# THE DEVELOPMENT OF A JOB ANALYSIS GUIDE

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# THE DEVELOPMENT OF A JOB ANALYSIS GUIDE

by

© Douglas Edward Anderson

A Project Presented to
The Department of Educational Psychology
Memorial University of Newfoundland

In partial fulfillment
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## ABSTRACT

The purpose of this Project was to develop a Job Analysis Guide of all jobs for which formal vocational training was available in Newfoundland and which did not require a work prerequisite to enter training. The writer first used a review of the literature to determine the types of information which should be included in a Job Analysis Guide. Then, using a Job Analysis Questionnaire, information was collected from the literature and through interviews with persons in the various occupational fields. After all information was collected, members of the various occupations were consulted to verify its accuracy and completeness.

The information was then examined, analysed and classified into ten categories which were deemed imperative by the literature for inclusion in Analysis Guide. The Job Analysis Guide was divided into three main sections. Section I was a Chart of jobs for which training was available in Newfoundland and the locations of the appropriate training centers. Section II contained the seventy-four job analyses. Section III was a brief description of apprenticeship training available in Newfoundland.

The Guide was then made available to the Department of Education to be reproduced and sent out to all of the high schools in Newfoundland.

## ACKNOWLEDGEMENTS

The writer wishes to thank Mr. Glenn Sheppard, supervisor of his project, for his help, advice, and time in developing this Project from its initiation. Thanks are also extended to Dr. David Watts and Mr. William Kennedy for their helpful suggestions and time.

Appreciation is also extended to the numerous workers and instructors of trades throughout this Province who gave their time and valuable information. A special thanks is extended to Mr. William Squires at the Department of Manpower and Industrial Relations, for his time and assistance.

The support, encouragement and assistance of fellow students is most appreciated.

Finally, the most profound appreciation goes to his wife, Dorothy, for without her constant encouragement and support this Project may not have been completed, and to his son, Jason, who again has a father to play with him.

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# CHAPTER I

## INTRODUCTION

### Statement of Purpose

The purpose of this project was to develop an accurate and current Job Analysis Guide of jobs for which formal vocational training was available in Newfoundland. This Guide is intended for use by high school counsellors and students in the Province of Newfoundland to meet a basic need for vocational information and as a resource for career counselling.

Information was gathered on those occupations for which formal vocational training was available in Newfoundland and a job analysis was developed for each of these specific occupations. The preferred aspects of vocational information, as outlined by such writers as Baer and Roeber (1964); Hoppock (1967); Issacson (1971); and Norris, Zeran and Hatch (1969), was analysed and presented in a topical format for each reference. The outline followed in gathering the necessary information is illustrated in the Appendix. The Job Analysis Guide was published by the Department of Education and made available to all high schools in Newfoundland.

Establishing a Need for the Project

A review of the literature indicated that writers, researchers and theorists, Ginzberg (1971); Issacson (1971); Marland (1972); Norris, Zeran and Hatch (1968); Super (1957), all maintained the importance of career information to the process of vocational decision-making, and more specifically the need for students to have a knowledge of training programs available, the nature of the work environment and an accurate perception of job opportunities. Parsons' Report (1974) on the career decisions of Newfoundland youth supported the need for more information on post-secondary training and available job opportunities after training.

In many high schools throughout Newfoundland, vocational counselling and guidance services are being established. One of the major purposes of such services is to help students become more aware of the world of work and to help them with a career choice.

After consultation with Mr. William Kennedy, Supervisor of the Pupil Personnel Services with the Department of Education and Youth, and Mr. David Cadigan, Federal-Provincial Manpower Needs Committee, it became apparent to the writer that there was an absence of appropriate vocational and career information in Newfoundland. Furthermore, these people felt that information which was available was

not readily accessible. A recent report by Mr. Harry O'Reilly (1974) supported this idea, and in fact was a major step toward improving the accessibility and awareness of occupational information in Newfoundland.

O'Reilly's Report (1974) supplied the counsellors of Newfoundland with an information service packet containing sources of occupational, educational, and personal-social information available in Newfoundland. One of Mr. O'Reilly's findings was that "There is definitely a scarcity of occupational information in the province," and he further elaborated with his hope that "more people will recognize the need and develop the information (p.2)."

This project supplements O'Reilly's work and provides not only sources of occupational information, but, more specifically, provides the actual information about jobs for which formal vocational training was available in Newfoundland.

The apparent consensus amongst prominent theorists, Ginzberg (1971); Issacson (1971); Marland (1971); Norris, Zeran and Hatch (1969); and Super (1957), as to the importance of vocational information to vocational development and career decision-making, as well as the support given to this project by local authorities, clearly indicates the need for such a project. The writer felt that much of the information which was available in Newfoundland was

not readily accessible and, furthermore, that which was accessible was not always relevant to this Province. This project gathered a great deal of job information pertinent to Newfoundland, and made it readily available to the school counsellors and students in Newfoundland as a resource in the broad field of career education.

Scope of Study

The study included all jobs for which formal vocational training was available in Newfoundland that did not require a work prerequisite. This includes such training as was available through District Vocational Schools, The College of Trades and Technology, and The College of Fisheries, Navigation, Marine Engineering and Electronics, various hospitals and any other public or private sources which were recognized and accredited by the provincial and/or federal governments. In addition, a special section of the Job Analysis Guide has reviewed apprenticeship programs available through the above sources.

Sources of Information

The information in the Job Analysis Guide was obtained by a thorough review of available literature, such as, The Canadian Classification and Dictionary of Occupations (1972) and The Occupational Analysis Units of

the Department of Manpower and Immigration. In addition, the writer had access to information from the training centers and personnel already employed in the various occupational fields. Any information gathered from the literature was verified by personnel trained and employed in that particular occupational field in Newfoundland. Statistical information such as wage rates was collected from The Department of Manpower and Industrial Relations, as well as from various unions.

Limits of Study

1. The analysis of the jobs and the training available was limited to the Province of Newfoundland, although one may find that such things as "job duties" varies little from province to province.

2. The study does not include university education or jobs requiring this type of training.

3. As in all studies of this kind, the relevance of the information is limited to a certain period of time. Obviously, information such as wage rates will change yearly, while other things such as "job duties" may stay relatively stable for some time. Special provisions were made for counsellors to update the "wage rate" information.

4. The analysis includes only jobs for which accredited training was available in Newfoundland.

5. The Guide does not include jobs for which one needs previous work experience to enter training. An example of jobs excluded from the Guide include those jobs related to the Nautical Science Division at The College of Fisheries, Navigation, Marine Engineering and Electronics, which require varying periods of sea time before training.

Definition of Terms

1. Accredited Training. This refers to training for which there was federal or provincial accreditation, i.e., recognition and qualification. "Accredited training" and "training" are used synonymously throughout this project.

2. Job Analysis. For the purpose of this project, job analysis includes classification of a job according to the informational categories outlined in the Appendix.

3. Occupationally Qualified. In this project, the term "occupationally qualified" refers to persons who have received accredited training in a field of work and have had at least five years experience working in that field.

4. Journeyman (or equivalent). As used in this project, the term "journeyman" includes any person with accredited training in an occupation who has met the Newfoundland Government's requirements for journeymanship. In the case where journeymanship was not available for certain occupations, the "equivalent" includes any person with accredited training and five years experience in that

field for which he was trained.

Organization of the Remainder of the Project

Chapter II of the project contains a review of the literature pertaining to job analysis. A discussion of the collection, verification and classification procedures used to formulate the Job Analysis Guide can be found in Chapter III. Chapter IV of this project is the actual Job Analysis Guide as it was reproduced by the Department of Education and sent to the various high schools in Newfoundland. Chapter V concludes the project with a discussion of recommendations and suggestions as to possibilities for further research and, as well, possible uses of the present Job Analysis Guide.

## CHAPTER II

## REVIEW OF LITERATURE

This section presents a review of the literature pertaining to job analysis; what a job analysis is; the need for such a service in our schools; the goals of such an analysis; and finally, the organizational structure of the job analysis.

### What is a Job Analysis?

Job analysis is often thought of as merely a list of jobs and duties of a worker in an occupation. However, the purpose of this project was to present a much more comprehensive view of the various vocational occupations.

Writers and theorists such as Gardner (1973); Hoppock (1967); Issacson (1971); Norris, Zeran and Hatch (1969); and Thompson (1973), have defined job analysis. Perhaps the most typical views are stated by Issacson (1971) who felt that "Job analysis is a process of observing jobs and reporting pertinent fact . . . (i.e.) the determination of essential factors in a specific kind of work and of qualifications of a worker necessary for its competent performance (p. 381)."

The specific classification of "pertinent" facts are dealt with later in this project. Essentially, one

must realize that a job analysis does not advertise, suggest or sell in any way. It is meant as an information service to provide those using it with pertinent, accurate and up-to-date facts on occupations that they may wish to pursue.

The Need for Job Analysis Guides in Schools

Writers and critics such as Marland (1972); Murihead (1973); Murphy (1973); and Wells (1973), felt that in most high schools today the emphasis seemed to be on preparing students for entrance to university. Wells (1973) pointed out that:

> . . . students who will be employed full-time within the next two years receive little or no help in job placement. These students do not know where or how to apply for employment, to say nothing of understanding the occupational meaning of their personal interests or the real nature of the world of work (p. 369).

Murphy (1973) further elaborated on this by stating that:

> . . . typically, people seem either to drift into their life's work or to find a career on the basis of trial and error, testing the marketplace here and there, moving from one job to another until they happen on one they want to stick with (p. 18)."

Generally, there seemed to be an acute lack of information available to most high school students regarding occupational careers, which seemed to have generated an overabundance of young people with no idea of their vocational aspirations. Marland (1972) felt that:

> . . . much of what is wrong in our society . . . has to do with the people who did not get an adequate career guidance and training early enough and substantially enough to find their way into productive and rewarding fields of endeavour (p. 2)."

As more training programs are instituted to meet the demands of industry, so the amount of, and need for, career information grows. Although high school students, through their parents or friends, may be sufficiently exposed to one or two careers as they are growing up, their total vocational outlook is, to a great extent, very limited, particularly in isolated rural areas. Parsons (1974), in his study of Newfoundland youth, felt that:

> . . . to make an intelligent choice the student must have information about several types of programmes so that he can weigh the merits of each in terms of his interests, abilities, accessibility to that programme, and job opportunities after graduation (p. 9)."

The need for this type of information appeared to be widespread. For example, in the annual report by the United States Department of Health, Education and Welfare (1968) it was felt that:

> . . . a real need existed in technical education for more effective guidance programmes to familiarize students in the early years of high school with the employment opportunities and requirements in the area of technical education (p. 101)."

An earlier report by Henry (1943) elaborated on this conclusion by suggesting that students "should also have

a clear conception of the nature of work done and of the requirements for successful participation in the occupations (p. 40)."

In essence, there seemed to be somewhat of an apathetic attitude taken by schools and society in general towards the post high school interests of students who are not considering a university education. This type of attitude was exemplified by the lack of vocationally oriented programs, either educational or pre-vocational, in schools, as well as a general lack of information services on post high school vocational opportunities. Although there had been some attempt in Newfoundland, as in the Seal Cove project (Reccord, 1973), to make students aware of occupational opportunities available, Parsons (1974), in his report, indicated that there was still a great vacuum to fill in the area of occupational awareness in Newfoundland. Murphy (1973) felt that a result of this attitude had led to a situation where a large majority of students leaving high school had a very limited idea of the world of work and their own vocational aspirations. Marland (1972) supported this idea and felt that students' abilities and interests were typically unexamined and there had been little or no attempt to integrate these abilities and interests with vocational choice and decision-making.

Goals of Job Analysis Guide

In response to the perceived need for career education in our schools, this section outlines the goals of a job analysis guide as viewed by writers and theorists in the field. Norris, Zeran and Hatch (1969) felt that:

> Some of the most important types of information at this [high school] level should help the young person:
>
> 1. To utilize means for continuous exploration of the world of work and study of specific occupational fields.
> 2. To develop tentative occupational plans when he graduates or leaves high school.
> 3. To have knowledge of or access to the present and possible occupational opportunities if he expects to secure employment in the vicinity (p. 122).

Issacson (1971) and Murihead (1973), generally agreed on the goals of career awareness and job analysis programs. For example, Issacson (1971) felt that "it [job analysis] is the only accurate source of knowledge about the nature and demands of a job and the qualifications needed by workers (p. 381)." Murihead (1973) viewed job analysis as an integral part of career education which will act as "a vehicle that will permit every student to select a career based on his understanding of many available options (p. 370)."

Dorcey (1969); Ginzberg (1971); Super (1957); and Wells (1973) also indicated strongly the need for students to be aware of what was available to them and the implications of choosing either one of those options. The

rewards of such an awareness were summed up by Dorcey (1969) who felt that:

> Manpower education can help reduce rates of involuntary unemployment, subemployment, dependency, and more positively, manpower education can promote social progress by expanding productivity and enhancing the quality of employment and of life for the entire community (p. 4).

In summary, there appeared to be a consensus amongst all writers and theorists reviewed that the goals of a Job Analysis Guide are not aimed at curing all of the problems in career education. Rather, a Job Analysis Guide should aim at providing students with one of the necessary tools needed in their efforts to overcome vocational and occupational ignorance, and hopefully help students in making positive intelligent career decisions.

Organizational Structure of Job Analysis Guide

The writer has drawn on the writings of Baer and Roeber (1964); Gardner (1973); Henry (1943); Hoppock (1967); Issacson (1971); Norris, Zeran and Hatch (1969); Thompson (1973); Wells (1973); and Wiley (1969) to develop the organizational categories outlined later in this section. Generally, these writers supported Wiley's (1969) idea that "it is important that the description of his job give a clear picture of what he does and how the job stacks up against other jobs (p. 6)." Also Wiley (1969) felt that these "descriptions must be clear enough so that the essential minimum skills required to perform the job can

be estimated (p. 8)."

In reviewing the literature, the writer found many different formats used for presenting essentially the same information. The format outlined below was adopted from the writings of Baer and Roeber (1964); Gardner (1973); Henry (1943); Hoppock (1967); Issacson (1971); and Norris, Zeran and Hatch (1969). The need for ease of comparability stressed by these writers also influenced the topical format and booklet presentation of the project.

The format follows ten basic topics. The following is a brief outline of the informational categories that writers in the field (Baer and Rober, 1964; Gardner, 1973; Henry, 1943; Hoppock, 1967; Issacson, 1971; Norris, Zeran and Hatch, 1969) suggest should be used when developing a job analysis:

(A) Job Title--Proper and common names used to describe an occupation.

(B) Work Duties--A complete description of the work done, tools, machines and materials used.

(C) Physical Demands and Working Conditions--An overall description of typical demands and conditions found in that particular type of work.

(D) Qualifications--Age, sex, citizenship, physical, educational and post secondary training necessary.

(E) How to Enter the Field--Where and how to apply for training. What exams are involved and/or interviews

required.

(F) Advancement Opportunities--How long it takes to advance and to what (eg.) from apprenticeship to journeyman or from journeyman to foreman.

(G) Earnings--Up to date information on the range of earnings from first year apprentice to journeyman (or equivalent). Blocks of space are left in this section to update the information. Due to regional variations, only general salary ranges are quoted.

(H) Supply and Demand--Information on the number of workers employed as opposed to the number needed. Also, information is supplied as to where the heaviest concentration of workers exists.

(I) Comments--Any other descriptive statements that will assist in understanding what is required to perform adequately on the job.

(J) Further Reference--An address is provided where one may obtain further information regarding this particular occupation.

The ten sections listed were emphasized by all writers reviewed as being imperative sections of a job analysis. Since each writer expressed different ideas as to the presentation of each section, the format used by the writer was integrated by adopting from all writings reviewed.

Summary

In this chapter, the writer has reviewed the literature to identify, support and justify the use of job analyses in vocational guidance. In summary, this project was aimed at the development of a useful tool which high school counsellors and students can use to help develop tentative occupational plans by becoming aware of the options which are available. As Marland (1972) pointed out, "until career education becomes an integral part of the educational system, we will continue to shortchange both our students and our society (p. 6)."

This project should provide a valuable and basic tool for implementing a career guidance program and also provide the basis for further study into career awareness in the high school.

# CHAPTER III

## METHODOLOGY

This chapter outlines the procedures which were followed in developing the Job Analysis Guide.

### Overview of the Methodology

The procedure utilized in the systematic development of each job analysis included the following three steps:

Step I: Collection of Information

Step II: Verification of Information

Step III: Classification of Information

These are the general steps in the methodology for the project. Following is a more detailed description of each step.

### Collection of Information

The major part of this project was the formulation of job analyses for occupations for which accredited training was available in Newfoundland. The writer has collected the information from the literature, through visitations to institutions and training centers and, as well, by direct contact with people actively employed in the various occupations. Information from each of these

sources was obtained and recorded by the writer through the use of a questionnaire.

The questionnaire used to collect this information was divided into ten main sections and followed the format as outlined below:

(A) Name of occupation--

Other names used to describe occupation.

(B) Duties of occupation, products made and/or services rendered--

Tools, machines and materials used.

(C) Conditions of work (physical and environmental)--

(D) Qualifications necessary for training--

Age

Sex

Citizenship

Physical condition

Educational prerequisites

Other

(E) Where training is available in Newfoundland--

Examination necessary to enter training--

Interviews necessary to enter training--

(F) Advancement after initial training--

Training necessary to become journeyman--

Advancement after journeyman status (or equivalent)--

(G) Earnings after initial training--

Earnings of journeyman (or equivalent)--

(H) Employment outlook in Newfoundland--

Areas of concentration of people in this occupation--

(I) Other comments--

(J) Further information--

Information for the sections involving (A) Name of occupation, (B) Duties of occupation, and (C) Conditions of work, was gathered from three sources: (1) The Canadian Classification and Dictionary of Occupations (1972); (2) instructors of the particular trade; (3) journeymen (or equivalent) actively employed in the field.

