DURING THE 1966 SUMMER RESEARCH PROGRAM, THE NEW BRUNSWICK DEPARTMENT OF LABOUR CONDUCTED A STUDY OF THE HIGH DROPOUT RATE AMONG THE 2,673 APPRENTICES IN THE PROVINCE. THE PURPOSE WAS TO FIND AN ADEQUATE SELECTION METHOD FOR TRAINEES. DATA FROM EXISTING FILES AND FROM A QUESTIONNAIRE FILLED IN BY FORMER EMPLOYERS AND DISTRICT SUPERVISORS WERE EXAMINED. IT WAS FOUND THAT APPRENTICES COMPLETING TRAINING WERE SIGNIFICANTLY OLDER, HAD MORE DEPENDENTS, AND HAD MORE PREAPPRENTICESHIP CREDIT PRIOR TO INDENTURE, BUT THEY DID NOT HAVE MORE FORMAL EDUCATION. ALTHOUGH DISCREPANCIES APPEARED ON THE QUESTIONNAIRE FILLED IN BY EMPLOYERS AND SUPERVISORS, IT SEEMED THAT APPRENTICES DID NOT LACK INTELLIGENCE OR ADEQUATE EDUCATION, BUT DID LACK INTEREST, WHICH SHOWED UP IN POOR ATTENDANCE, FREQUENT ILLNESS, AND TARDINESS. IT WAS SUGGESTED THAT A BATTERY OF APTITUDE AND INTEREST TESTS BE ADMINISTERED TO ALL APPRENTICESHIP APPLICANTS PRIOR TO SELECTION FOR TRAINING. (EB)
Some Dimensions Of The Drop-out Problem In Apprenticeship Training
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FORWARD

This is the first in a series of research reports designed to inform you of the type of research that is being conducted by The New Brunswick Department of Labour. The series follows no hard and fast rules. There is no set number of studies to be published per year. The format and style of the reports will vary from one to the other depending upon the nature of the subject matter. This is in part intentional since we feel that strict adherence to a given formula may in some cases hamper rather than help communication.

Some of the reports will have only limited application and interest. Others, we hope, will be much broader in scope and applicability.

This is a new and experimental venture for us. We welcome criticism and advice from all quarters. While a certain individual may be responsible for a given project, in the last analysis, any criticism should be levelled at the undersigned, whose responsibility it is to edit and decide whether or not to publish each study.

PAUL H. D. TACON
INTRODUCTION

This study was conducted as part of the 1966 summer research program of The New Brunswick Department of Labour. This research program was organized and guided principally by Dr. Paul H. D. Tacon and Mr. Brian W. Ross, although in one way or another most members of the Department found themselves involved to some extent.

The individual responsible for this specific project was Mr. Ronald W. Johnson. Mr. Johnson is a M.A. candidate in Psychology, and it was he who organized, collected and collated the data.
With 2,673 apprentices currently enrolled in training, New Brunswick has the highest per capita indentureship in Canada. This success in terms of enrollment reflects the dynamic nature of the apprenticeship program - a program that is constantly being revised in terms of standards and course content in order to better meet the current demands of the labour market.

One problem that has been with the apprenticeship program since its inception has been that of a high rate of "drop-outs". This problem is by no means restricted to apprenticeship trainees. Considerable research has been generated with regard to the factors involved in "drop-outs" in elementary and high schools. However, formal academic education differs in many respects from apprenticeship training and as a consequence generalization about factors involved with academic drop-outs cannot be justifiably applied to vocational drop-outs.

As little research had been undertaken with regard to this problem in this province or elsewhere, the present study was designed to gather data that might provide information on the best procedures to be used for selecting apprenticeship trainees. The orientation of the study was then toward more discriminatory selection procedures. By establishing certain criteria for selection, it was hoped that the drop-out rate would be substantially reduced. The first step in establishing
such criteria was felt to be an examination and analysis of existing data. As well, it was considered useful to supplement such data with information on the drop-out apprentice that could be gathered from those with whom he had been in close contact while an apprentice.

Accordingly, the present project was divided into two phases in order to assess the two types of data: (1) data collected from existing files, and (2) data gathered from employers and district supervisors.

