workers [93, p. 22]:

- a) socanics—skilled workers in social institutions (these are the aides);
- b) coaches—these are the technicians in the agencies;
- c) professional.

Saskatchewan NewStart developed courses and provided training for the first two levels of this career ladder. The basis for this type of training is a series of six premises [93, p. 21]:

- a) that trained non-professionals can perform a great many of the tasks now performed by professionals;
- b) that a hierarchy of these jobs can be developed, requiring different degrees of training;
- c) that this training can be acquired in stages;
- d) that the professionals will then be freed to perform tasks of a more specialized nature in accordance with their more advanced training;
- e) that including paraprofessionals in service organizations will extend and enhance the services offered;
- f) that social institutions re-organized to include paraprofessionals will be in a better position to assist clients during difficult periods of adjustment.

An important consideration in training indigenous non-professionals for these careers is that they can often operate more effectively than professionals

because of their more intimate knowledge of the problems of the people and consequent greater success in communication. In this sense, the paraprofessional not only relieves the professional of routine duties but adds a new dimension to the professional service.

After initial study of career opportunities at the Socanic level (Socanic is a coined word which designates a trained paraprofessional working in a social institution), Saskatchewan NewStart found that most of the required skills cluster into a core of skills and knowledge that is adaptable for a single course of study. After basic core training, students can select short specialized training to prepare them for work as social work aides, education aides, alcohol counsellors, community health workers, community service workers, recreational aides, court workers, or parole and probation aides.

The core training is grouped in five main sections:

- a) Communication processes—the ability to read, write, speak, interview, etc.
- b) Clerical—typing, recordkeeping, and office practice.
- c) Human relations—the role of the Socanic vis-à-vis the professional, the client, the organization, and fellow workers.
- d) Human growth and development—physical, mental, emotional, and social aspects of the progression from birth to old age.
- e) Personal—adapting habits and attitudes to the expectations of the employing agency.

The specialized training which follows the core curriculum can be largely done on the job and will include such items as familiarization with the employing agency's policies and procedures, the resources of the service, the specific problems of the clients, and the laws and regulations governing the particular service.

The instructional coaches represent the second level on the new careers ladder. There are training programs for two types of coaches—basic education and life skills. These courses were developed to provide personnel for Saskatchewan NewStart programs, but the skills proved to be in demand, and graduates of coach training have been employed as community development workers, social welfare counsellors, probation officers, and school counsellors.

The basic education coach is trained to use the Saskatchewan NewStart modular curriculum, to operate audio-visual equipment, and to administer aptitude and achievement tests.

The life skills coach receives training in problem-solving skills and in how to assist others in developing them. In the field of human relations he is assisted in developing competency in eliciting and assessing reactions, in coping with harmful and distracting behaviours, and in utilizing the group process. He learns the basic philosophy of the life-skills process, the principles of learning, the cultures of the Indian and Métis people, and the

principles of group dynamics. In addition he is given instruction in the techniques of lesson presentation and student evaluation.

Saskatchewan NewStart has produced commercial versions of the training programs that have been referred to here. Details of the courses and costs are available in [93].

2. PRINCE EDWARD ISLAND NEWSTART

The need for outreach into the community was one of the early concerns of Prince Edward Island NewStart. For this purpose two community service centres were established within the NewStart area. In order that communication could best be established and maintained, it was decided to employ people who were indigenous both to the area and to the segment of the population that was to be reached. The people selected were intended for two roles, *community workers* and *community counsellors*, but the initial training was combined. In simplified terms, the community workers were to concentrate on community problems and concerns, and the community counsellors were to be involved with the problems of individuals. In practice there appears to have been considerable overlapping of function [80].

One outcome of the community service centres was the realization of the need for specialized assistance in the home. This led to the development and implementation of a training program for visiting homemakers [33, p. 39]. The training, which lasted 12 weeks, included home nursing, household management, family life problems, practical psychology, and child care. The trained homemakers operated out of the community service centres and also through a number of provincial agencies.

Another Prince Edward Island NewStart program that grew out of the operation of the community service centres was the establishment of two day-care centres [34] for pre-school children. These centres were staffed by women chosen from other corporation training programs and trained for 16 weeks in a course that combined classroom instruction with on-the-job training.

Reaching into areas of paraprofessional training beyond the needs of the corporation, Prince Edward Island NewStart conducted training programs for attendants in health care institutions. The course for institutional attendants [21] was run three times, twice with male groups and once with a female group, and included instruction in nursing skills, basic education and social development. Successful graduates of the course were employed in provincial institutions that provided health care services.

3. NOVA SCOTIA NEWSTART

Nova Scotia NewStart set up four extension centres, similar in function to Prince Edward Island NewStart's community service centres. These

extension centres were staffed by indigenous paraprofessionals selected and trained by the corporation. Training involved a series of unstructured, problem-oriented sessions followed by practical experience in the centres. Although the sessions were unstructured, the program was set up to cover such components as the purpose of the NewStart program, the demographic and economic characteristics of the area, the basic principles of counselling and motivation, data collection and recoding, and the role of the paraprofessional counsellor [31].

The people who staffed the extension centres were designated as guidance workers and carried out such tasks as data collection on individual and community needs, recruitment and referral services, personal counselling, and reporting.

Staff at one of the extension centres became involved in an examination of community problems, and the corporation decided to use the location as the centre for its social development project [61]. To help achieve this purpose, three of the guidance workers were given further training and became known as community workers. The role they filled can be described as that of a community development aide, but continued to involve a substantial amount of individual counselling. The training program was later extended to include a resident of the area who became involved with the project but who did not become an employee of the corporation.

As the outreach role of the extension centres diminished, the centres were phased out and the guidance workers were assigned to roles as counsellors with other NewStart projects. In these roles they assisted trainees in finding solutions to personal problems or they became aides to professionals in basic education and life-skills programs.

4. ALBERTA NEWSTART

The title of *counsellor* was applied to the indigenous people that Alberta NewStart employed and trained to provide liaison between program personnel and program participants. Depending on the nature of their duties they were variously designated as community counsellors, family counsellors, and dormitory counsellors [3]. Training was a combination of three basic techniques—classroom, on-the-job, and in-service, and was largely informal, incorporating discussion-group techniques, sensitivity training, and field trips.

The counsellors performed a variety of liaison duties in the mobile centres and at Fort McMurray. The family counsellors were primarily concerned with adjustment problems of families moving from the mobile centres to advanced training at Fort McMurray; the dormitory counsellors had specific duties related to the programs for single men and women at Lac La Biche, and for single women residents of the dormitory at Fort McMurray.

5. NEW BRUNSWICK NEWSTART

New Brunswick NewStart reports contain references to three kinds of paraprofessional workers. Two of them—community workers and day care attendants—were involved directly in corporation-sponsored programs. The others, teacher aides, were destined for work in the community.

The basis for the training of the community workers was a DACUM chart prepared by Nova Scotia NewStart from experience in similar training programs. Of the ten people trained in this category five were employed by the research division and five by the program division. The roles seem to be those of information gathering and information giving respectively, although it is clear that a considerable amount of "helping with problems" takes place [96].

The training program for day care attendants at New Brunswick NewStart was similar to that used by the Prince Edward Island NewStart program with some modifications in the sequencing of classroom instruction and on-the-job training. Throughout the training, stress was given to the fact that day care attendants should be more educators than baby-sitters [76, p. 6].

The New Brunswick teacher aide program was conducted in co-operation with the New Brunswick Department of Education and the New Brunswick Teacher's Association. Material was secured from Saskatchewan NewStart and the program content was worked out with teachers in the project area. Training consisted of two months of instruction in the corporation's facilities followed by four months of on-the-job training in the schools. There were 15 trainees in the initial group and 15 schools participated in the project. In individual schools, each trainee worked with three teachers. Requests by the participants after three months of employment produced a summer refresher course which included audio-visual techniques, human relations, office procedures, and library organization [55, 59, 60].