Information for the sections involving (D) Qualifications, and (E) Where training is available, was gathered from five sources: (1) The College of Fisheries, Navigation, Marine Engineering and Electronics Calendar (1975-76); (2) The College of Trades and Technology Prospectus (1975-76); (3) The District Vocational Schools Prospectus (1975-76); (4) The Department of Manpower and Industrial Relations; (5) private firms and agencies involved in training.

If training facilities for particular occupations were available in three (or less) centers, the names of these centers were mentioned in the section dealing with (E) Where training is available. For those trades available at more than three training centers, the reader was

referred to a chart at the beginning of the Guide of all available centers and the trades involved.

Information for the section involving (F) Advancement, was gathered from five sources: (1) The Canadian Classification and Dictionary of Occupations (1972); (2) instructors of this particular trade; (3) journeymen (or equivalent) actively employed in this trade; (4) The Department of Manpower and Industrial Relations; (5) various employers of people in the occupations.

Information for the section involving (G) Earnings, was gathered from three sources: (1) persons now entering the field after just completing training; (2) journeymen (or equivalent) in the field; (3) the most recent trade and union agreements.

Since salaries will vary from place to place and from employer to employer, even in the same province, the salary ranges were kept somewhat general, reflecting "average" earnings of the various occupations. If, as in some cases, the employee was paid on a commission basis, "average" earnings were also recorded, but a note was made at the bottom of this section indicating this type of payment.

Information for the section involving (H) Employment outlook in Newfoundland, was gathered from three sources: (1) the training centers at which training was available for these occupations; (2) The Department of Manpower and

Industrial Relations; (3) private business and industry hiring people in these occupations.

Information for the section involving (I) Other comments, was gathered from two sources: (1) instructors of the various trades and occupations; (2) journeymen (or equivalent) actively employed in the trade.

The section "Other comments" was meant to encompass such things as special requirements, conditions or prerequisites that were unique to this type of work and/or necessary to make it a successful career. Practically all those interviewed felt that there were special attributes needed for each individual occupation which could be included in this section and which were not covered in other parts of the questionnaire.

Information for the section involving (J) Further information, was gathered from two sources: (1) the various training centers; (2) The Department of Manpower and Industrial Relations.

All personnel interviewed from both these sources seemed quite eager and willing to get involved in letting high school students and other interested people know about the courses of training being offered and the types of jobs available after training.

Verification of Information

After the collection of the information had been completed it was necessary to verify the accuracy and completeness of the data. Journeymen (or equivalent) and instructors in the various trades, as well as The Department of Manpower and Industrial Relations, were again consulted to verify that the information collected was accurate and complete. In order to increase the reliability of the verification procedure, it was necessary to contact different people, or groups, than those from whom the initial information had been collected. This way the writer was able to cross-validate the accuracy of the information.

Classification of Information

The information gathered was classified into three main sections:

Section I: This section was concerned solely with the training available and the location of the various training centers. A chart was developed to provide the reader with a quick reference list of training available in Newfoundland and the locations of the various centers at which this training was available. Occupations for which one could train without any affiliation with a training center were identified with an asterisk and an explanation was made at the bottom of the chart.

Section II: This section consisted of the actual job analyses. Each analysis was written in a topical format consisting of ten separate sections as listed below:

(A) Job Title
(B) Work Duties
(C) Physical Demands and Conditions
(D) Qualifications
(E) How to Enter Field
(F) Advancement Opportunities
(G) Earnings
(H) Supply and Demand
(I) Comments
(J) For Further Information Contact

Information for each section was transcribed from the corresponding sections of the questionnaire used to gather the information (see Appendix). The analyses were then arranged alphabetically into two groups. The first group consisted of jobs for which training time was of one year duration or less (vocational). The second group consisted of jobs for which training time was more than one year (technical). Each analysis was arranged in alphabetical order according to the first word of the job title. For example, Aircraft Maintenance Mechanic was classified under "A".

Section III. The Job Analysis Guide concluded with a brief description of apprenticeship training in Newfoundland, including entrance requirements, terms of apprenticeship, and where and how to apply for these programs. All occupations for which apprenticeship training was available in Newfoundland were described in Section II of the Job Analysis Guide. A list of apprenticable courses concluded this section.

Summary

The writer compiled a Job Analysis Guide for the use of counsellors and students in the Province of Newfoundland. The Division of Pupil Personnel with the Department of Education and Youth has shown interest in this Guide and has agreed to have it reproduced for the Province's high schools.

The three steps, Collection of Information, Verification of Information, and Classification of Information, have been outlined in this chapter. The next chapter reports the Job Analysis Guide exactly as it will be reproduced and distributed to Newfoundland high schools.

# CHAPTER IV

## JOB ANALYSIS GUIDE

### Introduction

This chapter contains the Job Analysis Guide as it was presented to Newfoundland high school counsellors. The chapter consists of three main parts:

1. Introduction
2. Job Analysis Guide
3. Summary

# A

# Job Analysis Guide

# for

# Newfoundland Counsellors

# developed by

# Douglas E. Anderson

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# INTRODUCTION

This Job Analysis Guide presents analyses of all jobs for which vocational training was available in Newfoundland and which did not require a work prerequisite to enter training. The Guide is divided into three main sections:

Section I: Chart

Section II: Job Analyses

Section III: Apprenticeship Training

The following is a more detailed description of each section:

## Section I: Chart

This is a fold-out page describing all the jobs which have been analysed in this Guide and the locations of training centers for these jobs.

## Section II: Job Analyses

This section contains all of the job analyses which were developed. The section is divided into two parts, the first of which lists jobs, in alphabetical order, for which training time is of one year duration or less (vocational), and the second part lists jobs, in alphabetical order, for which training time is of more than one year duration (technical).

Section III: Apprenticeship Training

Section III contains a brief outline of apprenticeship training available in Newfoundland including entrance requirements, terms of apprenticeship, and where and how to apply for these programs. A list of apprenticable trades concludes Section III.

Much of the information provided in this Guide will become outdated unless periodically revised. Some provision for this has been made in the "Earnings" section of each analysis, and the writer recommends that this and all other sections be kept up to date in order to insure the continued usefulness of the Guide as a current resource.

SECTION I

CHART

CHART

School Location

| JOB TITLE (Vocational) | St. Johns | Mall Island | Conception South | Placentia | Burin | Marystown | Channel-Port aux Basques | Corner Brook | Grand Falls | Gander | Twillingate | Baie Verte | Carbonear | Stephenville | Happy Valley-Goose Bay | Port aux Basques | St. Anthony | Labrador City | Other* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aircraft Maintenance Mechanic | | | | | | | | | | | | | | | | | | | |
| Beautician | | | | | | | | | | | | | | | | | | | |
| Bricklayer | | | | | | | | | | | | | | | | | | | |
| Carpenter | | | | | | | | | | | | | | | | | | | |
| Clerk-Accountant | | | | | | | | | | | | | | | | | | | |
| Clerk-Hotel Front Office | | | | | | | | | | | | | | | | | | | |
| Clerk-Typist | | | | | | | | | | | | | | | | | | | |
| Commercial Artist | | | | | | | | | | | | | | | | | | | |
| Construction Worker | | | | | | | | | | | | | | | | | | | |
| Cook | | | | | | | | | | | | | | | | | | | |
| Cook (Marine) | | | | | | | | | | | | | | | | | | | |
| Diesel Mechanic (Marine) | | | | | | | | | | | | | | | | | | | |
| Draftsman | | | | | | | | | | | | | | | | | | | |
| Dressmaker and Seamstress | | | | | | | | | | | | | | | | | | | |
| Electrical (Construction) Worker | | | | | | | | | | | | | | | | | | | |
| Electrical (Industrial) Worker | | | | | | | | | | | | | | | | | | | |
| Electrical (Power Utilities) Worker | | | | | | | | | | | | | | | | | | | |
| Electronics Trainee | | | | | | | | | | | | | | | | | | | |
| Electronics (Industrial) Technician | | | | | | | | | | | | | | | | | | | |
| Electronics (Marine) Technician | | | | | | | | | | | | | | | | | | | |
| Fisherman (Fisherman) | | | | | | | | | | | | | | | | | | | |
| Gas and Diesel Mechanic | | | | | | | | | | | | | | | | | | | |
| Handicrafts Worker | | | | | | | | | | | | | | | | | | | |
| Heavy [illegible] | | | | | | | | | | | | | | | | | | | |
| Heavy [illegible] | | | | | | | | | | | | | | | | | | | |
| [illegible] Administration Technician | | | | | | | | | | | | | | | | | | | |
| Insurance Agent (General) | | | | | | | | | | | | | | | | | | | |
| Insurance Agent (Life) | | | | | | | | | | | | | | | | | | | |
| Jeweller | | | | | | | | | | | | | | | | | | | |
| Lumber [illegible] | | | | | | | | | | | | | | | | | | | |
| Mechanic (Autobody) | | | | | | | | | | | | | | | | | | | |
| Mechanic (Automotive) | | | | | | | | | | | | | | | | | | | |
| [illegible] | | | | | | | | | | | | | | | | | | | |
| [illegible] Inn Assistant | | | | | | | | | | | | | | | | | | | |
| Oil Burner Mechanic | | | | | | | | | | | | | | | | | | | |
| Plumber | | | | | | | | | | | | | | | | | | | |
| Power Engineer | | | | | | | | | | | | | | | | | | | |
| Printer | | | | | | | | | | | | | | | | | | | |
| Radio [illegible] | | | | | | | | | | | | | | | | | | | |
| Real Estate Sales | | | | | | | | | | | | | | | | | | | |
| Refrigeration Plant C[illegible] | | | | | | | | | | | | | | | | | | | |
| Sawmill Worker | | | | | | | | | | | | | | | | | | | |
| Sheetmetal Worker | | | | | | | | | | | | | | | | | | | |
| Steamfitter-Pipefitter | | | | | | | | | | | | | | | | | | | |
| Steelworker (Marine) | | | | | | | | | | | | | | | | | | | |
| [illegible] | | | | | | | | | | | | | | | | | | | |
| Welder [illegible] | | | | | | | | | | | | | | | | | | | |
| **JOB TITLE (Technical)** | | | | | | | | | | | | | | | | | | | |
| Accountant | | | | | | | | | | | | | | | | | | | |
| Business [illegible] | | | | | | | | | | | | | | | | | | | |
| [illegible] | | | | | | | | | | | | | | | | | | | |
| [illegible] Technician [illegible] | | | | | | | | | | | | | | | | | | | |
| Electrical Technologist | | | | | | | | | | | | | | | | | | | |
| Electronics Technologist | | | | | | | | | | | | | | | | | | | |

| | | |

# SECTION II

## Job Analyses (Vocational)

Job Title: Aircraft Maintenance Mechanic.

Work Duties: The Aircraft Maintenance Mechanic inspects, overhauls, repairs and services airframe components, engines and accessories. Certifying that aircraft are ready for flight is also an important function of this job. A variety of mechanics' hand tools, as well as precision instruments designed especially for use with aircraft, may be used.

Physical Demands and Conditions: Dust, grease, fuel fumes and noise are all part of the work environment. Mechanics, at times, must use stands several feet high when working on the aircraft. Also, work may be done in a hangar or may be required outdoors. Generally, work weeks are forty hours long, and shift work is common in this industry.

Qualifications: To enter training, an applicant should be sixteen years of age or older, in good physical condition, have good eyesight, good hearing, and good muscular coordination. A grade eleven certificate with a pass in English, Mathematics, and Physics or Physical Science, is required. A medical certificate is also required before entering training.

How to Enter Field: Training for this occupation is available only at the District Vocational School in Gander.

There are no examinations (except medical) or interviews necessary to enter training.

Advancement Opportunities: After two years in the aircraft industry, Mechanics can write Ministry of Transport Examinations for a Category A Licence. After two and a half years in the helicopter industry, Mechanics can write Ministry of Transport Examinations for a Category R Licence. Advancement after this may be to supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $9,000 | $17,000-$18,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Job opportunities can be found in large and small airports and there is a large concentration of Aircraft Mechanics in Gander, Newfoundland.

Comments: This is a twelve-month course requiring people with a high sense of responsibility since many lives depend on their work. Those interested in this occupation should enjoy working with their hands and have a high mechanical aptitude.

For Further Information Contact:

Aircraft Maintenance Instructor,
Gander District Vocational School,
P.O. Box 395,
Gander, Newfoundland.
A1V 1W8

Job Title: Barber

Work Duties: The Barber cuts, styles, tints and bleaches hair. Giving shaves, shampoos, scalp massages, facials and moustache and beard trims are also part of the job. Many Barbers may also be involved with fitting and styling various types of hair pieces. A variety of tools and materials are used including combs, brushes, scissors, clippers, razors, and various lotions and creams used for the care of skin and hair.

Physical Demands and Conditions: Most shops are pleasant and well equipped. A Barber must be on his feet for long periods of time, and the work week ranges from forty to fifty hours per week. Working with a large variety of people makes this job both physically and mentally demanding.

Qualifications: To enter training an applicant should be sixteen years of age or older and be in good health. A grade nine certificate with a pass in English, Mathematics and Science is required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's and at the District Vocational School in Corner Brook. There are no examinations or interviews necessary

to enter training.

Advancement Opportunities: Generally, most Barbers start work with established barbering firms, and may eventually open their own shops or work in some type of supervisory capacity. Those interested may enter into a contract of apprenticeship with their employer which last two years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $5,500 | $8,500 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is fair. Barber shops can be found in most towns in Newfoundland with most being located in business areas, shopping centers and hotels.

Comments: This is a nine-month course requiring people who are pleasant, clean and who enjoy working with people.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Beautician.

Work Duties: The Beautician cuts, styles, shampoos, bleaches, colors, straightens and waves hair. Giving manicures, facials, scalp massages and applying cosmetics are also important functions of this occupation. A variety of materials are used by the Beautician including combs, brushes, scissors, clippers, dryers, and various creams and lotions used for the care of skin and hair.

Physical Demands and Conditions: Beauticians are usually required to stand all day while working with their hands. Generally, shops are pleasant and comfortable. Work hours vary during busy seasons, but Beauticians usually work a forty or forty-eight hour week with no shift work involved. Working with a large variety of people makes this work both physically and mentally demanding.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade ten certificate with a pass in English, Mathematics and Science is also required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Generally, most Beauticians start work with established firms and with some years experience may advance to supervisory positions or may wish to open their own shops. Those interested may enter into a contract of apprenticeship with their employer which lasts two years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $5,600 | $8,000 |
| 1976 | | |
| 1977 | | |

Note: Many Beauticians are paid on a commission basis, and earnings are therefore directly related to the amount of business.

Supply and Demand: The employment outlook in Newfoundland is good. Beauty shops can be found in most towns in the Province, with most being located in business areas, shopping centers and hotels.

Comments: This is a nine-month course requiring people who are neat, clean, and enjoy working with a variety of customers.

For Further Information Contact:

Guidance Counsellor,
College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Bricklayer.

Work Duties: The Bricklayer constructs and repairs structures such as walls, fireplaces and partitions, using brick, tile, terra cotta and other materials. Erecting scaffolds, reading blueprints, checking alignments and laying out lines for work, are also important functions of the Bricklayer's job. A variety of hand tools may be used including levels, plumb bobs, trowels, brick hammers, and joiners.

Physical Demands and Conditions: Bricklaying, as with many construction jobs, may often only provide seasonal employment. Work is often done on high scaffolds and bricklayers may be on their feet most of the day. Work is usually outside in dusty conditions, and involves much lifting, bending and stooping. Generally, the Bricklayer works as part of a crew, and work hours may vary depending on how quickly the job must be done.

Qualifications: To enter training an applicant should be sixteen years of age or older and have good eyesight and manual dexterity. A grade eight certificate with a pass in English and Mathematics is required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St.

John's and at the District Vocational School in Corner Brook. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Bricklayers generally enter into a contract of apprenticeship which last four years (including training time), after which they are eligible to write Provincial Government Examinations for their journeyman status. After some years experience, the Bricklayer may advance to supervisory positions or become estimators and/or contractors.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $6,800 | $11,300 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good especially during the construction season. Most job opportunities exist at construction sites, building sites and housing developments.

Comments: This is a nine-month course requiring people who can get along well with others since most work is done in crews.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Carpenter.

Work Duties: The Carpenter erects wooden frameworks of buildings, installs doors, stairs, floors and wooden trims. Construction and/or repairing farms, sheds and other wooden structures are all part of the Carpenter's job. A variety of hand and power tools may be used, as well as materials such as nails, screws and adhesives.

Physical Demands and Conditions: Work may be indoors or outdoors, in all types of weather conditions. While the Carpenter is often working at ground level, many times it is necessary to work on roof tops and temporary scaffolds. In many areas, this type of work may only provide seasonal employment. Generally, work weeks are forty to forty-eight hours long and overtime may sometimes be required to complete a job on time.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good physical condition. A grade nine certificate with a pass in English, Mathematics and Science is required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trade Schools throughout Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

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Advancement Opportunities: Generally, Carpenters enter into a contract of apprenticeship which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some years experience, a Carpenter may advance to supervisory positions or may wish to specialize in some area of carpentry such as cabinet making.

Earnings:

| Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $8,000 | $11,500 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good especially during the construction season. Most job opportunities exist at new construction sites and housing areas.

Comments: This is a nine-month course requiring people who are willing to travel to where work is available and who enjoy working with their hands. Generally, work is challenging and not repetitious.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prime Phillip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Clerk-Accountant.

Work Duties: The Clerk-Accountant compiles data for statements, computes figures for accounts and verifies the accuracy of records and transactions. Correcting computational errors, posting entries in ledgers, balancing financial records and preparing reports are also important functions of this job. A variety of office machines, materials and equipment may be used.

Physical Demands and Conditions: Work is usually in pleasant well-equipped offices. Work weeks are usually forty hours long and during busy times the Clerk-Accountant may be requested to work some overtime. Getting along well with others is an important part of this job.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven Public Examination Certificate with a pass in Mathematics is required.

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

Advancement Opportunities: The Clerk-Accountant usually begins work as a Junior Bookkeeper, and from there may

advance to Accountant and to supervisory roles. Many Clerk-Accountants further their studies to become Certified Chartered Accountants, General Accountants or Industrial Accountants.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $5,500 | $9,500 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with business firms, hotels, government agencies, schools, and private accounting firms.