FIRST STUDY

DATA COLLECTED FROM EXISTING FILES

A sample of files of three hundred apprentices who had had their indentureships cancelled between January, 1964 and April, 1966 was drawn and information from these files was recorded. A matching sample of three hundred apprentices who had successfully completed their courses during the period between January, 1965 and April, 1966 was used as a comparison group. Information that was recorded included: the length of time the apprentice was indentured; age of the apprentice at the time of indentureship; academic grade level achieved by the apprentice prior to indentureship; course of study; amount of credit on the program granted at the time of indentureship; number of dependents; and the employer's name and address when available.
Results of these comparisons are summarized in Table I below.

### Table I
COMPARISONS OF AGE, NUMBER OF DEPENDENTS, GRADE LEVEL AND CREDITS, BETWEEN COMPLETED AND CANCELLED APPRENTICES

<table>
<thead>
<tr>
<th></th>
<th>Complete Apprentice</th>
<th>Cancelled Apprentice</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age at time of indentureship</td>
<td>30.22 years</td>
<td>24.44 years</td>
<td>$t = 2.91$ $p &lt; .005$</td>
</tr>
<tr>
<td>Mean number of dependents at time of indentureship</td>
<td>1.64</td>
<td>1.06</td>
<td>$t = 2.63$ $p &lt; .005$</td>
</tr>
<tr>
<td>Mean school grade level at time of indentureship</td>
<td>9.53</td>
<td>9.26</td>
<td>n.s.</td>
</tr>
<tr>
<td>Percentage receiving credit on apprenticeship program</td>
<td>69</td>
<td>39</td>
<td>$p &lt; .005$</td>
</tr>
</tbody>
</table>

A. analysis of the data indicated the following differences:

1. the completed apprentice was significantly older than the cancelled apprentice;
2. the completed apprentice had significantly more dependents;
3. the completed apprentice did NOT have significantly more formal education at the time of his indentureship;
4. the completed apprentice had significantly more
pre-apprenticeship credits granted him prior to indentureship than did the cancelled apprentice. Possible interpretations of this data will be discussed following the report of the results of the second study.

SECOND STUDY

DATA GATHERED FROM EMPLOYERS AND DISTRICT SUPERVISORS

As recorded information on apprentices did not go beyond that outlined in the previous section, it was felt that this needed to be complemented by additional information gathered from the apprentice's employer and district supervisor. The aim then of the second study was to gather additional information concerning the causes of the individual apprentice to fail to complete training. If sufficient of this information was obtained on individual apprentices, it was felt that one would be justified in generalizing from factors involving individuals to factors involving groups. It was hypothesized that with a sufficiently large sample of apprentices, factors leading to cancellation would be recurrent within the group.

After discussion with those closely involved in apprenticeship training and after a thorough researching of all available literature relevant to apprenticeship drop-outs, a list of possible factors which might influence the drop-out rate was compiled. From this list a questionnaire was constructed, designed to be completed by the former employer of a cancelled apprentice. It was felt that an apprentice's
former employer would be in a good position to assess the capabilities and weaknesses of the apprentice, in terms of factors derived from the above-mentioned list. The questionnaire was designed for easy and speedy completion so as to facilitate the number of questionnaires actually completed and returned. A copy of the complete questionnaire together with the accompanying letter is found in Appendix A.

Questionnaires were mailed to two hundred and nine employers in this province. Of this number, one hundred and forty-nine were completed and returned to the Department. This return rate of seventy-two percent would appear to be a good indication of the co-operation between employers of apprentices and the Apprenticeship Branch of the Department of Labour.

As a check on the validity of the results of the questionnaires completed by the sample of employers, questionnaires on the same apprentices were completed by the district supervisors concerned. In this way, it was hoped that in cases where similar results were obtained both from the employer returns and from the district supervisor returns, greater weight could thus be given to conclusions deduced from the results of the survey. In addition, it was felt that by obtaining the district supervisor's answers, another point of view would be obtained on causes of apprenticeship failures.