6. MANITOBA NEWSTART

Although Manitoba NewStart did not exist long enough to implement many of its proposed programs, there were three identifiable activities in the field of paraprofessional training; the first was the recruitment of field staff for the corporation, the other two were intended to provide indigenous field staff for a number of social agencies.

The training program for community counsellors started with a two-week orientation period, followed by on-the-job training interspersed with group training sessions every four to six weeks. During on-the-job training the prime assignment was the collection of community data by way of interviews. As in other similar situations, a community interaction role

developed and, in some cases, the data collection task was subordinated to this.¹

A training program for indigenous paraprofessionals who would work in various social agencies in Northern Manitoba was developed after an earlier plan to evaluate a social animation project of the Manitoba Indian Brotherhood failed to materialize. There were four groups involved in this program, one at The Pas and the others at Camperdown. The first two courses lasted for nine and ten days respectively; the second two for seven weeks. The longer courses included two weeks of field trip experience and a one-week human relations workshop associated with each course.

Graduates of the course found employment with the Manpower Corps; Department of Indian Affairs and Northern Development; the Canada Manpower Centre; the Manitoba Métis Federation, and Manitoba NewStart [49].

The third paraprofessional training activity of Manitoba NewStart was a 10-day workshop conducted for the Manitoba Métis Federation. Participants were either employees or prospective employees of the federation. This program was in the nature of in-service training and included a consideration of the culture of native peoples, the workings of government, and skills in working with people [50].

D. TRAINING FOR BUSINESS AND INDUSTRY

There can be little doubt that the organization of development functions in education is becoming a matter of high priority. It may indeed be more important, in the immediate years to come, to establish a development policy in education than to establish a research policy [35].

Several NewStart corporations developed and conducted training courses designed to prepare the disadvantaged for employment in business and industry. There is no evidence that any of these courses were competitive with existing vocational or manpower training programs. On the contrary, they seem to have been planned to fill gaps in the existing system.

Since most of these training operations are described in detail in reports published by the respective NewStart corporations, this section will be restricted to brief descriptions with references to the appropriate documents. For convenience and to avoid fragmentation the descriptions of these training courses have been divided into three categories:

Primary Industry

Cole Crop Management—Prince Edward Island NewStart
Potato Farming—Prince Edward Island NewStart
Farm Management—Prince Edward Island NewStart
Oyster Culture—New Brunswick NewStart
Fisheries Training—Nova Scotia NewStart

¹ Information on this was obtained in personal interviews with community counsellors and other staff at The Pas, Manitoba, September 27-28, 1971.

Trades Training

Vocational Orientation—Alberta NewStart
Mechanical Trades—Prince Edward Island NewStart
On-the-Job Training—Nova Scotia NewStart
Handcrafts—Nova Scotia NewStart

Service Industries

Small Business Management—Saskatchewan NewStart
Retail Sales Clerks—Saskatchewan NewStart
Business Skills—Prince Edward Island NewStart
Oil Burner Repair and Service—Nova Scotia NewStart
Housekeeper-Homemaker Training—Nova Scotia NewStart

1. PRIMARY INDUSTRY

Farming is the main industry in Prince Edward Island, and Prince Edward Island NewStart conducted three programs specifically designed for persons in that industry. In sequence these were a training program for cole crop growers, growing potatoes, and farm business management.

a) *Cole Crop Growers—Prince Edward Island*

The training program for cole crop growers involved 13¹ producers of brussel sprouts, cauliflower, and broccoli in Kings County, Prince Edward Island. This particular group was chosen because their annual disposable incomes were all under \$3,000 in spite of markets. An assumption was made that improvement in production and quality would result in higher income for the growers. A secondary objective was to interest farmers in self-improvement programs of this type.

The program consisted of a series of 10 two-hour lecture-discussion sessions held in a local community hall from March 26 to April 25, 1968. The topics covered were:

- Why grow vegetable crops for processing?
- Processing costs and competition
- Soils
- Fertilizing the crop
- Factors affecting plant growth
- Labour and machinery
- Seed
- Cultivation
- Harvesting
- Insect and disease control.

The instructor was a man with seven years experience in working with low-income farmers, and proven ability in communicating with them [44].

¹ There is an unresolved discrepancy in the number of participants. The project manager's report indicates that there were 13 growers of cole crops in the county and that all participated. A later research report states that 19 out of 37 growers in the county took part.

b) *Potato Growers—Prince Edward Island*

Prince Edward Island NewStart's training program on the business of growing potatoes was conducted from October 1968 to January 1969. Thirty of the approximately 70 potato growers in the Souris area were invited to take part. They were between the ages of 25 and 45 years, had disposable incomes of less than \$2,500 per year, and were operating farms of 100 to 200 acres.

Recruitment was by personal invitation and interview. Most of those interviewed were positively disposed toward the course but were pessimistic about the future for the small potato farmer. In general they identified marketing as the only problem, the big grower as the main enemy, and external forces as controlling their fate.

The course consisted of 20 lecture-discussion sessions of three hours duration held two evenings a week. Subjects covered during the course were:

- Projected balance sheet
- Applied education
- Soil
- Cultivation
- Seed
- Factors affecting plant growth
- Marketing
- Fertilizer
- Insect and weed control
- Storage
- Packing
- Marketing.

Lecturers for the course included: the project manager, who was Prince Edward Island NewStart's agricultural specialist; a soil researcher and a seed specialist, both from the federal Department of Agriculture; a local farmer; a representative of Agricultural Engineers Inc. who lectured on packing and storage; and a professor of agricultural economics from the University of Maine, who conducted the last two sessions on marketing.

Attendance ranged from 18 to 32 and discussion was sporadic. There was considerable expression of fatalism and futility by the older participants but the younger men, when not outnumbered, showed optimism and willingness to change [45].

c) *Farm Management—Prince Edward Island NewStart*

The third farm management project conducted by Prince Edward Island NewStart included communications and mathematics components as well as lectures on farm business management. The occupational training component began in January 1970 and ran for ten consecutive weeks.

Sessions, involving 26 farmers, were held three evenings per week and lasted from three to three and one-half hours. Topics of the lectures were:

- Agriculture today and its problems
- The management job
- Economic principles
- Farm record keeping
- The income and net worth statements
- Budgeting
- Risk and uncertainty (insurance)
- Credit
- Taxation

Attendance was consistently high, probably aided by the fact that training allowances were paid. Again, the younger participants contributed most to discussion sessions; but interest was reported to have been generally high [32].

d) *Oyster Culture—New Brunswick NewStart*

Oyster fishing has been a traditional source of income in Kent County, New Brunswick; it began to decline after a serious outbreak of Malpeque Bay disease in 1955. The effects of the disease were serious enough but the continued use of outdated methods was also a contributing factor. At a time when 70 to 90 per cent of the oysters on the market were from cultivated beds, Kent County was still relying on the harvesting of natural production.

The entry of New Brunswick NewStart into the Buctouche area led to the revitalization of the Kent County Fishermen's Association and eventually to the formation of La Co-opérative des Huîtres de la Baie de Buctouche. This last organization was involved in the cultivation of oysters on a commercial basis; the earlier organization was primarily concerned with harvesting natural production.

The Buctouche Bay oyster culture training project set up by New Brunswick NewStart was essentially an on-the-job training project. The development and conduct of the project proceeded in several stages:

- i) fourteen Buctouche oystermen paid a visit to a commercial oyster hatchery at Ellerslie, Prince Edward Island—September 1970;
- ii) the idea of an oyster-culture co-operative was approved in principle—January 1971;
- iii) the Buctouche Bay Oyster Co-operative received its official charter—April 1971;
- iv) twenty-one unemployed heads of families began a work program with the co-operative, financed by the New Brunswick Department of Welfare and the Canada Department of Manpower and supervised by New Brunswick NewStart Inc.—May 1, 1971;

- v) contaminated oysters were transferred from the Buctouche River System to "clean" areas in the bay¹—May-July 1971;
- vi) a monitoring program was set up to check on the migratory oyster larvae—July 1971;
- vii) spat² collectors were set up in places indicated by the monitoring system—July-August 1971;
- viii) an estimated 40-50 million spat were on the collectors by the end of the spatfall—August 1971. This is expected to provide 5 to 10 million marketable oysters in four or five years (12).