Comments: This is a nine-month course and those interested should find the work both challenging and interesting. Initiative and neat appearance are essential for success in this occupation.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland,
A1C 5P7

Job Title: Clerk-Hotel Front Office.

Work Duties: The Hotel Clerk may work at a variety of jobs in the hotel complex. Arranging banquets, ordering food and beverages, and purchasing various hotel materials are some of the important functions with which the Hotel Clerk may be involved. Compiling information about hotel services, registering guests, distributing messages and mail and presenting statements to departing guests for payment are also part of the Hotel Clerk's duties. Some Hotel Clerks may work in the accounting office where they would be responsible for basic bookkeeping duties involved with the day to day operation of the hotel.

Physical Demands and Conditions: Due to the variety of guests encountered, Hotel Clerks must be patient and tactful. Work is indoors and usually involves being on one's feet for extended periods of time. Dealing with people provides for a variety of duties characterized by frequent change. Shift work is common in this occupation, and work weeks are usually forty hours long.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven certificate is required with a pass in grade ten Mathematics.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Generally, the Hotel Clerk will begin work as a Front Desk Clerk. After some experience, advancement may be to various areas of hotel operation such as banqueting, accounting and purchasing. Further advancement may be to various supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $5,500 | $7,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good due to the high turnover in this field. Job opportunities exist in any area where there are hotels and/or motels in operation.

Comments: This is a nine-month course requiring people with pleasant personality, neat appearance and verbal ability to deal with guests. The number of different guests provide for a wide variety of experiences for the Hotel Clerk.

**For Further Information Contact:**

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Clerk-Typist.

Work Duties: The Clerk-Typist operates telegraphic, electric and manual typewriters, and dictating machines. Copying information from files and from typewritten and handwritten data are other important functions of this job. The Clerk-Typist also transcribes letters, reports and other recorded data, sends and receives messages by teletype, and files and keeps various records. A variety of office equipment such as adding machines, calculators and duplicators may be used in this job.

Physical Demands and Conditions: Work may be in large or small offices and is usually demanding. The Clerk-Typist is often busy and at times may be asked to work overtime to complete work on time. Shift work is not common and work weeks are usually forty hours long.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven certificate is required with a pass in grade ten Mathematics.

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

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Advancement Opportunities: Advancement opportunities may vary depending upon the type and size of the office in which the Clerk-Typist works. Generally, advancement is from Junior Clerk-Typist to senior and clerical-supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $4,500 | $6,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is excellent for those who do their job well. Job opportunities exist in hospitals, schools, and practically all areas of business and government.

Comments: This is a nine-month course requiring people with a pleasant personality, neat appearance and a desire to work with the public.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Commercial Artist.

Work Duties: The Commercial Artist draws, selects, letters, lays out and designs illustrations for publications, displays and advertisements. Creating, developing and sketching ideas for advertisements or designs are also important functions of this occupation. A variety of art equipment may be used including brushes, pens, pencils, silkscreen, and photographical equipment.

Physical Demands and Conditions: Work is usually indoors in well-equipped offices. While shift work is not common, Commercial Artists may be required to work overtime to meet deadlines. Generally, the work week is forty hours long and most work is non-repetitious and challenging.

Qualifications: To enter training an applicant should be sixteen years of age or older, in good health and have good vision. A grade ten certificate is required with a pass in English and Mathematics.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. Potential students are required to write an entrance examination.

Advancement Opportunities: Advancement in this field depends largely upon the talent and ambition of the worker.

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After some experience in the field, a Commercial Artist may wish to teach art or to specialize in some area such as fashion, advertising, design or photography.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $5,500 | $10,000 up |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is not good at present; however, it is expected to improve within the next few years. Job opportunities may exist with large department stores, advertising agencies, publishing and printing companies, and government agencies.

Comments: This is a nine-month course requiring people with manual dexterity and good eye-hand-finger coordination. Potential Commercial Artists should be willing to start with menial jobs and work their way up in the field.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Construction Worker.

Work Duties: Work duties vary greatly in the construction industry. Generally, the Construction Worker will be involved as a tradesman's helper and may be working at such jobs as dry wall installation, plastering, painting, installing floor coverings, wall tiles, and carpets. A variety of tools may be used such as hammers, saws, paint brushes, rollers and putty knives, depending upon the type of job with which the Worker is involved.

Physical Demands and Conditions: The Construction Worker often works as a helper, especially when starting off, and should therefore be able to get along well with others. This type of work involves a great amount of working with the hands and may often be physically tiring. The work week is usually forty hours long, and shift work is not generally required although the Worker may be asked to work overtime to finish a job. Working on ladders, bending, stooping and kneeling, are all in a day's work.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good physical condition. There is no educational prerequisite and students who do not qualify for courses in the apprenticeable trades will be given preference.

NDIN

How to Enter Field: Training for this occupation is available only at the District Vocational School in Corner Brook. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: The Construction Worker may enter the construction field at a variety of jobs such as woodworking, plastering, painting and carpet laying. After some years experience in the field advancement may be to supervisory positions, or the Construction Worker may wish to specialize in a certain aspect of the construction trade such as carpet laying and/or set up a private contracting business.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $4,800 | $6,500 up |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with private building contractors, painters, carpet layers and others involved in the building industry.

Comments: This is a nine-month course requiring people who have a genuine interest in working with their hands. This type of job offers the Worker a good chance to become exposed to a variety of interesting trades in the

GNT BINDIN

construction industry.

For Further Information Contact:

Division of Vocational Education,
P.O. Box 4070,
Merrymeeting Road,
St. John's, Newfoundland.
A1C 5Y9

Job Title: Cook (Commercial).

Work Duties: The Commercial Cook prepares and cooks food, usually in large quantities. Manipulating kitchen utensils, equipment and appliances, and compiling information on menus, food arrangements and cooking methods, are all important functions of this occupation. The Commercial Cook also examines food for freshness and proper cooking, and carves and serves portions for meals.

Physical Demands and Conditions: The work is physically demanding as Cooks have to stand for long periods of time, work fast during rush periods, and are usually working in hot kitchens. Hours are often irregular, depending on the establishment, and split-day shifts are common.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eight certificate is required with a pass in English and Mathematics. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Generally, Commercial Cooks will begin work as a Cook's Helper and with some experience

may advance to Senior Cook and eventually to Head Cook. Those interested may wish to advance to more specialized cooking in high class restaurants and other establishments. In most cases, a Commercial Cook enters into a contract of apprenticeship which lasts three years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $5,900 | $7,500 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with restaurants, cafeterias, hotels, clubs, hospitals, schools, colleges and universities.

Comments: This is a nine-month course and those interested should be clean, tidy, and have keen senses of smell and taste. Work is usually demanding and not repetitious.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland,
A1C 5P7

Job Title: Cook (Marine).

Work Duties: Depending on the number of ship's crew and passengers, the Cook may prepare and cook food in large or small quantities. Manipulating kitchen utensils, equipment and appliances, as well as compiling information on menus, food arrangements and cooking methods, are all part of the Cook's job. Other duties include buying and receiving foods, examining foods for freshness and proper cooking, and also carving and serving portions for meals.

Physical Demands and Conditions: This work is physically demanding as Cooks have to stand for long periods of time, work fast during rush periods, and are usually working in hot kitchens. At sea, hours are often irregular since the Cook may be catering to men on different shifts. Generally, a Marine Cook will work forty to fifty hours per week and may be at sea from one to fifteen days at a time.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good physical condition. A grade eight certificate is required and it is preferred that applicants have some experience at sea. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available only at The College of Fisheries, Navigation, Marine

Engineering and Electronics in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Cooks may enter into a contract of apprenticeship which lasts three years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. Generally, Marine Cooks will start work as a Cook's Helper and with some experience may advance to Senior Cook and eventually to supervisory positions. Advancement may also be from fishing, marine trade or merchant vessels to private and/or commercial vessels.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $3,000 | $11,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with fishing, marine trade and merchant vessels, as well as with passenger and various government operated vessels.

Comments: This is a six-month course requiring people with a genuine interest in sea life, personal cleanliness, physical stamina and keen senses of smell and taste. This work is demanding, but usually challenging and non-repetitious.

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**For Further Information Contact:**

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Diesel Mechanic (Marine).

Work Duties: The Marine Diesel Mechanic installs new equipment to specifications, oils and greases machinery parts of main engines and auxiliaries, and observes guages and other indicators to determine if engines and equipment are working to specifications. Maintaining engines and equipment, repairing or replacing worn and defective parts, and inspecting and testing equipment during sea trials, are all important functions of this occupation. A variety of hand tools, as well as various types of testing equipment may be used.

Physical Demands and Conditions: Working conditions usually include exposure to loud continuous noises from operating machinery such as diesel engines, steam turbines, fans and boilers. High temperatures are also common in the engine room. Climbing ladders and working in confined and restricted spaces are all part of the job. While aboard ship work is usually done in shifts and may include longer work weeks than normal..

Qualifications: To enter training an applicant should be sixteen years of age or older, in good health, and have mechanical aptitude. A grade eight certificate with a pass in English and Mathematics is required at The College of Fisheries, Navigation, Marine Engineering and Electronics, while at the District Vocational School in Burin a grade

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ten certificate is required with a pass in Mathematics and Science.

How to Enter Field: Training for this occupation is available at The College of Fisheries, Navigation, Marine Engineering and Electronics in St. John's and the District Vocational School in Burin. There are no examinations or interviews necessary to enter training at either of the above mentioned institutions.

Advancement Opportunities: Generally, Marine Diesel Mechanics begin work on various types of motor ships. After some years experience, they may be eligible to write Ministry of Transport Examinations for a Certificate of Competency as Watchkeeping Engineer. Further advancement depends on the amount of sea time and the initiative of the Marine Diesel Mechanic to write the Ministry of Transport Examinations for higher positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $7,500 | $12,000 |
| 1976 | | |
| 1977 | | |

Note: Salaries are largely dependent on the amount of sea time an individual has accumulated and the positions for which he has successfully completed examinations.

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with shipping and

fishing companies, as well as with various government vessels.

Comments: This is a nine-month course requiring people with a genuine interest in sea life and an ability to get along well with others. This is routine, organized work and, depending upon the individual, it can lead to higher skilled positions aboard the ship.

For Further Information Contact:

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Draftsman.

Work Duties: The Draftsman prepares accurate, detailed plans and drawings of machinery, structures, manufactured products and other materials. Working from notes and sketches furnished by Engineers, Architects and Designers is an important function of this occupation. Making calculations, writing specifications and estimating costs are all in a day's work for the Draftsman. A variety of drafting and technical equipment may be used in the performance of daily routine.

Physical Demands and Conditions: Work is usually indoors in clean, well-equipped offices. Detailed, intricate drawings are fatiguing, and the Draftsman may often be required to meet time deadlines. While this may sometimes require overtime work, shift work is not usually required and work weeks are generally forty hours long.

Qualifications: To enter training an applicant should be sixteen years of age or older, have good eyesight and good coordination. A grade eleven certificate is required with a pass in Algebra, Trigonometry and Science.

How to Enter Field: Training for this occupation is available at a variety of District Vocational Schools throughout Newfoundland. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Many Draftsmen begin work as Junior Draftsmen, and with some experience may advance to senior and/or supervisory positions. In recent years, many Draftsmen have specialized in various areas of Drafting such as Architectural, Engineering and Mechanical.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $5,000 | $7,500 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Job opportunities exist in practically all areas of industry, as well as with Architectural and Engineering firms, government agencies and utility companies.

Comments: This is a nine-month course requiring people with steady hands, good eyesight and the ability to concentrate for long periods of time.

For Further Information Contact:

Division of Vocational Education,
P.O. Box 4070,
Merrymeeting Road,
St. John's, Newfoundland.
A1C 5Y9

Job Title: Dressmaker and Seamstress.

Work Duties: As an instructor of this craft the Seamstress would be responsible for preparing lectures, teaching students and evaluating their success. Those employed in large stores or dressmaking shops would be required to help customers select fabric and designs, measure customers, and cut materials to pattern. Fitting, altering and sewing garments, by hand or machine, are important functions of this occupation. A variety of tools may be used including pins, scissors, tapes and sewing machines.

Physical Demands and Conditions: Those employed in stores and shops will often deal with temperamental and exacting people, and must be able to remain calm and collected. Rush orders are common and overtime is often required, especially when Dressmakers are self-employed. Eyestrain, needle punctures, cuts and burns from pressing equipment, are the principal hazards. Those employed as instructors of some type, usually work in well-equipped classrooms and will also deal with a variety of people.

Qualifications: To enter training an applicant should be sixteen years of age or older. A grade eight certificate with a pass in English and Mathematics is required. These are minimum qualifications and it is highly recommended that an applicant be at least seventeen years old and have a grade eleven certificate.

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How to Enter Field: Training for this occupation is available at the Crafts School in the Arts and Culture Centre in St. John's, and at a variety of District Vocational Schools throughout Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Most Seamstresses in Newfoundland find employment either as vocational instructors or as assistants to Occupational Therapists. Some work with large stores and others work at home in their spare time. After some years experience many Seamstresses become supervisory instructors or decide to train further as Occupational Therapists.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $6,000 | $11,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Job opportunities exist at vocational and craft schools, at hospitals and other institutions, and also with clothing and tailoring shops.

Comments: This is a nine-month course requiring people with patience, neatness, accuracy and finger dexterity.

**For Further Information Contact:**

Craft Training Section,
Division of Vocational Education,
P.O. Box 4070,
Merrymeeting Road,
St. John's, Newfoundland.
A1C 5Y9

Job Title: Electrical (Construction) Worker.

Work Duties: The Electrical Construction Worker plans layouts, installs and repairs wiring, electrical fixtures, apparatus and control equipment. The Electrician must know and follow national and local code regulations when performing various duties. A variety of hand tools as well as special equipment are required to install such things as fixtures, power cables, switches, relays and circuit breakers.

Physical Demands and Conditions: Work duties vary from indoors to outdoors, new construction sites to old buildings, and from spacious surroundings to cramped quarters. Work may be done in crews, but in many cases the Electrician is required to work with little or no supervision. A forty hour week is common, but sometimes overtime may be required to get a job finished. Working on ladders, bending and kneeling are all part of a day's work.

Qualifications: To enter training an applicant should be sixteen years of age or older, and have good manual dexterity and eye-hand coordination. A grade ten certificate with a pass in English, Mathematics and Science is required. Specific training for the electrical construction trade is available only through apprenticeship (see Section III, p. 220).

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How to Enter Field: Initial training for this occupation (the Basic Electronics Course) is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Generally, Electrical Construction Workers enter into a contract of apprenticeship with an employer which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some experience in the field further advancement may be to supervisory positions or to private contracting.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $9,000 | $16,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Most job opportunites exist with private electrical contractors, large construction companies and government agencies.

Comments: This is a nine-month course requiring people with general mechanical ability, good eye-hand coordination, alertness, accuracy, neatness and a respect for safety precautions.

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For Further Information Contact:

Department of Manpower and Industrial Relations,
Gorman-Butler Building,
P.O. Box 4750,
St. John's, Newfoundland.
A1C 5T7

Job Title: Electrical (Industrial) Worker.

Work Duties: The Industrial Electrical Worker is primarily responsible for keeping generators, motors, transformers, wiring systems and other electrical devices in good working order. The Worker must find the points at which electrical service has broken down, determine the cause and decide on the fastest and best way to fix the facility. A variety of hand tools as well as specialized electrical testing equipment may be used on this job.

Physical Demands and Conditions: Working conditions vary considerably depending on the type of industry in which the Industrial Electrical Worker is employed. Work may be indoors or outdoors, in quiet spacious areas or in noisy, dirty and cramped quarters. Bending, kneeling and working on ladders and scaffolds are common in this occupation. Work weeks are usually forty hours long and shift work is not generally required.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade ten certificate is required with a pass in English, Mathematics and Science. Specific training for the Industrial Electrical trade is only available through apprenticeship (see Section III, p. 220).

How to Enter Field: Initial training for this occupation (the Basic Electonics Course) is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Generally, Industrial Electrical Workers enter into a contract of apprenticeship with an employer which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some experience in the field further advancement may be to supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $9,000 | $18,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Job opportunities exist in all areas of industry as well as with various government agencies.

Comments: This is a nine-month course requiring people with general mechanical ability, good eye-hand coordination, alertness, accuracy, neatness and a respect for safety regulations.

For Further Information Contact:

Department of Manpower and Industrial Relations,
Gorman-Butler Building,
P.O. Box 4750,
St. John's, Newfoundland.
A1C 5T7

Job Title: Electrical (Marine) Worker.

Work Duties: The Marine Electrical Worker installs and repairs wiring fixtures and equipment for all electrical services aboard ship and in shipyard facilities. Reading blueprints and wiring diagrams, and performing routine tests to insure that all equipment is performing up to specifications, are also important functions of this job. A variety of hand tools may be used as well as various types of special electrical testing and repairing equipment.

Physical Demands and Conditions: Working conditions vary considerably depending on where the Worker is located. Work may be inside or outside, in spacious surroundings or in cramped quarters. Working on ladders and scaffords and carrying heavy tools and electrical equipment are common in this job. Safety is a must since mistakes could be fatal. Work hours vary and in many cases shift work is required. Those working aboard ship will be required to go to sea for varying periods of time.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven certificate (or equivalent) is required with a pass in Mathematics. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available only at The College of Fisheries, Navigation, Marine Engineering and Electronics in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Generally, Marine Electrical Workers enter into a contract of apprenticeship with an employer which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some experience in the field further advancement may be to supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $9,000 | $18,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with shipping and ship building companies, as well as with various industrial concerns.

Comments: This is a nine-month course requiring people with mechanical aptitude, ability in Mathematics and a willingness to work under a variety of conditions.

**For Further Information Contact:**

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Electrical (Power Utilities) Worker.

Work Duties: This job involves working with a variety of special equipment as well as hand tools to erect, install and repair electrical power, lighting and wire communications equipment. Servicing, repairing or replacing circuit breakers, regulators, relays, meters and transformers are all important functions of this job. A variety of test instruments are used to locate sources of malfunctions or failure and using the results of these tests, as well as blueprints and diagrams, the Worker determines the best way to go about repairing these malfunctions.