Presentation of the results is broken down into twelve sections corresponding to the twelve major questions included in the questionnaire. With few exceptions the thirteenth question was not completed.
1. "Do you feel that this apprentice had sufficient formal education to prepare him for the training program?"

To this question, seventy-eight percent of the employers answered "Yes", ten percent "Barely Enough", and twelve percent "No". Using a Chi Square distribution as a test of significance\(^1\), a level of .001 was obtained.

Supervisors checked the question in the ratio of seventy-seven percent, eighteen percent and five percent.

These results are given figuratively in Table 2.

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>BARELY ENOUGH</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>78%</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Supervisor</td>
<td>77%</td>
<td>18%</td>
<td>5%</td>
</tr>
</tbody>
</table>

\(p < .001\)

From the large percentage stating that the apprentice had at least barely enough formal education and the close agreement between employers and district supervisors assessments, it seems a justifiable conclusion that lack of formal education is not a major cause of "drop-outs". This finding

1. By use of this statistical technique, it was calculated that the probability of obtaining such a large discrepancy between percentages of the three reply possibilities by chance alone was less than one in one thousand.
is, of course, in agreement with the comparison between grade levels achieved by cancelled and completed apprentices where no significant difference was found. Additional support of this conclusion is given by a similar finding concerning the technical training of members of the United States Air Force (Lecznar, 1965).

2. "A certain level of intelligence is required to learn the skills involved in your trade."

Twenty-one percent of the employers felt that their apprentices had more than sufficient intelligence to complete training, fifty-four percent felt that they had sufficient intelligence, twenty-one percent felt they had sufficient intelligence but would have needed to work harder and only four percent felt that the apprentices did not possess sufficient intelligence.

The supervisors' assessments again verified this distribution, the percentages being twenty-one, fifty-six, eighteen, and five respectively.

These results are shown in Table 3.

<table>
<thead>
<tr>
<th></th>
<th>MORE THAN SUFFICIENT</th>
<th>SUFFICIENT</th>
<th>SUCCFICIENT MORE EFFORT</th>
<th>LESS THAN SUFFICIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>21%</td>
<td>54%</td>
<td>21%</td>
<td>4%</td>
</tr>
<tr>
<td>Supervisor</td>
<td>21%</td>
<td>56%</td>
<td>18%</td>
<td>5%</td>
</tr>
</tbody>
</table>

p < .001
It seems warranted to conclude that apparent lack of basic intelligence is not a major cause of apprentice failure. Consequently, it follows that intellectual assessment need not be a necessary part of any prospective test battery for apprentice selection.

3. "A certain talent or aptitude for the type of work involved in your trade is frequently an asset in learning these skills."

Thirty percent of employers and twenty-two percent of supervisors felt that the apprentice could have mastered the skills involved with greater effort.

Fifty-nine percent of employers and seventy-four percent of supervisors felt the apprentice was capable of mastering the skills.

Eleven percent of the employers and four percent of the supervisors felt that the apprentice was not suitable to the trade.

<table>
<thead>
<tr>
<th>TABLE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Employer</td>
</tr>
<tr>
<td>Supervisor</td>
</tr>
</tbody>
</table>

p < .001
It would seem that there is more involved in becoming a journeyman than mere capability or aptitude to a particular trade. That is to say, a lack of suitability to the trade is not (according to the apprentice's employer and supervisor) the major factor in cancellation.

It is interesting to note with respect to this question that the supervisor rated the apprentice significantly more capable than did the employer. At the same time it must be remembered that both employer and supervisor felt that in the majority of cases the apprentice possessed the necessary talent or aptitude. Perhaps, since a discrepancy does exist here, some thought should be given to aptitude testing as a prerequisite to apprenticeship.

4. "Do you feel a lack of interest in your trade was a factor in the apprentice's not completing training?"

<table>
<thead>
<tr>
<th>TABLE 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Employer</td>
</tr>
<tr>
<td>Supervisor</td>
</tr>
</tbody>
</table>

As may be seen from Table 5, the majority of both employers and supervisors felt that lack of interest in the trade was a contributing factor to the apprentice's failure to complete his training. A somewhat greater percentage of employers than supervisors felt that the apprentice in question
was never interested in the trade. More supervisors felt that the interest was lost at some time during training but that it existed initially. One can easily see why such a discrepancy exists. The apprentice's failure is not the employer's fault if the apprentice was never interested in the first place. Likewise, the supervisor is not as much to blame if the apprentice lost interest some time during the training - since at least initially he was a good candidate.