As an occupational training project, this was confined to the 21 former welfare recipients who were selected for the work, but the membership of the co-operative had risen to 97 by September 1971. Among the skills which the project participants developed during the period of their involvement were:

- i) Fishing of oysters from contaminated areas
- ii) Manufacture of spat collectors
- iii) Placing, maintaining, and gathering collectors
- iv) Laying species in prepared oyster beds
- v) Repairing boats and equipment
- vi) Constructing fishing rakes
- vii) Constructing floats.

The occupational training was supplemented, where needed, by adult basic education and life-skills development along with basic technical instruction related to oyster culture [56].

e) *Fisheries Training—Nova Scotia NewStart*

Nova Scotia NewStart conducted a training program in two stages for deckhands in the Atlantic fishing fleet. The rationale for engaging in such a project was threefold: the technical requirements for work on fishing vessels were increasing rapidly; there was no entry-level training available for the fishing industry; and the fishing industry provided work opportunities for men with limited education.

It was agreed that the training should be of a practical nature, and a modern fishing vessel was chartered: a 130-foot steel-stern trawler with a capacity for ten trainees and six training crew. The first cycle of the project was planned in two phases: a series of six 10-day trips at sea; and two months of classroom instruction at the Nova Scotia fisheries training school at Pictou, Nova Scotia. The second cycle, building on

¹The digestive system of shellfish is such that those not heavily contaminated will eventually cleanse themselves if put in clean water.

²When, in the course of maturation, oyster larvae attach themselves to a hard clean object underwater they become "spat".

experience gained during the first, was based on alternating periods of ship and shore training, the shore training being provided by Nova Scotia NewStart in corporation facilities. Ship training was conducted on the same vessel used for the first cycle. Initially, selection criteria were few and simple: the trainees were males between the ages of 17 and 50, physically fit, who had expressed an interest in joining the offshore fishing fleet. For the second cycle a minimum educational requirement of grade 5 was introduced as essential to the verbal requirements of the course. A trial sea trip was also made part of the selection process.

The course content was specified on a DACUM chart and included the following general areas of competence:

- Perform emergency duties
- Perform general ship duties
- Maintain efficient work environment
- Steer a vessel
- Maintain fishing gear
- Operate trawl fishing gear
- Fish by long line
- Operate purse seine fishing gear
- Handle and process fish
- Lead a constructive working life.

During the second cycle, two training crews were employed and each worked with a separate group of trainees, spending eight days at sea and twelve days ashore. Shore training was related to the skills specified on the DACUM chart and included compass work and steering, fire fighting, first aid, safety precautions aboard ship, mooring procedures, knots and hitches, rope splicing, fishing nets and gear, maintenance and upkeep of work stations, quality control, and rules of the sea.

Fisheries training was supplemented by adult basic education and life-skills development. Post-training placement in the fishing industry was also an integral part of the project [71].

The training crews were made up of men who had had firsthand knowledge of offshore fishing and were experienced in the use of modern fishing methods. The captain, the mate, and the bosun were all considered to be trainers and gave instruction both on ship and on shore. The other members of the crew were a chief, a second engineer, and a cook. Their instructional responsibilities were secondary to their ship's duties.

2. TRADES TRAINING

a) *Vocational Orientation—Alberta NewStart*

Alberta NewStart's trades training program consisted of two phases: vocational orientation at the mobile centres, and vocational training at

the Alberta vocational centre at Fort McMurray. The program provided opportunities in heavy equipment operation, carpentry, basic welding, basic automotive, and driver training. Each centre covered the same subjects, although the emphasis varied with local conditions [2, p. 80].

The orientation program had a dual aim:

- i) to expose the trainees to the different trade areas, enabling them to make a vocational choice and possibly to proceed to Fort McMurray for further training in that field,
- ii) to give basic training in the chosen field which would enable them to attend the corresponding trade courses at Fort McMurray, if they so desired.

If a trainee chose not to go on to the Alberta vocational centre at Fort McMurray, he could (in some cases) pursue a chosen field of training at the mobile centre beyond the orientation stage [2, p. 80].

Curricula in the vocational subjects were prepared and revised [8, pp. 33, 35], but the emphasis was always on the practical aspects of the work. At both Kikino and Janvier, roads were built and maintained as part of the heavy equipment operators' course [8, p. 42; 4, p. 49].

The Alberta NewStart driver training program was intended not only to enable the trainee to secure a driver's license but to assist those who wished to make driving a career, as, for example, in the case of heavy-equipment operators. The corporation prepared both instructor's and trainee's manuals for this course [7, 9].

b) *Mechanical Trades—Prince Edward Island NewStart*

As part of its comprehensive manpower development system, Prince Edward Island NewStart offered orientation and training in a limited range of mechanical skills. During a two-week exploration period, the trainee became familiar with the programs offered in the training shop. Following this, he had the opportunity to choose between a welding program and an automotive and small engine program.

The welding program covered a period of approximately 250 hours of instruction and included both gas and electric welding. The instruction period for the automotive and small gas engine course ranged from 150 to 300 hours; the course dealt with the basic elements of the repair and maintenance of two- and four-cycle engines [26, pp.9-10].

c) *On-the-Job Training—Nova Scotia NewStart.*

The earliest occupational training project conducted by Nova Scotia NewStart was on-the-job training. This was organized initially to accommodate a group of young unemployed men who had been engaged in a series of group counselling sessions and were interested in securing gainful

employment. The process was revised as the result of this early experience and repeated with another group.

The training process in both phases consisted of several components which were utilized as required. These included:

- A work site
- A DACUM chart for the specific occupation
- A training consultant or tutor
- Basic education
- On-the-job instruction
- A home study program
- Counselling.

Trades chosen by the first group include plumbing (2), mechanics (3), electronics (4), communications (2), greenhouse gardening (1), commercial art (1), baking (1), automobile sales (1), and drafting (1). The second group was involved in cooking (3), auto body repair (2), motor vehicle maintenance (1), appliance repair (1), meat cutting (1), industrial electrical maintenance (1), construction electricity (1), antique restoration (1), gas burner installation and servicing (1), and radio and TV repair (1).

In practice the operation of this kind of an o.j.t. project takes place in a prescribed sequence:

- i) (a) persons interested in occupational training are identified and their trade preferences determined;
- (b) employers interested in securing and eventually hiring a trainee are located and training opportunities are classified by occupation;
- ii) trainee and employer are matched and paired by interview;
- iii) a DACUM chart is selected or developed and content and conditions of training are agreed upon;
- iv) the employer and the training agency complete a contract covering training, supervision, and remuneration on a reducing scale as training progresses;
- v) the trainee begins work, receiving instruction from a competent person and supervision by a representative of the training agency;
- vi) learning progress is recorded on the DACUM chart;
- vii) when the employer and the training agency agree that the desired level of competence has been reached by the trainee, a diploma, incorporating the DACUM chart with the highest ratings achieved, is prepared and presented.

Several benefits are claimed for this type of training in comparison with the more traditional types [64]:

- i) it is applicable to individuals or to small groups;
- ii) it does not require heavy outlays of capital for buildings and equipment;
- iii) it can be implemented quickly in response to a specific need;
- iv) usually it permits a trainee to live at home during the training period;
- v) trainee morale and persistence in training are improved as a result of direct involvement in employment.

d) *Handcrafts—Nova Scotia NewStart*

Among the disadvantaged groups identified by Nova Scotia NewStart were those who, because of physical disability or environmental restrictions, were unable to accept regular employment. On the hypothesis that ability to work at home, at their own convenience, would provide these people with supplementary income, the corporation developed and conducted a handcrafts training program.