Physical Demands and Conditions: This is mostly outdoor work, in all types of weather conditions. Work is usually done in crews and it is therefore important that the Worker be able to get along well with others. Working in high areas and with high voltage systems makes safety a very important consideration in this job. Work weeks are usually forty hour long although overtime may be required, especially during power failures.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven certificate is required including a pass in English, Mathematics and Science. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available only at the District Vocational Schools in Conception Bay South, Stephenville Crossing and Happy Valley. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Generally, Electrical Power Utility Workers enter into a contract of apprenticeship which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some years experience further advancement may be to supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $8,000 | $13,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with light and power and communications companies.

Comments: This is a nine-month course requiring people who are safety conscious and willing to work in all types of weather conditions. Potential candidates for this occupation should also be well coordinated since working on ladders, poles and towers is all in a day's work.

For Further Information Contact:

Department of Manpower and Industrial Relations,
Gorman-Butler Building,
P.O. Box 4750,
St. John's, Newfoundland.
A1C 5T7

Job Title: Electronics Trainee.

Work Duties: Those entering the field with just the Basic Electronics Course will generally aid Electronics Technicians in the installation, maintenance and repair of all types of electrical equipment. This means helping the experienced Technician in all aspects of the trade in order to learn this occupation through experience. A variety of testing and calibrating equipment as well as hand tools, blueprints and job manuels may be used in this job.

Physical Demands and Conditions: Although work is generally indoors, conditions may range from quiet and comfortable, to hot, noisy and dirty, depending on the type of industry. Working with equipment in out of the way places involves a great deal of crouching, crawling, stooping and kneeling. Since the Worker is often dealing with high voltage, safety is always an important factor. Work weeks are usually forty hours long and shift work is generally not required.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven certificate is required with a pass in Mathematics and Science.

How to Enter Field: Training for this occupation is available at a variety of Trades and Vocational Schools throughout Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Graduates of the Basic Electronics Course may enter either the Industrial or Communications Electronics Programs to specialize. Those entering the field directly after the Basic Electronics Course without specializing may find jobs hard to get and advancement opportunities at a minimum.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $6,500 | $8,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland for those with just a Basic Electronics Course is not good. Some probable employers include the larger industries and companies that may have training programs of their own.

Comments: This is a nine-month course and those interested in the field of Electronics are advised to specialize beyond this point. This is a fast growing field and interested people should be willing to keep up with new and changing developments.

**For Further Information Contact:**

Guidance Counsellor,
The College of Trades and Technolgoy,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Electronics (Communications) Technician.

Work Duties: The Communications Electronics Technician installs, maintains and repairs electronic communications equipment such as receivers, transmitters, recorders, telephone and teletype. A variety of electronic testing equipment and hand tools, as well as blueprints and job manuals, may be used in this job.

Physical Demands and Conditions: Most jobs in this field involve working both indoors and outdoors on a variety of communications equipment. Generally, the Technician is working with very little supervision and often in small crews of two or three. Dealing with high voltage makes safety an important factor in this job. Work hours range from forty to forty-eight hours per week and in many cases shift work is not required.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. Successful completion of the Basic Electronics Course or a pass in entrance examinations is required.

How to Enter Field: Training for this occupation is available only at the Gander District Vocational School. Entrance examinations are required for those who have not successfully completed the Basic Electronics Course.

Advancement Opportunities: Communications Electronics Technicians are prepared to enter the field of Electronics at a number of entry level jobs. After some experience in the field many Technicians specialize on the job in certain areas of electronics such as television or telephone systems. Further advancement may be to supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $8,500 | $13,000 up |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most jobs exist with large companies in the field of mass communications such as telephone, telegraph and television companies. The aircraft industry also employs a large number of Communications Electronics Technicians.

Comments: This is a nine-month course requiring people with high mechanical and mathematical ability. This is a challenging and fast growing field and interested people must be willing to keep up with new developments.

For Further Information Contact:

District Vocational School,
P. O. Box 395,
Gander, Newfoundland.
A1V 1W8

Job Title: Electronics (Industrial) Technician.

Work Duties: Work duties vary depending upon the type of industry. Typical duties include installing and repairing electronic control and process systems, audio visual equipment and other related equipment. In all cases, the Industrial Electronics Technician studies circuit diagrams and job manuals and uses a variety of testing and calibrating equipment to install, maintain and repair the electronic equipment being worked with.

Physical Demands and Conditions: Most jobs in this field involve working in large plants. Although work is usually inside, conditions may vary from quiet and comfortable, to hot, noisy and dirty, depending on the type of industry. Working with equipment in out of the way places sometimes involves a great deal of crouching, crawling, stooping and kneeling. The work week is usually forty hours long and shift work is generally not required. Safety is always important when dealing with industrial and electronic equipment.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. Successful completion of the Basic Electronics Course or satisfactory proof of advanced standing in this area is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. Entrance examinations may be required for those who have not successfully completed the Basic Electronics Course.

Advancement Opportunities: Industrial Electronics Technicians are prepared for a variety of entry level jobs in industry. After some experience in the field many Technicians wish to specialize in certain areas and further advance to supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $8,500 | $10,000 up |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with the larger industries such as mining, pulp and paper, chemical plants, oil refineries and electrical utility companies.

Comments: This is a nine-month course requiring people who have good eye-hand-finger coordination and manual dexterity. Interested candidates should be able to work well with very little supervision.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Electronics (Marine) Technician.

Work Duties: The Marine Electronics Technician installs, maintains and repairs electronic equipment such as direction finders, navigational systems, radar, echo sounders, radio telephones and other related devices. Using a variety of electronic testing equipment and hand tools, the Technician locates and repairs defective electronic components and circuits and performs tests to insure that all equipment is performing to specifications. Maintaining records of repairs, tests and adjustments, and demonstrating the use of equipment to the ship's personnel are also important functions of this job.

Physical Demands and Conditions: Working conditions vary greatly, depending upon the type of job. Most work is done inside, but the Technician may be required to work outside on certain types of equipment. Working with high voltage demands that safety precautions be taken at all times. Generally, the Technician works a forty hour week, although those employed with shipping companies will be expected to spend varying amounts of time at sea where work hours may be irregular.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A Basic Electronics Course or its equivalent is required.

How to Enter Field: Training for this occupation is available only at The College of Fisheries, Navigation, Marine Engineering and Electronics in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: The Marine Electronics Technician is usually prepared for a number of entry level jobs in the electronics industry. After some experience many Technicians specialize in certain areas of electronics and, with more experience, may further advance to supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $7,000 | $14,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is fair. Most job opportunities exist with shipping and fishing companies, government agencies, and industry.

Comments: This is a nine-month course requiring people with high mechanical and mathematical ability. Since this field is continuously developing, Technicians must be prepared to keep up. Those interested in working on ships should have a genuine interest in sea life and be aware of the various working conditions encountered while at sea.

For Further Information Contact:

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Fisherman (Trawlerman).

Work Duties: Fishermen prepare, lower and raise nets and fishing lines, set buoys and anchors, clean and stow fish and repair fishing equipment. Assisting other crewmen in the general operation and maintenance of the vessel is also an important function of this job.

Physical Demands and Conditions: This type of work involves working outside in all types of weather conditions. The work is physically demanding and may include long work hours, depending on the "catch" and the amount of time at sea. Generally, continuous sea time ranges from ten days to two weeks, but may vary with each trip.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good physical condition. A grade nine certificate is required and previous experience on a fishing vessel is recommended. A Ministry of Transport Eyesight Certificate is also recommended.

How to Enter Field: Training for this occupation is available only at The College of Fisheries, Navigation, Marine Engineering and Electronics in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Successful graduates of this program usually join the fishing fleets as Trawlermen. Depending upon their initiative and further training,

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advancement may be to Captain or other officer positions on the fishing vessels.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $6,000-$8,000 | $8,000-$15,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with the larger fishing companies around the southern and eastern coasts of Newfoundland.

Comments: This is a six-month course requiring people with a genuine interest in sea life, good eye-hand coordination and manual dexterity.

For Further Information Contact:

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Gas and Diesel Mechanic.

Work Duties: Job duties in this field will vary depending on the type of business entered. Generally, the Gas and Diesel Mechanic is reponsible for the installation, maintenance and repair of a variety of gasoline and diesel engines. This involves using various hand tools, as well as specialized testing equipment to insure that these engines are working properly and to their specifications.

Physical Demands and Conditions: Most work is done indoors under a variety of conditions. The Mechanic may be in a relatively clean, well-equipped shop, or may be in a dirty and noisy plant. Grease, dust and dirt are inevitable in this occupation, and in many cases the Mechanic must work in close and cramped spaces. Work is usually continuous and often physically tiring. Work weeks are generally forty hours long and shift work may be required with some companies.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade ten certificate with a pass in English, Mathematics and Science is required.

How to Enter Field: Training for this occupation is available only at the District Vocational School in Lewisporte. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Gas and Diesel Mechanics are usually prepared for a variety of jobs in various mechanical fields. Apprenticeship training is not required and therefore most students enter the field directly as engine servicemen. After some experience, many Mechanics specialize in certain areas such as diesel engines or outboard engines. Further advancement may be to supervisory positions or to the opening of a private shop.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $6,000 | $12,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Openings exist in practically all areas of the mechanical repair feild with most jobs existing in the larger centers.

Comments: This is a nine-month course and those interested should have mechanical aptitude. The variety of tasks the Mechanic is required to perform makes this a challenging and rewarding career. Potential applicants should note that the emphasis of the Gas and Diesel Mechanics Course is on engines alone and, in particular, diesel engines and small engines such as those in lawnmowers, outboard motors, portable generators and pumps.

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For Further Information Contact:

District Vocational School,
Lewisporte, Newfoundland.
A0G 3A0

Job Title: Handicrafts Worker.

Work Duties: An Instructor of crafts would be responsible for preparing lectures, teaching students and evaluating their success. Others may be involved in working for craft shops, stores, gift shops, or may work independently in their spare time. Weaving, embroidery, leather craft, knitting, crochet, macrame, smocking and rughooking are all important functions of the Craftsman.

Physical Demands and Conditions: Instructors generally work in well-equipped classrooms and deal with a variety of people. Craftsmen in craft stores and shops may not deal directly with the public, but may work independently producing various craft items. Work hours range from thirty-five to forty hours per week, although the independent Craftsmen may work more or less than this depending upon their initiative and spare time available.

Qualifications: To enter training an applicant should be seventeen years of age or older and in good health. A grade eight certificate with a pass in English and Mathematics is required. A grade eleven certificate is recommended for potential instructors.

How to Enter Field: Training for this occupation is available at a variety of Vocational and Craft Schools around Newfoundland (see Chart, p. 33). There are no examinations

or interviews necessary to enter training.

Advancement Opportunities: Generally, most Handicraft Workers find employment either as Vocational instructors or as assistants to Occupational Therapists. Some work with large stores and craft shops and may advance to supervisory positions after some years experience. Many graduates become instructors or decide to train further as Occupational Therapists.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $6,000 | $11,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Job opportunities exist with District Vocational Schools, The Division of Adult and Continuing Education, youth groups such as the YWCA, hospitals and other institutions, as well as with various craft and gift shops.

Comments: This is a nine-month course and those interested should have patience, neatness, accuracy and finger dexterity. A sincere interest in arts and crafts is also required for those considering this occupation.

For Further Information Contact:

Craft Training Section,
Division of Adult and Continuing Education,
P.O. Box 4070,
Merrymeeting Road,
St. John's, Newfoundland.
A1C 5Y9

Job Title: Heavy Duty Equipment Mechanic.

Work Duties: A Heavy Duty Equipment Mechanic repairs and maintains electric, diesel, and gasoline trucks and other equipment. Determining malfunctions in equipment, planning work procedures and keeping equipment working to specifications are also important functions of this job. A variety of mechanic's hand tools, as well as welding equipment, standard charts, hoists and specialized equipment are used.

Physical Demands and Conditions: The Heavy Duty Equipment Mechanic may be required to work outside in various types of weather conditions. Often, the Mechanic is exposed to noises from production machinery and tools, as well as fumes from diesel and welding equipment. Work weeks are forty hours long and shift work is not usually required.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade ten certificate with a pass in English, Mathematics and Science is required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trades Schools in Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Heavy Duty Equipment Mechanics generally enter into a contract of apprenticeship which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some years experience further advancement may be to supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $5,000 | $10,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with the various construction companies and industrial concerns throughout this Province.

Comments: This is a nine-month course and those interested should have a high degree of mechanical ability. Work is usually challenging and not repetitious.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Heavy Equipment Operator.

Work Duties: The Heavy Equipment Operator checks, starts, operates and manoeuvers equipment for leveling, compacting, back-filling, loading, excavating and shaping grounds for such things as roads, ditches, and pipelines. Preventive maintenance and making minor adjustments on the machines are all important functions of this occupation. A variety of earth moving equipment may be used such as tractors, scrapers, graders, trucks, front end loaders and hydraulic back hoes.

Physical Demands and Conditions: Work is often in dirty, dusty and muddy areas and may be hazardous at times, depending upon the landscape being worked on. The work is physically demanding and gas and diesel fumes are all part of the job. Work hours vary and overtime and shift work are often required.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eight certificate is required.

How to Enter Field: Training for this occupation is available only at the District Vocational Schools in Stephenville Crossing and Happy Valley, Labrador. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Heavy Equipment Operators are trained to begin work on a variety of equipment. After some years of experience, Operators may wish to specialize on one particular type of equipment such as tractor or back hoe. Further advancement may be to supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $7,500 | $9,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Most job opportunities exist with large and small construction companies, industrial firms, government agencies, and private contractors.

Comments: This is a fourteen-week course requiring people with good coordination and an ability to judge distances accurately.

For Further Information Contact:

District Vocational School,
Stephenville Crossing, Newfoundland.
A0N 2C0

Job Title: Heavy Truck and Semi-Trailer Operator.

Work Duties: Driving a truck and operating its equipment are the prime functions of the Truck Driver. Other duties include inspecting vehicle before and after runs, making minor repairs, operating valves, pumps, conveyors or other loading apparatus, recording quantities loaded, and operating a variety of machinery on the truck to unload the contents upon arrival at destination. Preparing vouchers and recording times of arrival, mileage, fuel consumption and other relevant data are also functions of the Truck and Semi-Trailer Operator.

Physical Demands and Conditions: Driving large trucks can be physically and mentally demanding. Work hours may vary although most Drivers work from forty to fifty hours per week. Many jobs will require that Drivers work at odd hours, on weekends and during holidays. Driving under all types of road conditions and manoeuvering large trucks in and out of city traffic are all in a day's work for the Heavy Truck and Semi-Trailer Operator.

Qualifications: To enter training an applicant should be seventeen years of age or older and in good health. A grade eight pass and a valid driver's licence are required. Some experience in truck driving is recommended.

How to Enter Field: Training for this occupation is available only at the District Vocational School in Stephenville Crossing. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Graduates of this course may enter into employment directly as a Heavy Truck and Semi-Trailer Operator. Advancement after some years experience may be to various other types of large machinery or to foreman and other supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $7,500 | $13,500 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with moving companies, freight companies, manufacturers, and in practically all areas of industry.

Comments: This is a six-week course requiring people with good eye-hand-finger coordination and manual dexterity. Good hearing and vision, as well as an adaptability to various types of driving conditions, are necessary prerequisites for success in this occupation.

For Further Information Contact:

District Vocational School,
Stephenville Crossing, Newfoundland.
AON 2CO

Job Title: Industrial Instrumentation Technician.

Work Duties: The Technician tests instrument mechanisms and circuitry, disassembles faulty instruments and replaces defective and worn parts such as pivots, shafts and bearings. Assembling equipment according to manufacturers' specifications and making calibration adjustments are also important functions of this job. A variety of special hand tools and testing instruments may be used.

Physical Demands and Conditions: The Technician may often have to crouch, crawl, stoop and kneel in order to replace and test equipment in out of the way places. Most work is inside, but conditions vary from quiet, comfortable and clean, to hot, noisy and dirty, depending on the type of industry. Work hours usually range from forty to forty-eight hours per week, and shift work and "on call" duty may be required in some industries. Since the Technician is often dealing with electronic instruments, safety is a very important factor.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A Basic Electronics Course or its equivalent is also necessary. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available only at The College of Fisheries, Navigation, Marine Engineering and Electronics in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Industrial Instrumentation Technicians usually enter into a contract of apprenticeship which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. Further advancement may be to supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $7,500 | $13,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with the larger industries such as electric power, pulp and paper, oil, chemical and mining.

Comments: This is a nine-month course and those interested in this occupation should have good eye-hand-finger coordination and manual dexterity for handling small objects. Most work requires that the Technician work alone with very little supervision, and usually offers a variety of job duties, overcoming any problems of monotony.

For Further Information Contact:

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Insurance Agent (General).

Work Duties: General Insurance Agents do very little "soliciting" of clients since the type of insurance they sell is either required or strongly encouraged by law. Explaining various types of insurance plans and types of coverage, as well as reviewing clients' needs and suggesting appropriate plans are all important functions of this job. The Insurance Agent also completes application forms, calculates premium rates, establishes methods of premium payments and arranges for any type of policy requirements such as medical examinations.

Physical Demands and Conditions: Generally, the Insurance Agent works in a well-equipped office with a variety of clients from all walks of life. Work weeks are usually forty hours long, although many calls may have to be scheduled for evenings or weekends to fit a client's convenience. Since competition is keen in the field of insurance, an Agent should be alert at all times when doing business with clients and prospective clients.

Qualifications: To enter training an applicant should be at least nineteen years of age or older, and bondable. A grade eleven certificate is highly recommended.

How to Enter Field: Training for this occupation is available anywhere in Newfoundland where there are Insurance Companies. Potential agents usually work with an Insurance

Company while studying at home to write examinations for Agent status. Interviews may be necessary to enter training.