Because of the wording of the question, it was impossible to determine why the apprentice lost interest. Was it a loss of interest in the particular trade (and a consequent increase of interest in another trade) or was it loss of interest in apprenticeship and its conditions of training generally? To some extent, the answers given to question 12 are relevant here.

Regardless of why the apprentice lost interest, it would appear that a perceived lack of interest on the part of the apprentice was an important reason for failure from both the employer's and the supervisor's point of view.

5. "Was the apprentice a hard worker?"

<table>
<thead>
<tr>
<th>TABLE 6</th>
<th>YES</th>
<th>NO</th>
<th>PERHAPS AT ANOTHER JOB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>69%</td>
<td>22%</td>
<td>9%</td>
</tr>
<tr>
<td>Supervisor</td>
<td>65%</td>
<td>24%</td>
<td>11%</td>
</tr>
</tbody>
</table>
While the majority of apprentices were assessed to be hard working, a goodly proportion (better than thirty percent in both cases) were considered not to be hard workers. Possibly, then, in at least some cases, failure may be due to a lack of effort on the part of the apprentice.

This question complements the previous one to some degree. Loss of interest usually results in lowered efficiency and decreased effort. Moreover, the responses suggest that for approximately one apprentice in ten, the particular trade was not suited to him and that his work effort would have improved if he were apprenticed in another trade.

This in part provides an answer to the questions raised in the previous section.

6. "What type of work record did the apprentice possess?" (attendance, tardiness, etc.)

<table>
<thead>
<tr>
<th>TABLE 7</th>
<th>GOOD</th>
<th>FAIR</th>
<th>POOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>58%</td>
<td>31%</td>
<td>11%</td>
</tr>
<tr>
<td>Supervisor</td>
<td>34%</td>
<td>45%</td>
<td>21%</td>
</tr>
</tbody>
</table>

*p < .001*

Loss of interest can also result in poor attendance, more frequent illness, and tardiness, all of which in turn lead to lessened efficiency. The apprenticeship supervisors rated this group significantly more severely than did the employers.
This may be due to the supervisor being more directly concerned with the apprentice's classroom attendance whereas the employer's concern related more closely to the apprentice's work attendance.

7. "What type of relationship did the apprentice maintain with his co-workers?"

<table>
<thead>
<tr>
<th></th>
<th>Got Along Well</th>
<th>Fairly Well</th>
<th>Not Liked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>62%</td>
<td>36%</td>
<td>2%</td>
</tr>
<tr>
<td>Supervisor</td>
<td>26%</td>
<td>69%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Once again employers' and supervisors' answers were significantly different on this question. While few apprentices were definitely not liked by their co-workers, it would appear that interpersonal relationships were at the same time far from optimal. Similarly, loss of interest could be a factor here. However, at the same time, poor interpersonal relationships can themselves contribute heavily to loss of interest in training.

The difference between apprenticeship supervisors' and employers' answers to this question may also be due in part to the different settings that each sees the apprentice in. In the work setting, interpersonal relationships are perhaps less dependent on vocational interest than they would be in a classroom setting. As well, at work, one's peers are a more diverse group in terms of age, education, skills and interests.
than one would find in the classroom. Consequently, an individual who is disenchanted with his trade training could still fit in well at work, whereas unless he were exceptional, this would not be the case in class. There is of course another explanation, which if valid, does much to negate the value of this research. It is simply that perhaps, in many instances the employer is not the best person to evaluate the apprentice's performance in the work situation. Perhaps, the apprentice's immediate supervisor would have been a better choice. In many cases, of course, the employer is the immediate supervisor. In large concerns however, this is not so.

Still another explanation might be that the apprenticeship supervisor feels more free than the former employer to express his feelings about the apprentice, since the research was conducted by the Department of Labour. The employer might hesitate to denigrate an employee because he does not wish to alter the good relationship he has, in most cases, with the Apprenticeship Branch.