Training was provided in woodworking, leather craft, ceramics, sewing, weaving, machine knitting, and jewellery making. The instructors were local craftsmen, each provided with a DACUM chart as a curriculum guide.

The training site was an old home, centrally located in Yarmouth, which was used for basic instruction in each of the specified crafts except knitting. A mobile instructor demonstrated machine knitting in the homes of the trainees.

The project had a dual objective: to develop the trainees' ability to produce and market an acceptable handcrafted product; and to organize and establish a co-operative to continue the training, production, and marketing functions.

In keeping with the second objective, a co-operative was chartered in May 1969 under the title of Arts Atlantic Co-operative Limited to conduct the production and marketing aspects of the project. Members of the project staff and of the corporation staff and board assumed responsibility as the first directors of the co-operative, but it was intended that the trainees would gradually take over the responsibility for the operation of the co-operative.

A number of in-process changes were made in the planned procedures, most of them to assist trainees to develop a marketing orientation and competence; but the co-operative was never turned over to the trainees. Instead, in December of 1970, it was agreed that it should be dissolved because Nova Scotia NewStart Inc. was set up for training and research purposes, and could not continue indefinitely to finance the co-operative. In addition, the volume of goods produced by members of the co-operative was too small to support an independent operation. Finally, no alternative source of working capital could be found [13].

3. SERVICE INDUSTRIES

Several of the NewStart corporations conducted courses related to skills for service industries. Saskatchewan NewStart developed courses for small business management and retail sales clerks. Prince Edward Island NewStart had a business skills course as part of the comprehensive manpower development system, and Nova Scotia NewStart developed programs for oil burner repair and service and for the training of homemakers and housekeepers. Alberta NewStart's course in driver training could be classified as a service industry program but was included in the previous section because of its inclusion in the vocational orientation package.

a) *Small-Business Management—Saskatchewan NewStart [90].*

An examination of the business and economic situation of native people by Saskatchewan NewStart showed that in spite of the improved loans and grants made available to them by provincial and federal governments, native people do not participate to any extent in the economic life of their communities.

In many communities, as new business ventures develop, white people move in to take the opportunities because native people are often not prepared to do so. Even in the case of band or co-operative businesses set up by native people, business management skills are often lacking.

Interviews with native people as well as government people disclosed a great need for business training. Existing business management courses did not appear to provide the training required. It was therefore decided to develop a course suited to the particular needs of native people, which would prepare them for the operation of their own businesses or those of bands or co-operatives.

The content of the course, outlined below, does not differ greatly from most business courses:

- General background information
- Marketing
- Business organization
- Personnel selection, training & supervision
- Personal finances
- Production (optional)
- Finance, accounting, bookkeeping
- Business communications
- Starting a business.

The approach taken in providing the training does, however, differ greatly from most such courses. Rather than subject-by-subject, the course provides for an integrated approach. Lessons are sequenced so that similar and related subjects can be treated as units. Therefore, rather than leave

the responsibility for integrating the subjects to the student, the sequencing of materials and the methodology provided for the instructor continue to help the student integrate the material into a business context.

The method used in teaching the course greatly facilitates learning. The lessons are developed so that the instructor is made aware of any prior knowledge the students may have of a particular topic. The instructor can then assess what has to be learned, and build on the knowledge that is already there; he can make his material directly relevant to the specific needs of his students.

There is a great deal of emphasis on the involvement and participation of students, as well as on their discovery of new knowledge. Very little lecturing is used in the course, but a large number of teaching aids help the students learn. Overhead projectors, role playing, films, tours, visitors, and exercises, as well as specially prepared reading materials, are included. Case histories from native communities have also been prepared, using business known to most native persons—businesses to which they can relate. The course is divided into 124 lessons, and occupies approximately six months. In addition to classroom group-learning experiences, students get a month of on-the-job training in a business of their choice.

It was found that many native people had not the necessary academic and life skills to conduct a successful business; they also lacked the skills required to successfully complete training in business management. It was therefore decided to upgrade all students to a minimum of adult grade 10, before they took the small business management course. Prospective students for this course were also required to have taken a life-skills course, or to have adequate life skills.

The selection criteria for small-business management course required the following: Indian ancestry, between 25 and 45 years of age, and average intelligence. In addition, they were to have a record of at least 75 per cent employment over the previous three years and freedom from serious personal problems such as alcoholism. Preference was given to married couples, in view of the close relationship between man and wife in small businesses.

The course underwent two trial runs; a third format was developed, based on the experience and evaluation provided by the earlier courses.

Saskatchewan NewStart is involved in dissemination activities concerning the content and methodology of the course.¹

b) *Retail Sales Clerks—Saskatchewan NewStart*

An earlier project conducted by Saskatchewan NewStart was the training of retail sales clerks. The course enrolled 24 trainees and covered a period of eight weeks. There were 102 hours of classroom instruction

¹ Material provided by Executive Director, Saskatchewan NewStart Inc. July 1972.

and 48 hours of on-the-job training. The occupational training segment was supplemented by academic upgrading and life-skills development as required. The nine units of the course were:

- Introduction to retail sales
- Applied retail mathematics
- The selling function
- Receiving and readying goods for sale
- Sales register
- Handling cheques
- Protecting profits
- The need for inventory
- Fire prevention.

Various instructional methods were used, including programmed instructional packages, lectures and readings, filmed instruction, role playing, practical exercises, supervised field trips, video-taped skill sessions, *and on-the-job training* [82, 83].

c) *Business Skills—Prince Edward Island NewStart*

Among the earlier projects conducted by Prince Edward Island NewStart was a series of business skills courses. The program was carried out three times, with revisions based on experience, and ultimately became a part of the comprehensive manpower development system of that corporation.

Initially the business skills program included typing, shorthand, filing, business English, recordkeeping, office procedure, business arithmetic, and personal and social development. Subsequently shorthand was dropped from the course and receptionist skills were added [24, 25].

d) *Oil Burner Repair and Service—Nova Scotia NewStart*

The oil burner repair and service project conducted by Nova Scotia NewStart had as its primary objective the testing of the DACUM process. It had some of the characteristics of the on-the-job training project described under Part IV Section D(2) c.

The project was initiated after consultation with a number of local oil dealers and oil burner servicemen who agreed that there was need for more trained workers in the business. Nine men were involved in the course, which consisted of three months of shop training followed by three months of training on the job. Standard training allowances were paid throughout the course.

The instructor was a local oil burner mechanic, rated one of the best in the business, and his shop was used for the first three months of training.

A DACUM chart specifying the skills required of a trained oil burner mechanic was prepared and used as the basis for the course. Individual counselling, group development process and supplemental driver training, as needed, were integral parts of the project [66].

e) *Housekeeper/Homemaker Training—Nova Scotia NewStart*

The training of disadvantaged women as homemakers or housekeepers was the objective of another Nova Scotia NewStart project. This was run according to the DACUM process and was intended to cover the following areas of competence [63]:

- Manage the household
- Maintain and clean the household
- Do laundry and care for clothing and linens
- Care for and use appliances, utensils, and dishes
- Cook and serve vegetables
- Cook and serve meats, fish, and poultry
- Prepare and serve breakfasts, snacks, and lunches
- Prepare and serve desserts
- Care for children
- Care for elderly, chronically ill, and convalescents
- Develop personal competence.

The training was conducted in two phases: a period of six weeks in a training centre, followed by three two-week periods of on-the-job training in three selected locations. A program of supplementary counselling was provided [65].