Advancement Opportunities: General Insurance Agents are qualified to sell all types of insurance other than life, such as car, fire and compensation. Many Agents further their qualifications by studying for and writing examinations to become Life Insurance Agents as well. Further advancement may be to supervisory and/or managerial positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $7,000 | $14,000 |
| 1976 | | |
| 1977 | | |

Note: The Insurance Agent's salary is largely dependent upon how much insurance is sold and therefore will vary depending on the Agent's initiative.

Suply and Demand: The employment outlook in Newfoundland is good. Job opportunities exist with practically all insurance companies throughout the Province.

Comments: This course generally takes from four to twelve weeks to complete, and those interested should be able to communicate effectively with others and have adequate numerical ability to determine premium rates and interpret basic statistical data in tables and manuals. This is a rewarding career for those with initiative who enjoy working

with people.

For Further Information Contact:

Insurer's Advisory Organization,
21 Church Hill,
St. John's, Newfoundland.
A1C 3Z8

Job Title: Insurance Agent (Life).

Work Duties: Soliciting prospective clients for new business is a major function of this job. After finding these prospective clients, the Agent must explain various types of insurance plans and types of coverage and must try to develop a plan which fits the clients' needs. Suggesting and selling these plans to the client is the most important function of the Life Insurance Agent. Completing application forms, calculating premium rates, establishing methods of premium payments, and arranging for medical examinations, is all part of selling a life insurance policy.

Physical Demands and Conditions: Generally, the Agent is based in a comfortable, well-equipped office, but much of the actual business is done in the client's home and at the client's convenience. This means meeting a variety of people under a variety of conditions and, as well, working evenings and weekends when necessary. This is a competitive field and Agents must be alert and tactful when dealing with clients.

Qualifications: To enter training an applicant should be at least nineteen years of age or older, and bondable. A grade eleven certificate is highly recommended.

How to Enter Field: Training for this occupation is available anywhere in Newfoundland where there are Life Insurance Companies. Potential Agents usually work with an Insurance

Company while studying at home to write examinations for Agent status. Interviews may be necessary to enter training.

Advancement Opportunities: Life Insurance Agents are qualified only to sell Life Insurance. Many Agents further their qualifications by studying for and writing examinations to become General Insurance Agents as well. Further advancement may be to supervisory and/or managerial positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $8,000 | $12,000 up |
| | 1976 | | |
| | 1977 | | |

Note: The Insurance Agent's salary is largely dependent upon how much insurance is sold and therefore will vary depending on the Agent's initiative.

Supply and Demand: The employment outlook in Newfoundland is good. Job opportunities exist with practically all companies dealing with Life Insurance, most of which are concentrated in the larger centers.

Comments: This course generally takes four to twelve weeks to complete and requires sales ability as well as an ability to get along and deal with a variety of people effectively. Agents must make it their business to know and be associated with as many people as they can, since

the success of the job is directly related to the number of customers.

For Further Information Contact:

Life Underwriters' Association of Canada,
41 Lesmill Road,
Don Mills, Ontario.
M3B 2T3

Job Title: Joiner.

Work Duties: This is a specialized field dealing with the more detailed and intricate tasks of the Carpentry Trade. Building and installing staircases, window and door frames, cabinets and drawers, bookcases and other built-in features, are all functions of this job. The Joiner uses a variety of hand and power tools, as well as nails, screws and adhesives, to perform these various tasks.

Physical Demands and Conditions: This type of work usually involves working inside finished or partially finished houses and buildings. Bending, kneeling, lifting and working on ladders is all part of a day's work. Generally, Joiners work from forty to forty-eight hours per week, although this may vary depending on how quickly the job must be finished.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade nine certificate is required with a pass in English, Mathematics and Science. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Joiners usually enter into a contract of apprenticeship which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some years experience further advancement may be to supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $8,000 | $11,500 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good, especially during the construction season. Most jobs in this field can be found at construction sites and/or new housing areas. Other employers include private firms specializing in the building of such things as window frames, door boxes, and kitchen cabinets.

Comments: This is a nine-month course and offers a challenging career for those interested in exacting and detailed work with their hands.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Logger.

Work Duties: The Logger's primary duties are concerned with manipulating chain saws and axes to fell trees, trim branches and cut trunks into standard lengths. Driving and operating machines that fell, de-limb and cut trees, and loading and moving logs with various types of machinery such as loaders and skidders, are also important functions of this occupation. Clearing away underbrush from work areas and cleaning and maintaining saws are all in a day's work for the Logger.

Physical Demands and Conditions: This is physically demanding work in all types of weather conditions. Since the Logger is always working around falling trees, sharp cutting tools and moving machinery, safety is of prime concern. Working hours vary from forty to forty-eight hours per week. If job sites are in out of the way places, Loggers may have to live in the lumber camps during the work week and go out on weekends. Generally, food and accommodation is of a high calibre in most logging camps.

Qualifications: To enter training an applicant should be sixteen years of age or older and be in good health. A grade eight certificate is preferred, but not essential.

How to Enter Field: Training for this occupation is available only at the District Vocational Schools in Stephenville

Crossing and Happy Valley, Labrador. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Loggers may start work at a variety of jobs in the logging industry such as fallers, skidders, operators and loaders. After some years experience many Loggers specialize in some particular function of the industry and further advance to supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $7,500 | $9,000 |
| 1976 | | |
| 1977 | | |

Note: Many Loggers are also paid a bonus for cutting over a set number of cords of wood per day.

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with the large paper companies, sawmills and industrial plants using lumber as a raw material.

Comments: This is an eight-week course and potential applicants should have a genuine interest in working outdoors. It should be noted, however, that since this is outdoor work, many jobs may only offer seasonal employment.

For Further Information Contact:

District Vocational School,
Stephenville Crossing, Newfoundland.
A0N 2C0

Job Title: Mechanic (Autobody).

Work Duties: The Autobody Mechanic replaces windows and windshields in cars and trucks, and dismantles, adjusts, repairs and assembles various vehicle body parts. Removing, repairing and installing vehicle upholstery and preparing and painting vehicles after fixing them are also important functions of this job. A variety of mechanic's hand tools may be used, as well as specialized tools such as dolly blocks, hydraulic jacks, pneumatic equipment, and welding and painting equipment.

Physical Demands and Conditions: The Autobody Mechanic usually works indoors in a well-equipped shop. Most shops are noisy because of the constant use of machine tools and hammering. Working in cluttered or cramped quarters, and contact with grease and dust are inevitable in this job. Hazards include cuts from torn metal and broken glass, burns from welding equipment and possible inhalation of paint fumes. Most Autobody Mechanics work a forty hour week and shift work is not usually required.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eight certificate with a pass in English, Mathematics and Science is required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Autobody Mechanics usually enter into a contract of apprenticeship which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some years experience further advancement may be to supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $4,800 | $10,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Most job opportunities exist with service departments of automobile dealers and with private autobody repair shops and garages.

Comments: This is a nine-month course and those interested should have mechanical ability and enjoy working with their hands. This type of work offers a great deal of variety and, as well, a good chance for the ambitious worker to operate his own business.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Mechanic (Automotive).

Work Duties: The Automotive Mechanic locates, adjusts and repairs faulty vehicle parts. Assessing the performance of cars according to acceptable standards, servicing new vehicles, cleaning and adjusting parts and installing new parts, are all important functions of this job. A variety of mechanic's hand tools, as well as special testing equipment, guages, hoists and power tools may be used.

Physical Demands and Conditions: The Automotive Mechanic usually works indoors in a well-equipped shop. Exposure to such things as paint and exhaust fumes, grease, oil and dirt is inevitable in this occupation. Working often in close quarters and cramped spaces, and at a wide variety of vehicles, makes this work both physically and mentally demanding. Most Mechanics work a forty hour week and shift work is not usually required.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade ten certificate with a pass in English, Mathematics and Science is required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33). There are no examinations

or interviews necessary to enter training.

Advancement Opportunities: Automotive Mechanics usually enter into a contract of apprenticeship which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some years experience further advancement may be to supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $4,800 | $10,100 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Job opportunities exist with industry, government agencies, automotive dealerships and private garages.

Comments: This is a nine-month course and those interested should have mechanical aptitude and enjoy working with their hands. Mechanics should be able to get along with others since they are usually working in a shop with a number of other skilled tradesmen.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Metal Machinist.

Work Duties: The Metal Machinist shapes metal parts to precise dimensions by following blueprints and specifications. Measuring and laying out workpieces, selecting and installing cutting tools and moving controls to start, stop and regulate equipment are also important functions of this job. The Machinist usually works to very close tolerances when machining and measuring workpieces. A variety of hand tools, as well as lathes, drill presses, shapers and grinders may be used.

Physical Demands and Conditions: Work is generally not physically strenuous, although the Machinist must always take safety precautions when in the shop due to hazards from metal chips, dust, sharp cutting tools and moving parts. Depending on the industry, shift work may be required and work weeks are usually forty hours long.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade ten certificate with a pass in English, Mathematics and Science is required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Machinists usually enter into a contract of apprenticeship which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some years experience further advancement may be to supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $7,500 | $12,500 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most work is found in areas of high industrial concentration such as St. John's, Long Harbour and Come by Chance.

Comments: This is a nine-month course and potential Machinists should have good manual dexterity, patience, ingenuity, good eyesight and the ability to stand for long periods of time.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Millwright.

Work Duties: The Millwright installs, moves, aligns, maintains and repairs industrial equipment. Diagnosing malfunctions, dismantling and assembling machinery and testing and adjusting equipment are all important functions of this job. A variety of hand tools, as well as jacks, hoists/ rollers, squares, micrometers and other specialized tools may be used.

Physical Demands and Conditions: Work is usually indoors and often in surroundings made unpleasant by heat and noise from large machinery. Millwrights usually work a forty hour week although overtime and/or shift work may be required by some industries.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven certificate with a pass in Mathematics and Science is required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Millwrights usually enter into a contract of apprenticeship which lasts four years (including

training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some years experience further advancement may be to supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $7,500 | $12,500 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Most job opportunities exist in industrial areas where there are various types of heavy machinery.

Comments: This is a nine-month course requiring people with mechanical aptitude and manual dexterity. The work involved is physically demanding, but usually challenging and not repetitious.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Nursing Assistant.

Work Duties: Nursing Assistants use a variety of medical equipment to take temperatures and pulse, blood pressure rates and various other routine clinical tests. Keeping accurate records of patients' meals and maintaining charts of the patient's condition are also important functions of this job. Other duties include sterilizing equipment and supplies, making beds, giving baths and insuring the personal hygiene of the patients.

Physical Demands and Conditions: This type of work may be both physically and mentally demanding since Nursing Assistants are constantly working with the sick and injured, and are on their feet most of the time. Following directions carefully and maintaining good relations with both staff and patients are important parts of this job. Most Nursing Assistants work from forty to forty-eight hours per week and shift work is often required.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade ten certificate is required.

How to Enter Field: Training for this occupation is available at The College of Trades and Technology in St. John's and at the community hospitals in Corner Brook and Grand Falls. There are no examinations necessary to enter training

although in many cases applicants are interviewed before being accepted.

Advancement Opportunities: Nursing Assistants are trained to work at a variety of jobs in the medical field including Nursing Assistants in Hospitals, Clinical Clerks, Public Health Workers and Home Nursing Assistants. After some experience in the field, many assistants advance to supervisory positions over others in this field or study further for more advanced jobs in the medical field.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $5,000 | $7,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most jobs are concentrated where there are hospitals and clinics.

Comments: This is an eleven-month course requiring people who are clean, tidy and enjoy working with the sick. Working as an important part of the medical profession has many rewards.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Oil Burner Mechanic

Work Duties: The Oil Burner Mechanic positions and erects furnaces and installs air ducts, pipes and vents. Testing and adjusting furnaces, replacing or repairing defective parts and cleaning furnaces and related equipment are also important functions of this job. A variety of hand and power tools, as well as specialized analysing equipment may be used.

Physical Demands and Conditions: Cuts and bruises, as well as grease, oil and dirt are all part of the Oil Burner Mechanic's job. Work hours usually range from forty to forty-eight hours per week, although the mechanic may often be called out "after hours" to fix a faulty furnace. Mechanics often work alone when on repair jobs and as part of a team when installing a furnace.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade nine certificate with a pass in English, Mathematics and Science is required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33), and is done conjointly with training for the Plumbing Trade. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Oil Burner Mechanics usually enter into a contract of apprenticeship which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some years experience further advancement may be to supervisory positions or some may wish to open their own business.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $7,400 | $12,300 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Most job opportunities exist with the various oil companies and with private contractors.

Comments: This is a nine-month course requiring people with mechanical aptitude and a willingness to work at odd hours when required.

For Further Information Contact:

Department of Manpower and Industrial Relations,
Gorman-Butler Building,
P.O. Box 4750,
St. John's, Newfoundland.
A1C 5T7

Job Title: Plumber.

Work Duties: The Plumber lays and installs pipe systems for water and sewerage in buildings under construction and installs fixtures such as bathtubs, sinks and automatic washers. Altering, repairing and replacing plumbing equipment and removing obstructions in pipe systems are also important functions of this job. A variety of hand tools, power tools and specialized plumbing tools may be used.

Physical Demands and Conditions: Work is sometimes hard, involving heavy lifting and working in cramped spaces. The Plumber is often called out "after hours" and may be working in dirty and wet conditions. Usually, work hours range from forty to forty-eight hours per week with extra pay for overtime work.

Qualifications: To enter training an applicant should be sixteen years of age or older, in good health and have good manual dexterity. A grade nine certificate with a pass in English, Mathematics and Science is required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33), and is done conjointly with training for the Oil Burner Mechanic's Trade. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Plumbers usually enter into a contract of apprenticeship which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some years experience further advancement may be to supervisory positions or some may wish to open up their own business.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $8,500 | $16,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Most workers are employed with plumbing and heating contractors, while others work with public utilities, government agencies and industrial companies.

Comments: This is a nine-month course and those interested should have mechanical aptitude. The type of work involved offers a great deal of variety, as well as satisfaction from a job well done.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Power (Stationary) Engineer.

Work Duties: The Power Engineer operates, maintains and repairs stationary engines, boilers, furnaces, generators, turbines and other equipment. Inspecting equipment regularly, checking gauges and meters, making adjustments and repairs and maintaining records of engine readings are all important functions of this job. A variety of hand tools, as well as special analysing and testing equipment may be used.

Physical Demands and Conditions: Work is generally around hot boilers and electrical and mechanical equipment. Heat and noise are characteristic of the power equipment area. Since most plants must operate around the clock, work is generally done in eight-hour shifts and most work weeks are forty hours long.

Qualifications: To enter training an applicant should be seventeen years of age or older, in good physical condition and have good manual dexterity. A grade ten certificate with a pass in English, Mathematics and Science is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. There are no examinationa or interviews necessary to enter training.

Advancement Opportunities: Graduates of this course are eligible to write Provincial Government Examinations to become fourth class Power Engineers. After some years experience, further training and the successful completion of Provincial Government Examinations, Power Engineers may advance to third, second and first class status. Further advancement may be to supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $7,000 | $12,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Job opportunities exist with government agencies, industrial and manufacturing plants and large buildings such as hospitals, hotels, office buildings and apartment houses.

Comments: This is a nine-month course requiring people with mechanical aptitude and the ability to get along with others. The job requires the Power Engineer to be alert and safety conscious at all times.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Printer.

Work Duties: Those trained in this area may find themselves doing a variety of closely related jobs. Drafting and simple art work, cold type settings, preparing photographic negatives for repdocution, plate making, adjusting and operating presses and operating binding equipment, are all jobs for which the Printer is skilled. Printers use various types of drafting and photographic equipment, as well as inks and chemicals, printing plates and presses. A variety of hand tools are also used to set up and maintain the presses.

Physical Demands and Conditions: The work area may vary from noisy and somewhat dirty in the older plants, to relatively quiet and clean in newer plants. Most new printing shops are clean and well-equipped, offering many jobs in typical office-type surroundings. Work weeks are usually forty hours long and shift work is not generally required.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade ten certificate with a pass in English and Mathematics is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's, and at the District Vocational School in Corner

Brook. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Printers usually start work as a helper in some part of the printing shop. After some experience, some may wish to specialize in certain areas while others elect to work in related areas such as duplicating centers.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $4,800 | $10,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is fair. Most work can be found with print shops, newspapers, book and magazine publishers, as well as in duplicating centers at colleges, hospitals and large business firms.

Comments: This is a nine-month course and requires people who are willing to start with "menial" jobs and work their way up. A number of openings exist for women in this field also.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Radio and Television Repairman.

Work Duties: The Radio and Television Repairman installs radios, televisions, stereos, public address systems and television antennas. Locating troubles and replacing or repairing parts in these appliances, and making house calls to repair, pick up or drop them off are also important functions of this job. A variety of hand tools and electronic testing equipment may be used.

Physical Demands and Conditions: The Repairman works mainly indoors, often with small and delicate parts. Working in awkward positions when installing and servicing equipment, and being in situations where there is a risk of electrical shock are commonplace to the Radio and Television Repairman. Work weeks are usually forty hours long although self-employed Repairmen often work longer hours.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven certificate is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Many Repairman start as helpers to already established servicemen and after some experience

may advance to senior positions. Some Repairman advance to opening their own private repair shops, while others may wish to stay with established companies and seek supervisory positions.

| Earning: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $7,000 | $12,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is fair. Places of work include service departments of large stores, radio and television dealers, wholesalers, manufacturers of electronic equipment and various repair shops.

Comments: This is a twelve-month course and those interested should be aware that in many areas of Newfoundland the job market is saturated. In places where work is available this job offers a challenging and rewarding career.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Real Estate Salesman.

Work Duties: Work duties of this occupation are centered around the selling of property. Viewing houses and buildings for appraisal and persuading property owners to list their holdings are important functions of this job. Soliciting clients and viewing property with interested parties is one of the most important aspects of this job. The Real Estate Salesman must also prepare and process various documents to finalize sales. Being aware of market conditions such as the availability of monies, is also an important part of this job.

Physical Demands and Conditions: This job involves a great deal of contact with a variety of people. Influencing people's opinions and ideas is a major part of the day's work. Although the Salesman may be based in a well-equipped office, much of the actual selling of real estate is done at the "listed" site. Work hours will vary since many customers will want to view properties after regular work hours or on weekends. This is a physically and mentally demanding job for those who are interested in building and expanding a career in real estate.