8. "Was the apprentice able to take orders from you and others in authority?"

<table>
<thead>
<tr>
<th></th>
<th><strong>YES</strong></th>
<th><strong>NO</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>87%</td>
<td>13%</td>
</tr>
<tr>
<td>Supervisor</td>
<td>95%</td>
<td>5%</td>
</tr>
</tbody>
</table>

p < .001
While disrespect for authority may be a factor with a few, it probably is not important with regard to the majority.

It is interesting to note that significantly more employers than supervisors found this to be a problem with regard to the apprentice who failed to complete his training. Not too much weight should be placed on this factor because of the small number to whom it applies and because there is no control group of "successful" apprentices with whom to compare. One might assume that problems with authority would be as great or even greater with the "successful" group.

9. "Did the apprentice leave the program to train for another trade?"

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Supervisor</td>
<td>40%</td>
<td>60%</td>
</tr>
</tbody>
</table>

p < .001

One problem with this question is the ambiguity of "another trade". This could include other indentured trades but more often it merely meant on-the-job training of a less formal kind. In some instances it might mean even less.

The answers here shed further light on why the apprentice seemed disinterested in his trade. It would suggest strongly that the particular trade was the reason -
not lack of interest in trade training in general. Moreover, it is highly likely that the apprenticeship supervisor is in a better position to answer this question than the employer. If this is the case then "training for another trade" becomes a major factor in the apprentice's dropping out. These results strongly emphasize the need for some testing of the apprentice's aptitudes and interests prior to his undertaking apprenticeship. If the apprentice can be so assessed prior to training, the drop-out rate would be significantly lowered in all probability. Moreover, and what is equally as important, the waste of time and effort on the part of the individual apprentice who suddenly finds himself a misfit will be greatly eliminated. It is difficult to determine the extent of such waste. We observe it only in the most obvious cases - those who "drop out". Many misfits do not drop out but stick with it and graduate - some because they have no choice, others because they are unwilling to admit that they are unsuited to the trade. What happens to these graduates? Some perform creditably in their trade. Others perform marginally and look elsewhere for their satisfactions. Still others leave the trade for other training, or for other employment. For some, unemployment may be preferable. For all, a degree of misery exists that might have been eliminated.

10. "Did the apprentice have steady employment offered to him or did he feel certain of being able to obtain steady employment before he left the training program?"
TABLE 11

<table>
<thead>
<tr>
<th></th>
<th>YES AT HIGHER WAGES</th>
<th>YES AT EQUAL WAGES</th>
<th>YES, BUT AT LESS WAGES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>40%</td>
<td>31%</td>
<td>1%</td>
<td>28%</td>
</tr>
<tr>
<td>Supervisor</td>
<td>40%</td>
<td>27%</td>
<td>1%</td>
<td>32%</td>
</tr>
</tbody>
</table>

It is extremely interesting that in twenty-eight percent of the cases cited by employers and in thirty-two percent of the cases cited by supervisors, the apprentice terminated his training program without either having had steady employment offered him or at least feeling certain of being able to secure employment. For them, taking their chances on obtaining employment was preferable to continuing training.

At the same time, higher wages appear to be a strong incentive to leave apprenticeship. To what extent this represents a real advancement or merely a temporary one which will be negated in the long run by the person’s lack of skill is difficult to say. Nevertheless, higher wages does appear to be a factor responsible for a large number of apprentices terminating training.

11. "Did immaturity play a role in the apprentice’s inability to continue the training program?"

Employers indicated that in more than fifty percent of the cases immaturity was a factor in the apprentice’s failure. Supervisors indicated that immaturity was a factor in slightly less than fifty percent. The results for this question are given in Table 12.
The term "immaturity" is unfortunately somewhat too general to be very meaningful here. Certainly, without a common definition of the word for employers and supervisors, the results must not be given too much weight. For some, immaturity might mean lack of interest; for others, it might mean poor attendance; for others, it might mean disrespect of authority. 

12. "What do you think was the greatest factor in the apprentice's failure to complete training?"