The training programs related to business or industry that were conducted by the NewStart corporations are only a small sample of the vocational training field. In general, more attention was paid to the needs of the disadvantaged people than to the demands of business and industry. Where suitable courses existed people were directed to them, with special preparation if necessary. Extensive use was made of the resources of the Canada Department of Manpower and Immigration and the provincial Departments of Education; new courses were created only if available ones did not meet the needs of the trainees.

The NewStart training program was more concerned with devising new methods and materials than with processing masses of people. Therefore to express results in terms of numbers would be misleading. A fairly substantial number of people were trained during the course of the NewStart program but the real results can be expressed only in terms of useful programs and techniques. In Part V we examine the results as reported in publications of the NewStart corporations.

PART V

The Results

Millions of dollars are spent annually in activities designed to bring about change and, presumably, improvement in schools: consulting services, workshops for teachers, after-school courses, and so on. But we know little today either about the effects of these or, more important, how to bring about comprehensive educational change. Planned strategies, drawing upon studies and findings from related fields, need to be laid out, and their success needs to be traced systematically to gain knowledge about factors resisting or facilitating change. Further questions have to do with the characteristics of those innovations having unusual salience for practitioners and the personal characteristics of educators who support (or resist) innovation [22, p. 264].

In this Part we report on the findings of the NewStart corporations regarding the results of some of the vocational training programs described. No attempt is made to assess the findings, which are related as they appear in the reports of the several NewStart corporations. No comparisons between NewStart corporations are expressed or implied.

The volume and sophistication of the data available on the results of the training projects vary greatly not only between but also within corporations. For example, one corporation has produced more than 120 pages of follow-up data analysis on one project and less than 10 on another. In other instances, the results of extensive evaluation appear as revisions of curriculum materials with no other documentation. Under these circumstances, a general summary of results such as this, although attempting to be as balanced as possible, touches only the main areas of achievement. Greater detail can be secured from the publications of the individual corporations.

1. LIFE SKILLS

Life skills training was considered by each NewStart corporation as a prerequisite or essential supplement for occupational training; but there

is little evidence what influence such programs had on the results of that training.

In the program at Fort McMurray, Alberta NewStart reported that the group who had taken the human relations program felt more optimistic, more satisfied, and more responsible than previously, whereas a control group reported opposite feelings [38, p vii]. On the other hand the conclusion was that the human relations program had no effect on performance in the academic or vocational areas.

At Nova Scotia NewStart, where a life skills program was combined with adult basic education, staff reported improvements in the selection of clothing, personal hygiene, verbal expression, work and study habits, and social awareness [67, p. 128]. Success in on-the-job training was attributed, at least in part, to the acquisition of "some broader life skills involved in self-directed learning and achievement-oriented behaviour" [64, p. 67].

On the other hand, Nova Scotia NewStart's fisheries training program, which reported good results in the imparting of work-related skills, claimed little success in "changing attitudes or life patterns" [71, p. viii]. The conclusion was that "future training programs should give much more emphasis to . . . life skills".

Prince Edward Island NewStart came to much the same conclusion with regard to its occupational training. "The majority of the participants have very little difficulty with the knowledge and skill achievement required by the various occupations. The major problem lies in their attitudinal and behavioural characteristics, which are not conducive to the regimentation required by industry" [26].

The evidence of Saskatchewan NewStart's favourable results with the life skills program can be found primarily in the revised course materials and in the fact that these materials have been read and used throughout Canada. A preliminary report on effects of the life skills course on personality and attitude indicates that the most consistent effect is "the increased ability of students to communicate more effectively with others and improve their ability to express themselves clearly" [103, p. 46]. Among those changes which could have relevance in occupational training or employment are increased confidence and self-assurance, increased creativity, increased enthusiasm, decreased attitudinal rigidity, and increased stability [103, p. 55].

2. ADULT BASIC EDUCATION

There is little or no evidence to indicate to what extent adult basic education programs affected the results of occupational training programs. In some cases, project proposals indicate an intention to carry out occupational training with and without adult basic education, but if these intentions were carried out they were not reported.

Alberta NewStart, which used a variety of adult basic education programs, reported no significant difference in results from any of the different methods [37, p. 47]. After a series of adult basic education programs conducted in classroom settings, Prince Edward Island NewStart came to the conclusion that individualized programs are essential to success with the disadvantaged [46, p. 22]. Both of these corporations achieved better results in mathematics instruction than in communications training [46, p. 22; 37, p. 47].

In the major follow-up study conducted by Nova Scotia NewStart it was found that graduates of the adult basic education program were among those who benefited most financially from NewStart training. This study concerned 192 people of whom 31 per cent were project graduates, 13 per cent were project dropouts, 27 per cent had declined to enter projects, and 29 per cent (the control group) had been contacted by the corporation but had not had the opportunity to participate in projects.

One finding of this study was that graduates of the adult basic education programs had incomes in 1970 that were \$667 above those of the control group. This was exceeded only by those who had taken on-the-job training and by the group who had refused training [40, p. 51]. The study does not reveal, however, whether adult basic education had any effects on the results of occupational training.

3. SYSTEMS APPROACHES

The results of the systems approaches described in Part IV Section A can be considered in two ways: the composite or aggregate effects, and the individual or component effects. At this point in the report attention is given only to the first type. The available information deals more with the process than with the product. The result is that there is no evidence to show whether one particular system worked better than another system, or than no system at all.

a) Comprehensive Manpower Development System—Prince Edward Island NewStart

The final evaluation of the Prince Edward Island NewStart comprehensive manpower development system reports that the 121 people who were involved in the system participated in one or more of its seven components [81, pp. 11-12]. The distribution of these participants was:

- 4 people were placed directly
- 8 were enrolled only in basic education
- 31 were involved in basic education and pre-employment skills training
- 11 took only initial (mechanical) skills training
- 3 were involved in pre-employment skills and initial skills training

18 took basic education and initial skills training, and
46 were enrolled in the basic education, pre-employment skills, and
initial skills sequence.

The post-training results, as reported in another paper [23, p. 24] were:

26 employed in areas related to training
63 employed in areas not related to training
14 employed as housewives
14 unemployed
1 engaged in further training
1 unable to work
2 not located

121 total involved in CMDS programs.

The low percentage of participants employed in training-related jobs was thought to be caused by the limited occupational choice available [23, p. 25]. On the other hand, the efforts of the placement personnel received credit for achieving the relatively high proportion of employment [81, p. 25].

In his final report on the operation of Prince Edward Island NewStart, the executive director predicted the adoption of the comprehensive manpower development system as a major part of an employment training corps which the province of Prince Edward Island planned to establish [17, p. 56].

b) Alberta NewStart Fort McMurray Program

Some information on the results of Alberta NewStart programs is found in the 1970 Annual Report [8]. This report indicates that [79] Alberta NewStart students were introduced to social reform programs in Fort McMurray in 1970. This number was made up of 34 heads of families and 45 single students of whom 26 were male and 19 female. At the end of 1970, 14 of the 79 were still in training. The distribution of the other 65 was [8, pp. 58-9]:

12 left the program to accept employment
28 left for other reasons
7 were released by the corporation
12 graduated and went to work
6 graduated but were unemployed.

A number of problem areas were noted, including inadequate behaviour change before relocation in Fort McMurray, unresolved personal or social problems of one member of a family group, difficulties in transition from training to employment, insufficient housing, too high an academic level required by the human relations program, and requirement for more practical experience in the curriculum [8, pp. 64-67].

Alberta NewStart reported in July 1971 on a follow-up study of 89 program participants at 6, 12 and 18 months after completion of training. This group was compared with a control group of 71 people who had not taken part in NewStart programs. The results of this study are expressed in weeks worked per month, and in average monthly salary. The data show that for the trainees the average for both measures was consistently below that of the control group at six months, but that the gap had narrowed or been erased by the end of 18 months. The evaluators concluded that the study should be repeated at 24, 30 and 36 months, to determine if the upward trend for the trainees would continue [39].