Qualifications: To enter training an applicant should be at least nineteen years of age, and bondable. A grade eleven certificate is recommended.

How to Enter Field: Training for this occupation is done on the job and through home study. After potential Salesmen have completed the home study course, they may write Provincial Government Examinations to become qualified Real Estate Salesmen. Training time will vary with each individual's initiative, but generally it takes four to twelve weeks to complete.

Advancement Opportunities: After successful completion of the Provincial Government's Examinations, Salesman are qualified to enter the field and sell real estate. After at least two years experience, advancement may be to a Real Estate Agent which requires another Provincial Government Examination. Other possibilities for advancement may be to supervisory or managerial positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $7,500 | $13,000 |
| 1976 | | |
| 1977 | | |

Note: Real Estate Salesmen are paid on a commission basis and therefore their salaries will vary greatly, depending on their initiative.

Supply and Demand: The employment outlook in Newfoundland is good. Job opportunities exist wherever there is real estate, with most opportunities in the larger expanding centers.

Comments: Those interested in this field should be capable of communicating effectively with others and should be willing to work irregular hours. Salesmanship, self-confidence, diplomacy and tact when dealing with people, are all assets for this occupation.

For Further Information Contact:

Newfoundland and Labrador Real Estate Board,
P.O. Box 5476,
Javelin House, 109 Water Street,
St. John's, Newfoundland.
A1C 5W4

Job Title: Refrigeration Plant Operator.

Work Duties: The Operator installs, maintains and repairs all types of refrigeration equipment including motor controls, switches and compressors. Assembling parts, bending, cutting and connecting tubing for new units, and observing guages and controls to determine if the plant is working to specifications, are also important functions of this job. A variety of hand and power tools, as well as specialized analysing equipment may be used.

Physical Demands and Conditions: Working conditions vary, depending on the type of job being performed. The Operator may be reading guages in a clean well-equipped plant or may be installing or repairing equipment in hard to reach areas. Working on ladders or kneeling and crouching in awkward positions are all in a day's work. Some work may also be done outdoors under a variety of conditions. Work hours range from forty to forty-eight hours per week and shift work is not usually required, although the Operator may be "on call" in case of a breakdown.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade ten certificate with a pass in English, Mathematics and Science is required.

How to Enter Field: Training for this occupation is available at The College of Fisheries, Navigation, Marine Engineering and Electronics in St. John's, and at the District Vocational School in Burin. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: After successful completion of training, Operators may write Provincial Government Examinations for a Certificate of Competency as Refrigeration Operator, Grade B. Advancement after two years experience in the proper size plant may be to write examinations for a Grade A licence. Further advancement may be to supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $8,500 | $10,000 up |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good with most jobs existing with fish plants, trawlers, and private refrigeration companies.

Comments: This is a nine-month course at The College of Fisheries, Navigation, Marine Engineering and Electronics, and a twelve-month course at the District Vocational School in Burin. Those interested in this occupation should

be mechanically inclined. The type of work involved is characterized by frequent change and usually leads to a challenging and rewarding career.

For Further Information Contact:

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Sawmill Worker.

Work Duties: The Sawmill Worker operates, tends or feeds circular saws, band saws, planes, or other lumbermill equipment to cut logs or lumber to specified dimensions. Determining cuts to get the best grade and amount of lumber, as well as adjusting machine blades and cutters, and operating a variety of controls and equipment are all important functions of this job. Some common tools and machines that may be used include circular and band saws, planes, power saws, end saws and wheeled skidders.

Physical Demands and Conditions: Much of this type of work is done outdoors in all types of weather conditions although some Workers may be in large, well-equipped plants. In the modern sawmills the work is not usually as physically demanding as in the older type mills, although the Worker is still exposed to loud saw noises, moving machinery and flying wood chips and dust. Generally, the work week is forty to forty-eight hours long and shift work is not usually required.

Qualifications: To enter training an applicant should be eighteen years of age or older and in good physical condition. A grade eight certificate (or equivalent) is preferred, but not essential.

How to Enter Field: Training for this occupation is available only at the District Vocational School in Stephenville Crossing. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: After successful completion of this course the Sawmill Worker may enter the sawmill industry at a variety of jobs including Sawyer, Grader, Tallyman, Planer Operator, and so on. Further advancement, after some years experience, may be to supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $4,800 | $6,000 up |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is fair. Most job opportunities exist with large and small sawmills, logging companies, pulp and paper and lumbering companies.

Comments: This is a twelve-week course and those interested should have good eye-hand coordination and manual dexterity for operating the various types of machinery.

For Further Information Contact:

District Vocational School,
Stephenville Crossing, Newfoundland.
A0N 2C0

Job Title: Sheet Metal Worker.

Work Duties: The Sheet Metal Worker makes, installs and repairs sheet metal products such as ventilating, air-conditioning and heating ducts, roofing, siding and rain-spouts. Laying out work, cutting, shaping, assembling and installing metals are important functions of this job. A variety of special hand and power tools, as well as soldering and welding equipment may be used.

Physical Demands and Conditions: Much of this work is done in well-equipped shops. However, the Sheet Metal Worker may be required to work on high buildings and in all types of weather when installing the equipment. Installations also call for work in close and cramped spaces many times. Work weeks are usually forty hours long and shift work is generally not required.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade ten certificate with a pass in English, Mathematics and Science is required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Sheet Metal Workers usually enter into a contract of apprenticeship which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some years experience further advancement may be to supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $8,000 | $14,000 up |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with manufacturing firms producing sheet metal equipment, heating and air-conditioning contractors and roofing contractors.

Comments: This is a nine-month course and those interested should have mechanical aptitude and enjoy working with their hands. Getting along with others is important since work is often done in crews of two or three.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Steamfitter-Pipefitter.

Work Duties: The Steamfitter-Pipefitter assembles, installs and maintains piping systems for steam, hot water, gas, air, acid and paints, in various types of domestic, industrial or commercial establishments. Determining malfunctions and measuring, cutting, threading and installing pipes, valves, guages and other fixtures are also important functions of this job. Reading blueprints for proper maintenance procedures is all in a day's work for the Steamfitter-Pipefitter. A variety of hand and power tools, as well as soldering, welding and caulking materials may be used.

Physical Demands and Conditions: This type of work often involves heavy lifting and working in cramped spaces. Also the worker may be required to work both inside and outside on ladders, platforms and scaffolds. The possibility of injury from sharp metals, torch burns and fumes from old pluming is always present and safety is therefore an important consideration at all times. Work weeks are usually forty hours long and shift work is generally not required.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good physical condition. A grade ten certificate with a pass in English,

Mathematics and Science is required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available only at the District Vocational Schools in Burin, Grand Falls and Baie Verte. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Steamfitter-Pipefitters usually enter into a contract of apprenticeship which lasts four years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some years experience further advancement may be to supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $8,500 | $16,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with private contractors, public utilities, government agencies and various industries.

Comments: This is a nine-month course requiring people with good eye-hand coordination and manual dexterity. The type of work involved is construction and usually not

repetitious.

For Further Information Contact:

District Vocational School,
P.O. Box 413,
Grand Falls, Newfoundland.
A2A 2J8

Job Title: Steelworker (Marine).

Work Duties: The Marine Steelworker lays out and fabricates metal structural parts for attachment to the hull of a ship. Reading blueprints and specifications for installing equipment in ships, building supports for ships in dock and welding various pieces to the ship's hull in the construction and maintenance stages are also important functions of this job. A variety of hand tools, machine tools, power tools and caulking and welding equipment may be used.

Physical Demands and Conditions: This type of work generally involves working both indoors and outdoors in a variety of weather conditions and while exposed to the continuous loud noise of the shipyard. Lifting heavy loads, working in awkward positions and exposure to gasses, fumes and dust, are all in a day's work for the Marine Steelworker. Work hours usually range from forty to forty-eight hours per week, and overtime may be required if a job has to be completed quickly.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade ten certificate is required.

How to Enter Field: Training for this occupation is available only at The College of Fisheries, Navigation, Marine Engineering and Electronics in St. John's. There are no

examinations or interviews necessary to enter training.

Advancement Opportunities: Successful graduates of this program usually start work directly as Steelworkers in the shipbuilding industry. After some years experience further advancement may be to supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $10,000 | $12,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with shipbuilding and repairing companies, the majority of which are situated on the south coast and in St. John's.

Comments: This is a nine-month course requiring people with the ability to master a wide range of steelworking skills. The type of work involved requires stamina and manual dexterity.

For Further Information Contact:

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Stenographer.

Work Duties: The Stenographer types and performs general clerical duties. Taking dictation in shorthand or from a dictating machine, answering and making telephone calls, making appointments and classifying correspondence are also important functions of this job. A variety of office machines, dictating machines, manual and electric typewriters may be used.

Physical Demands and Conditions: Most work requires sitting down for extended periods of time in comfortable and pleasant offices. The Stenographer must be able to work under the pressure of getting work done on time and may be asked to work overtime to complete unfinished work. Work weeks are usually forty hours long and often involve working with a large variety of personalities.

Qualifications: To enter training an applicant should be sixteen years of age or older, and have good mental dexterity. A grade eleven certificate with a pass in grade ten Mathematics is required.

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33). There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Stenographers usually enter the field in junior positions and after some years experience may become senior Stenographers. Others may wish to specialize in areas such as Court Reporting or as Legal and Medical Secretaries.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $4,800 | $6,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good especially in the larger centers. Work exists with practically all areas of business, industry, government, and service.

Comments: This is a nine-month course requiring people with pleasant personalities who enjoy dealing with the public.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Welder (Arc and Gas).

Work Duties: Welders join, cut and shape metals using intense heat and pressure. Cleaning workpieces, laying out and marking weld points and cut lines, securing workpieces for fabrication or repair, selecting appropriate electrodes, rods, torch tips and related apparatus are all important functions of this job. A variety of hand tools, as well as electric and/or gas welding equipment may be used.

Physical Demands and Conditions: Working conditions vary greatly depending on the work situation. Welders may be required to work in or out of the shop, at ground level or high above ground on new construction sites. Exposure to intense heat and fumes is common, but proper safety equipment and procedures minimize the chance of injury. Work weeks are usually forty hours long and overtime and shift work may be required in some industries.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade ten certificate with a pass in English, Mathematics and Science is required. Training is also available through apprenticeship (see Section III, p. 220).

How to Enter Field: Training for this occupation is available at a variety of Vocational and Trades Schools throughout Newfoundland (see Chart, p. 33). There are no examinations

or interviews necessary to enter training.

Advancement Opportunities: Welders usually enter into a contract of apprenticeship which lasts three years (including training time), after which they are eligible to write Provincial Government Examinations for journeyman status. After some years experience many Welders elect to specialize in some particular type of welding and eventually advance to supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $8,400 | $14,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Most work is concentrated in industrial areas and in the larger centers. Some employers of Welders include garages, metal working shops, government agencies, and practically all areas of industry.

Comments: This is a nine-month course requiring people with good eye-hand coordination and manual dexterity. Patience, thoroughness and physical stamina are assets necessary for success in this occupation.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

# SECTION II

## JOB ANALYSES (TECHNICAL)

Job Title: Accountant.

Work Duties: The Accountant applies the principles of Accounting to compile, analyse and audit business records. Preparing, examining and reporting financial accounts, reports and systems are all important functions of this job. A variety of office and business machines may be used in this type of work.

Physical Demands and Conditions: Generally, an Accountant works in a pleasant, comfortable office. Since job locations may vary from small businesses to large industries, the amount of travelling time required also varies considerably. The work week is usually forty hours long although some overtime may be required during rush periods. The work involved is often mentally demanding.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Successful graduates of this course usually enter the accounting field at the junior level. After some years experience many Accountants either advance to senior and/or supervisory positions or further their education and specialize in such areas as cost accounting, tax work, budgeting or auditing. Certain exemptions are allowed for those who intend to further their studies in this area.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $7,500-$10,000 | $12,000-$20,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Employment opportunities exist with small and large business firms, Chartered Accountants, various governmnent departments and industry.

Comments: This is a two-year course and those interested should have high numerical ability, accuracy in detailed work, good self-expression and leadership qualities to succeed in this profession.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Business Administrator.

Work Duties: The Business Administrator coordinates the operations of a department, formulates plans, organizes resources and appoints and supervises staff. Working with managers or specialists to arrive at decisions is also an important function of this occupation. A variety of office and business machines may be used to aid Business Administrators in their work.

Physical Demands and Conditions: This is an exceptionally broad field and the conditions of work vary greatly. Generally, work is indoors and in most cases is both mentally and physically demanding. Some Business Administrators work a forty hour week while others may be expected to work longer hours and do a lot of travelling. This type of work is usually very competitive.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Advancement opportunities vary considerably in this field depending on the type of business one enters. Generally, advancement is from junior to senior executive positions and from there to supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $7,000 | $10,000 up |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good because of the amount of new industry coming to this Province. Job opportunities exist with private businesses, governments, industries and practically all areas of the economy.

Comments: This is a two-year course requiring people with good leadership qualities, communication skills, organizational and reasoning abilities.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Civil Engineering Technologist.

Work Duties: The Civil Engineering Technologist assists Engineers and other technical workers in determining work procedures for installing, repairing or modifying various types of equipment or systems. Testing and analysing material, surveying, designing, drafting and preparing charts, graphs and other supporting data for reports are all important functions of this job. A variety of testing, analysing, surveying and drafting equipment may be used.

Physical Demands and Conditions: In this type of job much of the basic work may be done outside in all types of weather conditions while final drafts and reports are completed in clean, well-kept offices. Work hours range from forty to forty-eight hours per week while overtime may sometimes be required to get a job completed on time. In some cases, Technologists may work full time in an office or in the field.

Qualifications: To enter training an applicant should be sixteen years of age or older, in good health, have good eyesight and manual dexterity. A grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St.

John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Successful graduates of this course usually enter the field as technicians and with some years experience advance to technological and/or supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $9,000 | $15,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Most job opportunities exist with Engineering and Architectural firms, town councils, government agencies and public utility companies.

Comments: This is a two-year course requiring people with initiative and an ability to work without supervision.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Community Recreation Leader.

Work Duties: The Community Recreation Leader studies the recreational needs of a community and plans, organizes and conducts activities to meet these needs. Administrative duties such as personnel selection and coordination of staff and finances are also important functions of this job. Administrating various types of programs in arts and crafts, sports and games, is all in a day's work for the Recreation Leader.

Physical Demands and Conditions: This type of work is physically and mentally demanding since the Recreation Leader may be working on and/or coordinating a number of different programs at any given time. Work weeks are usually forty to forty-eight hours long and evening and weekend work is common. Generally, the type of work involved is very challenging and not repetitious.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Successful graduates of this program may start as assistants to, or directly as, Recreational Leaders. After some years experience advancement may be to larger centers or to expansion of facilities so as to give the worker great responsibilities.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $7,000 | $10,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is fair. Job opportunities may exist with town councils, volunteer or private agencies, government agencies and commercial and special interest groups.

Comments: This is a two-year course and those interested should have a pleasant personality and an ability to work with a wide variety of people. Initiative, dedication, enthusiasm, leadership abilities and organizational qualities are all important assets for success in this occupation.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Drafting Technician (Architectural).

Work Duties: This job involves working closely with Architects and Engineers, interpreting and converting their ideas into well prepared drawings. Using a variety of drawing and drafting equipment, the Technician sketches the designs and details of various types of buildings and structures. Computing strengths of materials and making estimates of materials to be needed on a job may also be functions of the Technician's work.

Physical Demands and Conditions: The Architectural Drafting Technician generally works in a well-equipped office although some field work may be required at various stages of construction. Working with detailed layouts which must conform to specific regulations and standards makes this work both physically and mentally demanding. Work weeks are usually forty hours long although some overtime may be required to meet certain construction deadlines. This job involves a great deal of teamwork so the Technician should be able to get along well with others.

Qualifications: To enter training an applicant should be sixteen years of age or older and be in good health. A grade eleven certificate is required with a pass in Science and Mathematics.

How to Enter Field: Training for this occupation is available at The College of Trades and Technology in St. John's and at the District Vocational School in Grand Falls. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Most Architectural Drafting Technicians start work in junior positions and with some experience may advance to senior and supervisory positions. Many Technicians take further training in the fields of Engineering and Architectural Drafting.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $8,000 | $10,000 up |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with government departments, various areas of industry and private Engineering and Architectural companies.

Comments: This is a two-year course requiring people with a steady hand, good eyesight and an ability to concentrate for long periods of time. Working as part of a team of professionals makes this an exciting and rewarding career.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Electrical Technologist.

Work Duties: The Electrical Technologist is prepared for a variety of jobs in the electrical field. Job duties vary and may include such activities as installing and maintaining electrical control equipment and circuitry, testing and diagnosing trouble spots and consulting blueprints and diagrams to determine the best and fastest method of repairing faulty circuits. Maintaining equipment to meet certain operating standards and keeping records of equipment operation are also important functions of this job. A variety of hand tools, blueprints, circuit diagrams and testing equipment may be used.

Physical Demands and Conditions: Conditions may vary considerably depending on the type of job one enters. Work in the maintenance and repair field is usually outdoors in a variety of weather conditions while those working with Architects or Consultants may spend most of the time in an office. Working on ladders, poles and towers, or in noisy, cramped spaces, is common in the maintenance and repair field. Since the Technologist is usually working with high voltage, safety is always an important factor. Work weeks are generally forty hours long although "after hours" work may be required during a time of power failure.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. At The College of Trades and Technology a grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required. A grade eleven (or equivalent) is required at The College of Fisheries, Navigation, Marine Engineering and Electronics.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology and The College of Fisheries, Navigation, Marine Engineering and Electronics in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: The Electrical Technologist is prepared to enter any area of the electrical field. Service, maintenance and repair, as well as inspection, installation and development, are all possible areas for specialization. The high degree of training offered in these courses often leads to early advancement opportunities for the Technologist.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $9,000 | $14,000 up |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Job opportunities exist with public utility companies, industrial complexes, government agencies and Engineering firms.