4. DACUM APPROACH TO CURRICULUM, LEARNING, AND EVALUATION IN OCCUPATIONAL TRAINING

While the DACUM process was employed in a number of training projects, no controlled experiment could be used to compare it with other techniques. The process has sufficient *prima facie* validity to result in its being adopted by at least one institute of applied arts and technology¹ and to encourage active involvement by another². Several other interests in the DACUM approach are being explored.

During the development of the DACUM approach a check was made to assess the reliability of the evaluation aspects of the process. Using the service department of a large automobile agency, the individual ratings from three supervisors were gathered for nine employees. The chart used was one available on automotive repair; it contained 127 items on which the employees were rated in terms of reliability for three raters, and for the one rater who caused the most variance. Two methods of calculating inter-rater reliability were used. The first indicated an over-all reliability, based on average rating per subject of .9318 for one rater and .9762 for three raters. This seemed to be rather high as an estimate of over-all reliability in using such a large number of items, and it was decided to use a global approach. On this basis the median for one rater proved to be .76 and for three raters .91 [1, pp. 235-239].

5. NEW CAREERS

Eighteen identifiable projects were used to train indigenous non-professionals for new careers. Eleven of these were for employment, at least initially, with NewStart corporations. The remaining seven were for employment in schools, hospitals or other social institutions or agencies. Since each of these projects is discussed in detail in the Canada NewStart Program report *New Careers for the Disadvantaged*, there will be no attempt here to comment

¹ Holland College of Applied Arts and Technology, Charlottetown, Prince Edward Island.

² Nova Scotia Institute of Technology, Halifax, Nova Scotia.

on the results of each of the 18 projects individually. Rather, a summary of the findings will be presented to provide an over-all impression of the results of the programs.¹

Each corporation conducted paraprofessional training for one or more occupations in the service field. There is no question that this was anything but a reasonable and practical course to take. With very few exceptions, the indigenous people trained for paraprofessional roles within NewStart corporations appear to have filled these roles satisfactorily. Although the opportunity for follow-up has been limited, there also seems to have been general acceptance of the indigenous paraprofessionals who were trained for other agencies. Perhaps the greatest indication of the results of the programs comes from the degree of satisfaction expressed by the people who were trained and involved. Whether the information comes from follow-up questionnaires or through personal interviews, there is a general expression of personal satisfaction on the part of the participants. Among the most common indications of satisfaction given by the trainees is that of personal growth during the process.

The training program reports from all corporations implied that paraprofessionals were considered essential to the successful conduct of their operations; some corporations expressed this conviction explicitly. The indigenous paraprofessionals were seen as a vital link between the professionals who were designing and managing the programs and the disadvantaged people who were the beneficiaries. Among the values these people brought to the NewStart program were a more intimate understanding of the needs of the disadvantaged, an ability to communicate with them, and a degree of acceptance not generally accorded to non-indigenous professionals.

There was some evidence, however, that the paraprofessionals were not always comfortable in this middle-man role. In several instances the initial reaction was confusion and uncertainty, which could be attributable to their ambiguous situation: the corporation, the paraprofessional, and the client had separate impressions of the role and the results expected. In at least one instance, these feelings resulted from an attempt on the part of the corporation to have the paraprofessional find and develop his own role. Whether this procedure was beneficial in the long run has not been determined but it made the paraprofessionals feel insecure for some time.

Where the paraprofessional seemed to be the most comfortable was in individual face-to-face contacts with the disadvantaged in a helping relationship. Even when the expressed direction of the corporation was in other lines, there was a strong tendency to devote large proportions of the available time to personal contacts. This was done, in one instance, at the expense of a data-gathering role; and in others in preference to group guidance or social animation roles.

¹ Material for this summary is drawn from a pre-publication draft of (70).

The role of the paraprofessionals seems to have been most severely questioned by the corporations that assigned them to duties demanding the ability to write letters or reports or to adhere strictly to data gathering processes. This ability the paraprofessionals did not always possess.

Evidence of the results of paraprofessional training in terms of post-training employment is inconclusive. Where opportunities existed, the results were generally good, notably in the three Prairie provinces. Not only were trained paraprofessionals employed quickly by existing social agencies, but requests were made for additional training courses. In Prince Edward Island, the homemaker program and the nursing attendant program were both adopted by provincial agencies. The opportunities in Nova Scotia seem to have been fewer, but a number of NewStart-trained paraprofessionals found employment in jobs related to their training. In several cases, paraprofessionals were motivated to secure further education in related fields.

6. TRAINING FOR BUSINESS AND INDUSTRY

a) *Cole crop management—Prince Edward Island NewStart*

The Prince Edward Island NewStart cole crop management project has a two-fold objective: to improve the cost-yield per acre, and to increase awareness of the need for farm management training. With the first objective the results were inconclusive. There was considerable improvement in yield per acre for the group who participated in the training course, but it was not significantly different from that achieved by non-participants. Factors that contributed to the inconclusive nature of the results included the short comparison period (two crop-years), the variation in the nature of the crop between the two years, the fact that the program participants had had a substantially higher yield to the acre than other growers before the project began, and failure to collect data on both cost and yield to the acre.

Subjective analysis indicates that the training program produced positive results in terms of a better quality product, and the use of more efficient production methods. From this it may be inferred that net returns and production costs to the acre both improved [62, pp. 12, 13].

To assess the results relating to the second objective, two follow-up investigations were made: a questionnaire completed when the course ended, and a meeting held six months later. The questionnaire results indicated that the course participants were very much aware of the need for farm management training. However, it was not evident whether this awareness had been increased by the course. The consensus of the meeting held six months after the end of the course was that the quality and quantity of their product had increased; only 28.6 per cent felt that this

had resulted in increased income. It was reported that about 40 per cent of the crop could not be sold [62, p. 12]. There is no indication that the idea of further training has since been pursued either by the growers or by provincial authorities.

b) Potato Farming—Prince Edward Island NewStart

No data were collected on the achievement of the original objectives of the project: to assess the individual farmer's attitude toward self and farming, his appreciation of his situation, his estimates of the course, his objectives in farming and his income. There is, however, an indication that the course created or at least intensified a conviction that drastic changes were needed in the handling, packaging, and marketing of potatoes. This led to the formation of a private company for this purpose and a subsequent request for a \$500,000 government grant from the province. There is evidence that an incentive offer of \$169,000 was subsequently made by the Department of Regional Economic Expansion.

c) Farm Management Training—Prince Edward Island NewStart

This program consisted of approximately 120 hours of basic skills training in mathematics and communications, in addition to the farm management component. An average improvement of about two grades was reported.

The operational staff felt that the most important changes which were observed were those for which we had no objective measures. These changes were primarily in the area of ability to relate with other people and the building of a sense of common interest and group cohesiveness. It appears that this can be attributed to such factors as involvement in a program closely identified with the experience and needs, improved self-concept as a result of improved communication skills and good interpersonal relationships with the staff. All participants expressed great satisfaction with the program and requested it be offered again the following winter [78, pp. 39, 40].

d) Oyster Culture—New Brunswick NewStart

This is an ongoing, long-range program and only interim results are available. The first and probably the major result of the project was the establishment of the Buctouche Bay Oyster Co-operative, which provided the basis for operation, the means of training, and a measure of the economic objectives achieved. In terms of involvement and accomplishment the co-operative seems to be well established. Membership had risen to almost 100 by September, 1971, and the various activities associated with the project were well organized and productive. Barring unforeseen accidents, the cash crop resulting from work already done is expected to amount to between

\$600,000 and \$1,000,000 in 1974, and to continue to increase thereafter [58, p. 2].

Another indicator of the success of the project is the fact that the provincial government is examining the possibility of extending the industry along the eastern coast of that province [60, p. 2].

e) *Fisheries Training—Nova Scotia NewStart*

The predominant observation regarding Nova Scotia NewStart's fisheries training program was that, while there was appreciable success in imparting the skills required by deckhands on fishing vessels, there was very little success in terms of producing employed fishermen. Follow-up interviews were held with available trainees approximately six months after the completion of the second phase of the project. At that time 20 per cent were engaged in fishing and 21 per cent reported that they had fished more than half the time since completing training [71, p. 51].

The claim for the success of the skill-development aspects of the program is based on three measures: the DACUM ratings by the instructors, the reaction of captains and mates on vessels that employed the trainees, and the responses of the trainees.

The mean DACUM ratings for the first phase of the project were 2.09 and for the second phase 2.26¹ [71, p. 45]. Charts comparing independent ratings of trainees by four instructors reveal a high degree of inter-rater consistency [71, pp. 68-72].

The assessments of the trainees by the captains of the ships on which they were placed are, of course, subjective but indicate a quality of performance that was usually commendable [71, pp. 83-96]. There was not, however, sufficient motivation for most of the trainees to persist in fishing; the majority dropped out, even though some were offered a full share of the proceeds for a second trip. The reasons given, in most cases, were largely trivial and irrelevant [71, pp. 83-96]. In spite of their disinclination to go fishing, the trainees recognized the gains they had made in the knowledge and skills of fishing. In the follow-up study 61.2 per cent listed knowledge of fishing as either the first or second of their benefits from the program. "Getting along with people" was so listed by 18.4 per cent [71, p. 107].

When asked for their reasons for not persisting in the fishing industry, 63.9 per cent gave circumstantial causes such as inability to find work, winter weather, poor health, and pressure from others. The remaining 36.1 per cent gave motivational reasons such as lack of desire to fish, preference for working ashore, and inadequate financial returns [71, p. 115].

¹ A 2 rating indicates ability to perform satisfactorily with periodic supervision and a 3 rating indicates ability to perform satisfactorily without supervision. Since trawler deckhands always operate with supervision a 2 rating is considered quite acceptable.

f) *Vocational Orientation—Alberta NewStart*

The results of the Alberta NewStart Fort McMurray program, as reported in sub-section 3b of this section (Part V), are relevant to the vocational orientation program conducted by Alberta NewStart. There is no indication that the skill levels achieved in the mobile centres were in any way inadequate for continuing training at Fort McMurray. In fact, the difficulties that were mentioned related almost exclusively to behavioural or adjustment problems and not at all vocational competence [8, pp. 56-67].

g) *Mechanical Trades—Prince Edward Island NewStart*

The courses in automotive mechanics and welding that were conducted by Prince Edward Island NewStart were accepted by the province and approved as the basis for certification or admission to apprenticeship [26, p. 16]. Out of the 19 trainees who took the welding course, 17 were successful in passing the provincial test for a Class B ticket [23, pp. 29, 30].

The fact that only six of the 35 trainees succeeded in securing employment in jobs related to their training is attributed to the scarcity of such employment in the area and to the limited offerings of the mechanical trades section [26, p. 17]. It should be noted, however, that an additional 25 secured employment in jobs not related to their training and that only three remained unemployed [23, p. 24].

h) *On-the-Job Training—Nova Scotia NewStart*

Follow-up data on Nova Scotia NewStart's on-the-job training project are found in the main project report [64] and in the corporation's major follow-up study¹ [40]. The former deals mainly with comparisons between the two phases of the project while the latter reports on the economic benefits of the project as a whole.

In terms of increased income, the graduates of on-the-job training were doing better in 1970 than any other group of Nova Scotia NewStart's trainees. Graduates of that project reported personal incomes amounting to \$1,100 more than the control groups and family incomes of \$1,282 more [40, pp. 51, 70].

Similar results are reported for employment status, the graduates of on-the-job training having been employed for 670 hours more than the control group during 1970 [40, p. 59]. It must be noted, however, that at the time of the follow-up study less than half the trainees were employed in work related to their training [64, pp. 60-61]. Information on job satisfaction was elicited by asking whether or not the respondent would prefer a different job from the one he had. On this basis 57 per cent indicated job satisfaction but, without exception, those who were making the highest wages

¹This is the same report referred to in sub-section 2 of Part V.

were among the 43 per cent who would have preferred a different job [64, p. 58].

i) *Handcrafts Training—Nova Scotia NewStart*

Of the two objectives set by Nova Scotia NewStart for its handcrafts training project the corporation claims to have been successful in developing production skills, but was unable to establish a viable production and marketing co-operative. At the end of the venture it was reported that 75 per cent of the trainees were producing marketable products [13, p. 47]. One reason given for the inability to maintain the co-operative was the lack of entrepreneurial skills on the part of the trainees [13, p. 43]. Many who were able to turn out quality work were unable to establish and maintain contact with markets.

The lack of working capital was a limiting factor at both the personal and the organization level [13, p. 45]. Where trainees were receiving transfer payments there was considerable reluctance to jeopardize this fixed income by venturing into the questionable area of production and marketing [13, pp. 40, 41]. The market for handcraft products is highly seasonal, peaking during the Christmas and the summer tourist seasons, and considerable working capital is required to maintain a supply of raw materials and to stockpile finished goods. Neither the individual trainees nor the co-operative were able to acquire the necessary funds to finance continuous production.

j) *Small-Business Management—Saskatchewan NewStart*

Any report on the results of the Saskatchewan NewStart small business management course would be both partial and premature. The course has been through two revisions and a third is in process. As of March 22, 1972, 26 people had completed the course and 16 were employed in business, government, or association administration. Of the 10 who were not so employed, four were in jobs not related to management training, four were unemployed, one was enrolled in continuing education, and one could not be located¹.

k) *Retail Sales Clerks—Saskatchewan NewStart*

Saskatchewan NewStart conducted the retail sales clerks' course only once because of the lack of placement opportunities for the graduates of the course. The absence of jobs was attributed to the reluctance of the retail merchants to hire Indian or Métis clerks². Some of the graduates were retrained as typists.

¹ Letters from Executive Director, Saskatchewan NewStart. March 22 and June 13, 1972.

² Ibid.

1) *Business Skills—Prince Edward Island NewStart*

Prince Edward Island NewStart trained a total of 61 people in its business skills projects but was dissatisfied with the placement record. (The labour market seems to have been limited.) Of the 34 who were trained in the first two projects, 16 succeeded in securing employment in jobs related to training, but only 9 out of the 37 trained under the comprehensive manpower development system were able to do so. In spite of this, the total employment record is much better, with only 4 of 61 reported as unemployed [23, pp. 18, 24].

m) *Oil Burner Repair and Service—Nova Scotia NewStart*

All nine of the men who participated in Nova Scotia NewStart's oil burner service and repair project completed the course and all but one reported increased income during the eight months immediately following the training period. Converted to annual terms, the average increase in income was \$3,220, including one trainee whose choice of fishing as a career resulted in an annual increase of \$11,400. Excluding this extreme figure, the average was \$2,200, about double the pre-training income [66, pp. 116-136].

The seasonal nature of oil burner repair and servicing makes it difficult to assess results in terms of employment but the follow-up indicated that every one of the nine trainees spent some time in related work during the immediate post-training period. The proportion of time ranged from 6.2 per cent (for the successful fisherman) to 100 per cent, with a group mean of 37.7 per cent [66, p. 117]. The figures were higher during the winter months immediately following training and lower in the summer months just before the follow-up interview.

n) *Housekeeper/Homemaker Training—Nova Scotia NewStart*

A follow-up study of the graduates of Nova Scotia NewStart's housekeeper/homemaker project was conducted 16 to 18 months after completion of training. This study revealed that the participants had worked about 70 per cent of the available time but had succeeded in increasing their annual incomes by only \$400. Their average weekly wage, while working, was \$34 [65].

The skill acquisition of trainees seems to have been adequate, with an over-all mean exit rating of 2.7 out of a standard of 3.0. The higher levels of occupational skill tended to be recorded for those who were older, and who had records of previous employment in housekeeping. Persistence in working and job satisfaction were more characteristic of the trainees who were, according to test results, less intelligent [65, pp. 128, 129].