Comments: This is a two-year course at The College of Trades and Technology and a three-year course at The College of Fisheries, Navigation, Marine Engineering and Electronics. Those interested should be adaptable to working under a variety of conditions and should be able to work well with others as part of a team. This is a challenging and rewarding career for those who are willing to keep up with the newest developments in the Electrical field.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Electronics Technologist.

Work Duties: The Electronics Technologist is prepared for a variety of jobs in the Electronics field. Job duties vary and may include aiding the Electrical Engineer in planning installations, diagnosing trouble spots and overseeing repair jobs. Assembling, maintaining, testing and repairing electronic equipment in various areas of the industrial and communications fields are also important functions of this job. A variety of hand tools, testing equipment, blueprints and circuit drawings may be used in this job.

Physical Demands and Conditions: Work in this field provides a great variety of conditions from clean, comfortable offices to dirty and noisy industrial plants. The Technologist may be in a workshop, on a ladder, or working in close cramped spaces, depending on the job involved. Work weeks are usually forty hours long and shift work may be required on some jobs. Working as part of a team, and often working with high voltage demands that the Technologist be able to get along well with others and be safety conscious at all times.

Qualifications: To enter training an applicant should be sixteen years of age or older, in good health, have good eye-hand coordination and manual dexterity. At The College

of Trades and Technology a grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required. A grade eleven pass (or equivalent) is required at The College of Fisheries, Navigation, Marine Engineering and Electronics.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology and The College of Fisheries, Navigation, Marine Engineering and Electronics in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: The Electronics Technologist is prepared to enter any area of the electronics field. Specialization in any particular area of electronics is usually done "on the job" and the comprehensive training background usually leads to early advancement.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $9,000 | $14,000 up |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Job opportunities exist with radio and television companies, industrial firms, power companies, telephone companies and various other commercial and industrial concerns.

Comments: This is a two-year course at The College of Trades and Technology, and a three-year course at The College of Fisheries, Navigation, Marine Engineering and Electronics. Those interested should have high mathematical and mechanical ability and should be willing to keep up with the new developments in this fast growing field.

For Further Information Contact:

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Food Technologist.

Work Duties: The Food Technologist researches to improve the quality, flavour, color, texture and nutritional value of foods. Performing chemical, microbiological and taste tests to inspect the quality of foods is all in a day's work for the Technologist. Developing new food products and constantly trying to improve processing and packaging techniques for various foods are also important functions of this job. Many Food Technologists also become involved in production management and may be supervising the work of others. A variety of instruments and chemicals for testing and inspecting may be used in this work.

Physical Demands and Conditions: Working conditions vary greatly, depending on the job. Generally, the Food Technologist will work either in a well-equipped laboratory or directly on the plant floor. The work week is usually forty hours long and at times requires a great deal of patience and perseverance. Working with and/or supervising others demands that the Technologist be able to get along with a variety of people.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven certificate, or approval of the Admissions Committee, is required.

How to Enter Field: Training for this occupation is available only at The College of Fisheries, Navigation, Marine Engineering and Electronics in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Many Food Technologists enter the industry directly as quality controllers, assistant food production managers or primary product inspectors. At present, the field is such that many new graduates are finding these top level jobs shortly after graduation and are moving into supervisory positions very quickly.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $7,500 | $12,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Job opportunities exist with food laboratories, food and beverage processing companies, and in some government agencies.

Comments: This is a three-year course and those interested should have an aptitude for science as well as mechanical and mathematical ability. Leadership ability, initiative and self-confidence are recommended prerequisites for success in this occupation.

For Further Information Contact:

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Food Management Technologist.

Work Duties: This job entails training and supervising employees engaged in serving food and beverages, generally in large restaurants or institutions. Overseeing that sanitary conditions are maintained at all times, and that the entire operation of preparing and serving food is done efficiently are also important functions of this job. The Food Management Technologist may also assist in the planning of menus and, as well, keep records of supplies, amount and cost of meals, worker hours, and so on.

Physical Demands and Conditions: This is a mid-management position and usually involves working in a large, well-equipped kitchen. Overseeing a variety of workers, as well as food preparations, carries a great deal of responsibility and can be physically and mentally demanding. Work hours vary since the Food Management Technologist may often be required to oversee special dinners such as weddings and banquets. Generally, the work week is forty hours long.

Qualifications: To enter training an applicant must be sixteen years of age or older and in good health. A grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St.

John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Graduates of this course usually enter the industry as dietetic aides in various commercial food establishments, or may begin as assistant managers in various establishments. At present, the rate of advancement is relatively fast and many Food Management Technologists are finding top level jobs very quickly.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $7,000 | $10,000 up |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Job opportunities exist with hospitals, restaurants, hotels, colleges, government agencies and food processing and packing plants.

Comments: This is a two and one half-year course requiring people with an ability to organize, an appreciation of food quality and a general interest in business principles.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Forestry Technologist.

Work Duties: The Forestry Technologist prepares maps showing the amounts and conditions of timber, new growth, topographical features and other forestry data. Estimating amount, growth and value of trees, fighting fires, spraying trees for protection from disease and insects, and aiding with the reforestation of various areas are all important functions of this job. A variety of tools and equipment may be used such as axes, augers, chain saws, outboard motors and firepumps.

Physical Demands and Conditions: Most of this work is outdoors under little or no supervision. Walking and climbing over rough terrain is all in a day's work, and in some cases the Technologist may be required to work alone in remote areas. Generally, the work week is forty hours long, but in emergency cases, such as forest fires, the Technologist may be required to work longer hours under hazardous conditions.

Qualifications: To enter training an applicant must be sixteen years of age or older and in good health. A grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St.

John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Graduates of this program usually start work as a junior technician under the supervision of a Forester. After some years experience advancement may be to senior and/or supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $7,000 | $9,000 up |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Most job opportunities exist with the Provincial and Federal Forestry Services, while other positions exist with pulp and paper companies, sawmills and industry.

Comments: This is a two-year course requiring people who are capable of working with little or no supervision, and who enjoy working outdoors.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Marine Engineering Technologist.

Work Duties: The Marine Engineering Technologist assists Marine Engineers and other technical workers with the operation and repair of marine power plants, propulsion systems and other related equipment. Studying drawings and specifications to evaluate the operation of equipment during sea trials, and testing equipment for malfunctions are also important functions of this job. Preparing charts, graphs and other related data for reports is all in a day's work for the Technologist.

Physical Demands and Conditions: Working conditions may vary, but usually the Technologist will work in the ship's engine room where heat and noise are common. The work week is usually forty hours long, although this may vary during sea time which generally lasts from one day to two weeks. Working as part of a team demands that the Technologist be able to get along well with others.

Qualifications: To enter training an applicant must be sixteen years of age or older and in good health. A grade eleven certificate, or the approval of the Admissions Committee, is required.

How to Enter Field: Training for this occupation is available only at The College of Fisheries, Navigation, Marine

Engineering and Electronics in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Successful graduates of this program may write Ministry of Transport Examinations for their Fourth Class Steam and Motor Certificate of Competency, and may also be exempt from parts of the Third, Second and First Class Examinations. Advancement to various classes of competency will depend upon initiative, training and sea experience.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $10,000 | $16,000 up |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with the various shipping and fishing companies, as well as with dockyards, oil rigs and other related concerns.

Comments: This is a three-year course requiring people with mechanical ability as well as an interest in various types of scientific operations. A genuine interest in sea life and an ability to get along well with others are necessary for success in this occupation.

For Further Information Contact:

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Medical Laboratory Technologist.

Work Duties: The Medical Laboratory Technologist performs numerous laboratory tests to help detect, diagnose, treat and study diseases. Examining and testing specimen samples, analysing test results and compiling data for doctors and pathologists are all important functions of this job. A variety of laboratory instruments and materials may be used in the Technologist's daily routine.

Physical Demands and Conditions: Medical Laboratory Technologists usually work in a well-equipped laboratory with a variety of materials and technical equipment. The work involved is very precise, requiring patience and calmness. Generally, the work week is forty hours long and some "on call" or weekend duty is usually expected.

Qualifications: To enter training an applicant must be sixteen years of age or older, in good health, and have good eyesight and manual dexterity. A grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Graduates of this program usually write examinations, set by the Canadian Society of Laboratory Technologists, to become certified in this occupation. After some years experience advancement is usually to senior and/or supervisory positions.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $7,500 | $12,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist in hospitals, while others exist in clinics, health agencies, research centers and universities.

Comments: This is a three-year course requiring people who have a genuine interest in the welfare of others, enjoy scientific, technical activities and are willing to check and research their work. This type of work involves a variety of duties characterized by frequent change.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Medical Laboratory and X-Ray Assistant.

Work Duties: The Medical Laboratory and X-Ray Assistant performs routine tests in the laboratory and/or x-ray room for use in the treatment and diagnosis of disease. Assisting Medical Laboratory and X-Ray Technologists, as well as pathologists and doctors in diagnosing ailments and diseases through the use of radiological and medical laboratory examinations is an important function of this job. Preparing patients to be x-rayed; obtaining specimens for analysis and maintaining accurate records are all in a day's work. A variety of x-ray machinery, chemicals and medical instruments may be used in this job.

Physical Demands and Conditions: Generally, the Assistant works in a clean, well-equipped room with a variety of materials and technical equipment. Work must often be done quickly while at the same time being precise and accurate. Supervision on the job is usually minimal and work hours range from forty to forty-eight hours per week with some "on call" duty often being required.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Graduates of this program may enter the medical field directly as Medical Laboratory and X-Ray Assistants. After some years experience further advancement may be to supervisory positions or one may wish to specialize in either x-ray or medical laboratory work and/or take further training to become a Technologist.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $6,000 | $10,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is excellent. Most job opportunities exist in Cottage Hospitals, while other openings exist in Community Hospitals and medical clinics throughout the Province.

Comments: This is an eighteen-month course requiring responsible people with a genuine interest in the welfare of others, and an ability to work well with little or no supervision. This is a rewarding career as an important part of the medical profession.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Nautical Science Technologist (Fishing).

Work Duties: The Nautical Science Technologist (Fishing) determines fishing areas and coordinates and supervises the activities of crewmen. Controlling course and speed of vessel, directing crews engaged in catching, cleaning, preserving, stowing and refrigerating various types of sea life, and insuring that the vessel is properly equipped, provisioned and maintained are all important functions of this job. Researchers in this area become more involved in testing out new methods, procedures, techniques and equipment for fishing and catching various forms of sea life. A variety of navigation aids and fishing equipment may be used in this job.

Physical Demands and Conditions: This type of work involves exposure to continuous noises from engines, sea and wind, as well as danger from mechanical hazards such as ropes, cables and winches. Continuous sea time usually ranges from a few days to two or three weeks, depending on the fishing "catch." While at sea, work hours will vary and the type of work involved is both physically and mentally demanding.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven pass, or the approval of the Admissions Committee, is required.

How to Enter Field: Training for this occupation is available only at The College of Fisheries, Navigation, Marine Engineering and Electronics in St. John's. A Ministry of Transport Eyesight Examination is required to enter training.

Advancement Opportunities: Graduates of this program usually begin work on large fishing vessels and with additional training, experience and the successful completion of Ministry of Transport Examinations may continuously advance to jobs requiring higher skills and responsibilities such as First Mate or Master, and on to ships of greater tonnage. Advancement in this field is limited only by one's initiative.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $10,000 | $18,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with the major fishing companies operating out of St. John's and various southern coastal areas.

Comments: This is a three-year course requiring people with a genuine interest in sea life and an ability to work

well with others. Those with initiative and ambition can find a rewarding and fruitful career in this field.

For Further Information Contact:

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Nautical Science Technologist (Merchant Marine).

Work Duties: The Technologist determines the position of the ship using a variety of navigational aids and communications equipment. Directing the loading and discharging of cargo, steering and navigating the ship and coordinating the activities of the crew to insure safe and efficient operation and maintenance of the vessel are all important functions of this job.

Physical Demands and Conditions: This type of work involves working inside and outside under a wide range of temperature and weather conditions. The amount of actual sea time, as well as actual working hours, will vary, depending on the type of vessel the Technologist works on. Much of this work involves dealing with other people in a variety of situations and circumstances, and can be both mentally and physically demanding.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven pass, or the approval of the Admissions Committee, is required.

How to Enter Field: Training for this occupation is available only at The College of Fisheries, Navigation, Marine Engineering and Electronics in St. John's. A Ministry of

Transport Eyesight Examination is required to enter training.

Advancement Opportunities: Graduates of this program usually begin work on various types of shipping vessels and with further training, experience and the successful completion of Ministry of Transport Examinations may advance to jobs requiring higher skills and responsibilities such as First Mate or Master, and on to ships of greater tonnage. Advancement in this field is limited only by one's initiative.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $10,000 | $18,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with private shipping companies, as well as with various government operated vessels.

Comments: This is a four-year course (including sea time), requiring people with a genuine interest in sea life and an ability to work well with others. This is a challenging and rewarding career for those with initiative and ambition.

For Further Information Contact:

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Naval Architecture Technologist.

Work Duties: The Naval Architecture Technologist assists Senior Naval Architects and Marine Engineers in research, design and development of various marine craft and structures. Preparing detailed construction drawings, determining work procedures and supervising craftsmen on the job are all important functions of this occupation. Preparing charts, graphs and other data for reports is all part of a day's work. A variety of technical equipment and tools may be used to prepare such things as accurate scale drawings and prototypes.

Physical Demands and Conditions: Working conditions vary from clean, comfortable offices where the planning work is done, to the actual building site where the Technologist may be exposed to all types of noise, dust and gasses. Getting along well with others is important since the job involves working with a variety of highly skilled people all of the time. Generally, work weeks are forty hours long, although some overtime may be required to meet certain deadlines.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven pass, or the approval of the Admissions Committee, is required.

How to Enter Field: Training for this occupation is available only at The College of Fisheries, Navigation, Marine Engineering and Electronics. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Graduates of this program usually enter the field at the junior design level. After some years experience advancement may be to senior and/or supervisory positions.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $9,000 | $16,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is limited although many positions do exist outside this Province. Job opportunities exist with shipyards, Consultant Naval Architects, and various other agencies involved with marine design.

Comments: This is a three-year course requiring people with high numerical ability and also an ability to communicate well with others. This is a very challenging and rewarding career for those interested in Naval Architecture and Engineering.

For Further Information Contact:

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Nurse (Registered).

Work Duties: The Registered Nurse administers injections, gives medicines and dresses wounds. Observing and reporting symptoms, reactions and progress of patients to their physicians, and teaching patients how to care for themselves when they leave the hospital are also important functions of this job. Other duties may include assisting with operations and deliveries, supervising the work of nursing aides and, in some cases, planning and administering community health programs. The Nurse's primary concern is that the patient receives the best of care, and this may also involve working with the patient's family to discuss and develop plans for caring for the patient at home.

Physical Demands and Conditions: Nurses in hospitals and clinics usually work in clean, comfortable surroundings. Work hours vary from forty to forty-eight hours per week and shift work is usually required. The type of work involved can be both mentally and physically demanding since Nurses are on their feet for long periods of time and are often dealing with people who are in pain and suffering. Nurses in other areas, such as Public Health, will deal more with preventive nursing and will often work during the days only.

Qualifications: To enter training an applicant should be seventeen years of age or older and in good health. A grade eleven pass in Public Examinations with an overall average of not less than 65 per cent is required.

How to Enter Field: Training for this occupation is available at the General, St. Clare's and Grace Hospitals in St. John's, and at the Western Memorial Hospital in Corner Brook. Training is also available at Memorial University in St. John's. Entrance examinations are required to enter training and in some cases applicants must also be interviewed.

Advancement Opportunities: Advancement possibilities will differ depending on the area of Nursing one enters. After some years experience advancement is usually from general Nurse to supervisory and possibly instructing positions, depending upon the education and experience of the individual involved. After further schooling Nurses may also advance to specialist positions such as Nurse-Anesthetist.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $7,000 | $9,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is excellent. Most jobs exist with hospitals and medical

clinics, while other opportunities are available in public health services and private dury nursing.

Comments: This is a three-year course at the hospitals in St. John's and a two-year course at the hospital in Corner Brook. Sound judgement, dependability, initiative and a sense of responsibility are all prerequisites for a successful career in Nursing. This occupational area provides a variety of opportunities for work with patients of varying age groups, as well as involvement in any of a wide range of medical specialties.

For Further Information Contact:

The Association of Registered Nurses,
67 LeMarchant Road,
P.O. Box 4185,
St. John's, Newfoundland.
A1C 6A1

Job Title: Pharmacist.

Work Duties: The Pharmacist compounds and dispenses pharmaceuticals and related preparations according to prescriptions. Consulting with and advising doctors and customers, selling a variety of non-prescription drugs and supplies, as well as directing and supervising staff, are also important functions of this job. Maintaining accurate records and stocks of supplies are all in a day's work for the Pharmacist.

Physical Demands and Conditions: Work hours tend to vary considerably depending on the job location. Those operating their own businesses often work long hours and on weekends and holidays, while those working in community pharmacies and hospitals usually work a forty to forty-eight hour week and share with co-workers weekend and holiday work. Most pharmacies are clean and well organized. The work involved can be both physically and mentally demanding since the Pharmacist is continuously standing and usually dealing with a large variety of people.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Graduates of this program may apply to become registered with the Newfoundland Pharmaceutical Association as a Pharmacist Chemist. Many Pharmacists start work with established firms or hospitals and eventually advance to supervisory positions or to opening their own business.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $10,000 | $15,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Most job opportunities exist with community pharmacies, hospitals and clinics.

Comments: This is a three-year course requiring people genuinely interested in scientific work. Pharmacists gain considerable satisfaction in helping to maintain high health standards and in working as an important member of the medical profession.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Power Engineering Technologist.

Work Duties: The Power Engineering Technologist assists engineers and other technical workers with the installation, repair, maintenance or modification of various types of power plant equipment. Studying drawings and specifications to evaluate the operation of plant equipment, and using testing equipment to diagnose malfunctions in machinery are also important functions of this job. Preparing charts, graphs and other data for reports are all in a day's work for the Technologist.

Physical Demands and Conditions: Working conditions vary considerably. Technologists may be in a clean office or may be working in a hot, noisy plant. Work weeks are usually forty hours long and shift work is often required.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven pass, or the approval of the Admissions Committee, is required.

How to Enter Field: Training for this occupation is available only at The College of Fisheries, Navigation, Marine Engineering and Electronics in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Graduates of this program may write examinations set by the Department of Manpower and

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Industrial Relations to qualify for their Third Class Certificate of Competency. Advancement after more training and experience may be to Second and First Class standing and eventually to various types of supervisory roles, depending on the initiative of the individual concerned.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $10,000 | $14,000 up |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Most job opportunities exist with fish processing plants, mining companies, utility companies and various other areas of industry.

Comments: This is a three-year course requiring people who are mechanically inclined, who enjoy various types of scientific operations, and who have an ability to get along well with others. Those with initiative should find this a challenging and rewarding career.

For Further Information Contact:

Guidance Counsellor,
The College of Fisheries, Navigation,
Marine Engineering and Electronics,
P.O. Box 4920,
St. John's, Newfoundland.
A1C 5R3

Job Title: Secretary.

Work Duties: The Secretary takes notes and dictation and transcribes and types of types of letters and reports. Answering the telephone, scheduling appointments, meetings and trips, reading and sorting mail and filing and keeping records are all important functions of this job. A variety of office and business machines may be used such as typewriters, dictaphones, calculators, duplicators and keypunch machines.

Physical Demands and Conditions: Generally, the Secretary works in a clean and pleasant office. Tact, discretion and courtesy are needed at all times due to the variety of people encountered during the run of a day. The work week is usually forty hours long, although Secretaries may at times be required to work overtime to finish important business. The type of work involved may be both physically and mentally demanding.

Qualifications: To enter training an applicant should be sixteen years of age or older and in good health. A grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's and the District Vocational School in Corner Brook.

There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Graduates of this course are trained for high level Secretarial positions such as those needed by business executives, doctors and lawyers. Advancement to these positions may be directly after training or after some years experience in the field. Further advancement may be to supervisory positions over other Secretarial workers or to instructing positions at various Vocational Schools.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $5,500 | $8,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good with a high concentration of need in the larger centers. Job opportunities exist in practically all areas of business, industry and government.

Comments: This is a two-year course requiring people interested in advancing to higher level positions in the Secretarial field.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: Surveyor.

Work Duties: The Surveyor plans surveys, makes precise measurements and calculates latitude, longitude angles, areas and other information for making maps. Compiling and classifying information for charts, maps, legal descriptions and land usage planning, as well as supervising survey crews, are all important functions of this job. A variety of technical instruments, as well as measuring and map plotting instruments may be used.

Physical Demands and Conditions: Work may be indoors in clean, well-equipped offices or outdoors in all types of weather and topographical conditions. Generally, the Surveyor is working as part of a team and should therefore be able to get along well with others. Work weeks are usually forty hours long, although overtime may be required if a job needs to be finished in a hurry. New wood construction sites, building sites and various industrial areas are common places to the Surveyor.

Qualifications: To enter training an applicant should be sixteen years of age or older, be in good physical condition and have good eyesight. A grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Graduates of this course usually spend a certain amount of time "articling" with a Registered Land Surveyor before obtaining their licence from the Association of Newfoundland Land Surveyors. Further advancement may be to supervisory positions with established firms or to opening their own Surveying practice.

| Earnings: Year | Initial | Journeyman (or equivalent) |
|---|---|---|
| 1975 | $8,000 | $12,000 |
| 1976 | | |
| 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is very good. Most job opportunities exist with construction companies, private surveying firms, and various areas of industry and government.

Comments: This is a two-year course requiring people with mathematical ability and accuracy in detailed work. This is an interesting and rewarding career for those with initiative.

**For Further Information Contact:**

Guidance Counsellor,
The College of Trades and Technolpgy,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

Job Title: X-Ray Technologist.

Work Duties: The X-Ray Technologist operates x-ray machinery, prepares patients to be x-rayed, processes film, keeps records and maintains machinery in good working order. Working closely with doctors in diagnosing illness and injury through the use of various types of scanning equipment and other materials is also an important function of this job.

Physical Demands and Conditions: X-Ray Technologists usually work in clean, well-equipped rooms. Work hours range from forty to forty-eight hours per week and some "on call" time may be required. Since the Technologist is usually dealing with sick or injured people, work must be quick and accurate at all times. Technologists must always beware of too much exposure to x-rays.

Qualifications: To enter training an applicant should be sixteen years of age or older, in good health and have good manual coordination. A grade eleven pass in Public Examinations with an overall average of not less than 60 per cent is required.

How to Enter Field: Training for this occupation is available only at The College of Trades and Technology in St. John's. There are no examinations or interviews necessary to enter training.

Advancement Opportunities: Graduates of this program may write examinations set by the Canadian Society of Radiological Technicians to become certified to work as X-Ray Technologists anywhere in Canada. After some years experience advancement may be to supervisory positions over other x-ray staff.

| Earnings: | Year | Initial | Journeyman (or equivalent) |
|---|---|---|---|
| | 1975 | $8,000 | $12,000 |
| | 1976 | | |
| | 1977 | | |

Supply and Demand: The employment outlook in Newfoundland is good. Practically all job opportunities in this Province exist in hospitals and clinics.

Comments: This is a three-year course requiring people with patience, consideration for others and a genuine interest in working in the medical profession. This is a challenging and rewarding career for those interested in working as part of a team in the field of medicine.

For Further Information Contact:

Guidance Counsellor,
The College of Trades and Technology,
Prince Philip Drive,
St. John's, Newfoundland.
A1C 5P7

# SECTION III

# APPRENTICESHIP TRAINING

A number of courses are offered throughout Newfoundland in a variety of District Vocational Schools, The College of Trades and Technology and The College of Fisheries, Navigation, Marine Engineering and Electronics, after which graduates may enter into a contract of apprenticeship between themselves, their employers, and the Department of Manpower and Industrial Relations. Depending upon the trade, an apprentice must serve from two to five years (including training time) before becoming eligible to write Provincial Government Examinations for journeyman status. Interested persons may also enter into a contract of apprenticeship without any initial training in a formal training program. To enter training with an employer directly as an apprentice candidates must:

(1) Be at least sixteen years of age.

(2) Have at least grade eight or equivalent for the following trades: Auto Body Repair, Barbering, Bricklaying, Carpentry, Cooking (Commercial), Joinery, Painting and Decorating.

Have at least grade nine or equivalent for the following trades: Plumbing and Domestic Heating, Sheet Metal Work.

Have at least grade ten or equivalent for the following trades: Beauty Culture, Electrical Construction, Heavy Duty Repair, Industrial Electrical, Machinist,

Millwright, Motor Vehicle Repair, Steamfitter-Pipefitter, Welding.

(3) Possess a physical development sufficient to enable him or her to perform all of the physical duties of the trade.

(4) Be willing to enter into a Contract of Apprenticeship with an employee in the trade.

Persons interested in apprenticeship training should contact:

The Apprenticeship Training Branch,
Department of Manpower and Industrial Relations,
Gorman-Butler Building,
P.O. Box 4750,
St. John's, Newfoundland.
A1C 5T7

The following is a list of trades for which apprenticeship training is available in Newfoundland and the amount of apprenticeship training time that is required before writing Provincial Government Examinations for journeyman status. These time periods include training time for those who enter apprenticeship training after initial training in formal training centers:

| Trade | Term of Apprenticeship in Years |
|---|---|
| 1. Barbering | 2 |
| 2. Beauty Culture | 2 |
| 3. Bricklaying | 4 |
| 4. Carpentry | 4 |

| | | |
|---|---|---|
| 5. | Cooking (Commercial) | 3 |
| 6. | Electrical (Construction) | 4 |
| 7. | Electrical (Industrial) | 4 |
| 8. | Electrical (Power Utilities) | 4 |
| 9. | Heavy Duty Equipment Repair | 4 |
| 10. | Industrial Instrumentation | 4 |
| 11. | Joinery | 4 |
| 12. | Mechanic (Auto Body) | 4 |
| 13. | Mechanic (Automotives) | 4 |
| 14. | Metal Machinist | 4 |
| 15. | Millwright | 4 |
| 16. | Oil Burner Mechanic | 5 |
| 17. | Painting and Decorating | 3 |
| 18. | Plumbing | 5 |
| 19. | Sheet Metal Work | 4 |
| 20. | Steamfitter-Pipefitter | 4 |
| 21. | Welder | 3 |

## Summary

This chapter has looked at the Job Analysis Guide as it was presented to Newfoundland high school counsellors. The Guide contained six parts: title page, introduction, table of contents, chart, job analysis, and a description of apprenticeship training. The body of the Guide was divided into three main sections: Section I: Chart; Section II: Job Analyses; Section III: Apprenticeship Training.

The fifth and final chapter of this project contains recommendations and suggestions both for the use of the Job Analysis Guide and for future research in this area.

# CHAPTER V

## SUMMARY, SUGGESTIONS AND RECOMMENDATIONS

This chapter contains a summary of the development of the Job Analysis Guide as well as suggestions for the use of the Guide and recommendations for further work in the development of career information literature. Also, a number of ideas are presented regarding the need for further research into the development and use of occupational information in Newfoundland.

The purpose of this Project was to develop a Job Analysis Guide of all jobs for which formal vocational training was available in Newfoundland, and which did not require a work prerequisite to enter training. The writer first used a review of the literature to determine the types of information which should be included in a Job Analysis Guide. A Job Analysis Questionnaire was then developed and synthesized from the literature. Using the Job Analysis Questionnaire, information was collected from the literature and through interviews with persons in the various occupational fields covered by this Project. Other members of the occupations were then consulted to verify the accuracy and completeness of the information.

The information was classified into ten sections (as outlined below), which were deemed imperative by the literature for inclusion in a Job Analysis Guide:

A. Job Title
B. Work Duties
C. Physical Demands and Conditions
D. Qualifications
E. How to Enter Field
F. Advancement Opportunities
G. Earnings
H. Supply and Demand
I. Comments
J. For Further Information Contact

The classified information formed Section II of a three section Job Analysis Guide. Section I was a Chart of jobs for which training was available in Newfoundland and the locations of the training centers for these jobs. Section III was a brief description of apprenticeship training available in Newfoundland.

Suggestions for Use of Guide

1. The occupational opportunities available to our young people become more varied and complex each year. An effective informational program will have to keep up to date with these changes. Information of the type presented in the Job Analysis Guide will become outdated in the

future. Although the information in some sections, such as Work Duties, may remain relatively stable, the information in the sections on Qualifications, How to Enter Field, Earnings, and Supply and Demand, will be continuously changing. The writer has made some provision for adding new salary rates to the Earning section of the Guide. However, since there will be other changes each year it is recommended that the Guide be revised and updated at least once a year. It is only through revision and updating that the Guide can remain a useful tool for career counselling in Newfoundland.

2. The Guide was reproduced and made available to high schools in Newfoundland. To maximize its use as a resource for career counselling, the writer felt that each school should have at least two copies of the Guide, one for the counsellor and one for general use by the students. Placing a copy in the school library may maximize its accessibility to students and, in fact, the writer suggests that a special section of the school library be devoted to books, catalogues, directories, and other materials that contain educational, occupational and personal-social information. This Guide has been presented to Newfoundland high schools on the assumption that it is highly desirable for all schools to devise a plan for the systematic disposition of occupational information to students. Of course,

the personnel and facilities in each school will determine the nature of the plan and the strategies developed to maximize student use of occupational information.

3. Section I of the Job Analysis Guide contains a Chart which names all the jobs which were analysed in the Guide and the locations of training centers for these jobs. This Chart was originally reproduced on a small scale for ease of placement into the written report of the Project. As a quick and easy reference, the Chart may be more practical if reproduced on a larger scale and placed on a wall in a location displaying the school's various career guidance materials.

4. For some students engaged in the process of career decision-making, the mere provision of accurate and relevant occupational information may be a crucial factor in making an appropriate career choice. However, it must be remembered that career counselling is complex and a process of self-examination and exploration and, therefore, the mechanical providing of information, however accurate or relevant, may not be particularly useful for some students unless they are involved in the experience of self-exploration. The school counsellor can best utilize any information resource as the need arises from the counselling relationship. This will insure a greater probability that the student will be open to examine the

information and integrate it with his own perceptions and self-knowledge which are so important when making a career decision.

Recommendations for Further Research

1. The writer recommends that a Job Analysis Guide be developed of jobs requiring a university education since such jobs were omitted from the present Guide.

2. The writer recommends that a Job Analysis Guide be developed of jobs which do not require either formal vocational or university education.

3. The writer recommends that an evaluation scheme be built into the on-going use of the Guide. The monitoring of its use, as well as the evaluative comments of the users of the Guide will provide data to answer the following questions:

A. To what extent is the Guide being used by counsellors?

B. To what extent is the Guide being used by students?

C. Does the Guide answer the type of questions students ask regarding careers?

D. Does the Guide help students become more aware of career choices available to them in Newfoundland?

E. Do students see the Guide as a useful aid in enabling them to make a career choice?

F. What is the most effective plan for making the Guide accessible to students?

G. Where does this Guide most effectively fit into the process of decision-making?

Other areas may be explored when evaluating the usefulness of the Job Analysis Guide, depending upon the evaluator's own interests.

Concluding Remarks

In the process of collecting the materials for this Project, the need for such a resource was expressed repeatedly by persons employed in the various trades and occupations as well as by instructors of these trades at the various training centers. These people consistently felt that this type of information was lacking in Newfoundland high schools. They were very cooperative and showed a keen interest and desire to share information about their various occupations. Many felt that certain occupations had been stereotyped, and expressed hope that the Job Analysis Guide would aid in giving students a more realistic picture of the occupations which were analysed. It is the writer's hope that the Job Analysis Guide will serve as a truly useful resource, and that it will be a continuing aid to students as they tackle the difficult task of career choice amid the ever-increasing complexity of the world of work and the continuing demands of a changing society.

# BIBLIOGRAPHY

Baer, Max F. and Edward C. Roeber. Occupational Information. Illinois: Science Research Associates, 1964.

Canadian Classification and Dictionary of Occupations. Ottawa: Canadian Department of Manpower and Immigration, 1971.

College of Fisheries, Navigation, Marine Engineering and Electronics Calendar. Newfoundland: Department of Education, 1975/76.

College of Trades and Technology Prospectus. Newfoundland: Department of Education, 1975/76.

District Vocational Schools Prospectus. Newfoundland: Department of Education, 1975/76.

Dorcey, Robert L. "Helping Youth Bridge the Gap From School to Work Through Manpower and Economic Education," American Vocational Journal, Vol. 44, No. 3, March, 1969.

Gardner, John C. "The Job Description, the First Step to Good Management," American School and University, Vol. 45, No. 5, January, 1973.

Ginzberg, Eli.: Career Guidance. New York: McGraw-Hill Book Company, 1971.

Henry, Nelson B. The Forty-Second Yearbook of the National Society for the Study of Education - Part 1. U.S.A.: 1943.

Hoppock, Robert. Occupational Information. New York: McGraw-Hill Book Company, 1967.

Issacson, L.E. Information in Counseling and Teaching. Boston: Allyn and Bacon Inc., 1971.

Marland, S.P. The Need for Career Education. U.S.A.: U.S. Department of Health, Education and Welfare, 1972.

Murihead, P.P. "Career Education: The First Steps Show Promise," Phi Delta Kappan, Vol. 54, No. 6, February, 1973.

Murphy, M.K. "Getting a Jump on Career Choices," American Education, Vol. 9, No. 5, June, 1973.

Norris, W., F.R. Zeran, and R.N. Hatch. The Information Service in Guidance. Chicago; Rand McNally and Company, 1969.

O'Reilly, Henry V. The Development of A Model Information Centre Containing Appropriate Guidance Materials For Newfoundland Counsellors. Unpublished Master's thesis, Memorial University of Newfoundland, 1974.

Parsons, G.L. Factors Related to Career Decisions of Newfoundland Youth. St. John's: Memorial University of Newfoundland, 1974.

Reccord, Ross. The Seal Cove District Vocational School Pilot Project in Pre-Vocational Education: An Evaluation of the First Year of Operation. Unpublished Master's thesis, Memorial University of Newfoundland, 1973.

Super, Donald G. The Psychology of Careers. New York: Harper and Row, Publishers, 1957.

Thompson, John F. Foundations of Vocational Education, Social and Philosophical Concepts. New Jersey: Prentice-Hall Inc., 1973.

Vocational and Technical Education - Annual Report 1968. Washington: U.S. Government Printing Office, 1968.

Weinrach, Stephen G. "How to Evaluate Career Information Materials," The School Counselor, Vol. 22, No. 1, September, 1974.

Wells, Carl E. "Will Vocational Education Survive?" Phi Delta Kappan, Vol. 54, No. 6, February, 1973.

Wiley, Uretha W. Six Steps to New Careers. Michigan; Upjohn Institute for Employment Research, 1969.

# APPENDIX

(A) Name of occupation -

Other names used to describe occupation -

(B) Duties of occupation, products made and/or services rendered -

Tools, machines and materials used -

(C) Conditions of work (physical and environmental) -

(D) Qualifications necessary for training:

Age -

Sex -

Citizenship -

Physical condition -

Educational prerequisite -

Other -

(E) Where training is available in Newfoundland -

Exams necessary to enter training -

Interviews necessary to enter training -

(F) Advancement after initial training -

Training necessary to become journeyman -

Advancement after journeyman status -

(G) Earnings after initial training -

Earnings of journeyman (or equivalent) -

(H) Employment outlook in Newfoundland -
Areas of concentration of people in this occupation -

(I) Other comments - Special requirements, conditions or prerequisites, needed to adequately understand this occupation.

(J) Further information - Local address where one may obtain further information about this particular occupation.

Under the section entitled "Advancement Opportunities" and "Earnings" data may vary between institutions and throughout regions of the province. Due to this, the information in these sections will be kept relatively general.

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