PART VI

Summary

The development of occupational skills as one of the means of achieving "stable and rewarding employment" was given varying degrees of attention by the NewStart corporations. Occupational training, or the lack of it, was seen as only one of many factors associated with disadvantage. Among the other conditions regarded as contributing to the problem were inability to communicate adequately, personal and social conflicts, scarcity of jobs, negative family and environmental factors, and lack of problem-solving skills.

A review of the reports and publications of the NewStart corporations shows that all recognized the multi-faceted nature of disadvantage, and avoided any simplistic approach towards overcoming it. On the other hand, the limitations of time and other resources necessitated some degree of specialization. This necessity, modified by the disparate geographic and anthropological settings of the NewStart program, as well as by the backgrounds and interests of the several staffs, results in a diversity of programs.

Alberta NewStart, located in an extensive tract of underdeveloped territory in northeastern Alberta, considered its prime objective to be finding ways to enable the Indian and Métis populations to participate in the industrial development of the region. This meant setting up training programs, in isolated areas and facilitating movement from there to the larger centres where jobs could be obtained. Because of the strong family ties characteristic of the people in that area, the program was family-centred. Programs for unmarried persons were set up in two of the larger centres.

Saskatchewan NewStart was focused on the disadvantaged people living in and around Prince Albert, Saskatchewan, of whom 50 per cent were of native ancestry. The corporation devoted much of its resources to the development of programs aimed at promoting pre-employment skills. Problem-solving in personal and social situations, and the ability to communicate and calculate adequately, became the major emphases. Life skills and adult basic

education courses, appropriate to the needs of the disadvantaged people of the area, were developed and carried through a series of practical revisions.

A second emphasis of Saskatchewan NewStart was in the field of "new careers". It enabled disadvantaged persons to be selected and trained for employment in paraprofessional occupations related to education, welfare, health, and the law.

Because of the development of a Special Area plan at The Pas, Manitoba NewStart did not continue beyond the planning phase.

The occupational training carried out by New Brunswick NewStart was within the framework of a community typology study concerned with the relations between disadvantage and certain community characteristics.

After conducting a number of individual projects in occupational training and basic education, Prince Edward Island NewStart pulled its efforts together into an integrated comprehensive manpower development system. The occupational training courses became part of a service continuum which started with recruitment or first contact and progressed to placement and follow-up.

Nova Scotia NewStart devoted a substantial portion of its resources to occupational training, using information-giving, life-skills training, and adult basic education as ancillary services for the most part. A common element of the occupational training was a process known as DACUM, which provides maximum opportunity for individualization and involves the trainee in both the determination and evaluation of his learning process.

Adult basic education and life skills programs are reviewed briefly in this report because of their obvious preparatory relation to occupational training, but their importance in the total Canada NewStart program was sufficient to warrant separate detailed reports. In the various NewStart corporations, adult basic education and life skills were used in three distinct ways: as introductory to occupational training; coincidental to occupational training; and independently. No systematic efforts were made to assess their relative merits.

Two NewStart corporations, Alberta and Prince Edward Island, developed systems that incorporated adult basic education and some form of life skills training into a package that included occupational training and, where possible, job placement. In both cases the objective was to meet a variety of problems rather than attempt isolated attacks on individual ones. The Alberta NewStart program also included a mobility component that made it possible for trainees to move from isolated communities to a larger centre when certain levels of achievement had been met.

Each NewStart corporation conducted some form of paraprofessional training, with the total amounting to some 18 different courses. Many of these were designed to train people for employment (at least initially) within the corporations; but several, particularly those related to health

and education, were for jobs in the community. This form of training met with varying degrees of success. The total effort of the NewStart corporations, in the field of paraprofessional training, is covered in the Canada NewStart Program report *New Careers for the Disadvantaged*.

In the traditional field of occupational training there were 14 discrete subject areas covered by NewStart training programs. Some of these represented two or more trials so that the total number of projects was considerably greater than this figure. It is interesting that there was practically no duplication of content among the five corporations that conducted such courses.

In primary industry, courses were conducted on agricultural topics by Prince Edward Island NewStart, and in fisheries by the corporations in New Brunswick and Nova Scotia.

The Prince Edward Island NewStart courses were designed for farmers with submarginal incomes. They covered cole crop management, potato farming, and general farm management. The major consensus after the completion of the courses was that improved marketing procedures were required.

New Brunswick NewStart succeeded in establishing a co-operative for the cultivation and marketing of oysters. Because this is a long-term project the results cannot be reported in this summary, but all interim indications point to a successful effort.

The fisheries training project conducted by Nova Scotia NewStart was designed to prepare unskilled men for employment as deckhands on deep-sea trawlers. The project used a combination of ship and shore training and achieved success in imparting knowledge and skills but succeeded in influencing only a small percentage of trainees to remain in the fishing industry.

Only three NewStart corporations, Alberta, Prince Edward Island, and Nova Scotia, engaged in trades training. The emphasis was more on method than content.

Alberta NewStart conducted a two-stage program that started with vocational orientation in the isolated "mobile" centres and proceeded to specific training at the Alberta vocational centre at Fort McMurray. A fairly broad choice of practical skills was offered, with heavy-equipment operation the most popular.

The trades training offered by Prince Edward Island NewStart was limited to welding and internal combustion engine repair. These courses were recognized by provincial authorities but job openings were reported by the corporation to be too few to provide the desired placement opportunities.

Nova Scotia NewStart conducted an on-the-job training project which placed 29 people in 19 different occupations. In this project, jobs and

people were individually matched; supervision, supplementary training, and counselling were provided as needed. The trainees were employed by various firms that were reimbursed on a diminishing scale as training progressed. The corporation's follow-up study revealed higher financial benefits for this group than for any other project.

A handicrafts training project, conducted by Nova Scotia NewStart for people confined to their homes by physical or other limiting circumstances covered skills in leathercraft, ceramics, sewing, woodworking, jewellery making, and machine-knitting. The objectives of the project included the establishment of a co-operative that would carry on training and marketing functions after the termination of the corporation's mandate. Lack of working capital and of managerial skills among the trainees made this impossible. The co-operative, which was maintained for a while under NewStart supervision, had to close down.

Saskatchewan NewStart devoted part of its program to the business-skill needs of the Indian and Métis populations. A retail sales clerk course was not repeated because of difficulties in obtaining employment for the graduates. A small business management course designed to help the native people of the area to take an active role in business management and administration found more positive opportunities and has been revised and repeated.

Prince Edward Island NewStart offered courses in business skills as part of its comprehensive manpower development system but expressed dissatisfaction with the low incidence of training-related employment.

The oil burner repair and service project and the housekeeper/home-maker training project provided Nova Scotia NewStart with opportunities to try out the DACUM process. In both cases satisfaction was expressed with the potential of the process but no studies were done comparing it with other methods.

In general, the occupational training programs conducted by the NewStart corporations can only be considered as preliminary. Several interesting approaches were devised and initiated but all require longer-term critical examination and comparison. In some cases, provision has been made for further testing, but in all the program has raised more questions than it has answered.

PART VII

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PART VIII

Abbreviations

ABE	: Adult Basic Education
BLADE	: Basic Literacy for Adult Development
CMDS	: Comprehensive Manpower Development System
DACUM	: Developing A Curriculum
DREE	: Department of Regional Economic Expansion
EDL	: Educational Developmental Laboratories
LAB	: Learning Activity Batteries
LEREC	: Learning English as a second language through RECreation
LINC	: Learning Individualized for Canadians
MIND	: An educational system
MOTT	: An educational system
OJT	: On-the-Job Training
PEST	: Pre-Employment Skills Training
REE	: Regional Economic Expansion
SRA	: Science Research Associates
TRY	: Training Resources for Youth