As many employers and supervisors failed to complete this question it is difficult to make generalizations. The replies, however, are shown in Table 13 with the number of apprentices' failures attributed to the various factors given.

<table>
<thead>
<tr>
<th>GREATEST FACTOR IN APPRENTICE'S FAILURE</th>
<th>LISTED BY EMPLOYER</th>
<th>LISTED BY SUPERVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immaturity</td>
<td>28</td>
<td>14</td>
</tr>
<tr>
<td>Ability to get higher pay</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>Disliked work</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Lack of education</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 12

<table>
<thead>
<tr>
<th>Number of Apprentices listed by employers (85)</th>
<th>GREATEST</th>
<th>LARGE</th>
<th>IMPORTANT</th>
<th>some extent</th>
<th>NOT FACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12</td>
<td>15</td>
<td>11</td>
<td>9</td>
<td>38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Apprentices listed by supervisors (77)</th>
<th>GREATEST</th>
<th>LARGE</th>
<th>IMPORTANT</th>
<th>some extent</th>
<th>NOT FACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>8</td>
<td>6</td>
<td>17</td>
<td>43</td>
</tr>
</tbody>
</table>
GREATEST FACTOR IN APPRENTICE'S FAILURE | LISTED BY EMPLOYER | LISTED BY SUPERVISOR
--- | --- | ---
Take another job | 4 | 8
Laid off | 4 | 0
Alcohol | 4 | 0
Train for other trade | 3 | 3
Course too elementary | 3 | 0
Completed training (passes T.Q.) | 2 | 4
Ill health | 2 | 3
Adverse working conditions | 2 | 1
Lack of promotion | 2 | 0
Holds certificate in other trade | 2 | 0
Not suited to trade | 1 | 2
Lack of intelligence | 1 | 2
To university | 1 | 1
Died | 1 | 0
Ignored theory | 0 | 2
Lack of employment | 0 | 4

While twenty different factors were listed by employers and supervisors as being the most important in a given apprentice's failure, two factors appeared by far the most frequently; i.e., immaturity and the ability to obtain higher pay. While no empirical evidence can be offered for the argument, it seems possible that employers on the whole
might be slightly reluctant to admit that their apprentices left to seek higher paying jobs. If, in fact, this is the case, it would explain the observed discrepancy between employers' and supervisors' responses. Other than these two factors, it is doubtful that too much can be inferred from the results of this question, as most other factors were cited as being most important in only a few cases. The two exceptions to this are the seven instances of "dislike for work" (which tentatively might be termed immaturity), and the eight instances of "taking another job" which could (although not necessarily) be included with the "ability to get higher pay" cases.

CONCLUSIONS

While it is true that a great percentage of apprentices "drop-out" prior to completion of their courses, this large group may be in part an artifact of the present system of keeping records. There seems to be several types of apprentices who have not completed their training but who at the same time should not be considered "drop-outs" in the usual sense of the term. Among this third group would be included those who terminated apprenticeship because of: (1) ill health (one apprentice painter in the present sample became allergic to paint); (2) death; (3) those apprentices who passed their Trades Qualification exam and thus became recognized journeymen; (4) those apprentices who transfer to another trade; (5) those apprentices who become indentured apprentices in another province.
having moved because of family relocations. Perhaps with a
different system of keeping records of apprentices which would
include a new definition of "drop-out", a drop-out rate in
the order of perhaps thirty percent rather than fifty percent
would be more realistic.

On the other hand, no matter what system of recording
is used, there will still remain a large group of "hard-core
drop-outs". The results of the present study indicate that
although there may be a large number of factors involved, some
factors have much greater influence than all others.

The first of these factors is indicated by question
10, which lists forty percent as having left apprenticeship
training programs to take jobs offering higher pay. Results
of the twelfth question which asked: "What do you think was
the greatest factor in the apprentice's failure to complete
training?", indicate this factor as one of the two most
influential. In any event, a large number of apprentices are
attracted to higher wages and perhaps this is at least under-
standable if not wholly desirable. The question as to whether
fewer would drop out if other jobs were scarcer can only be
answered under different economic conditions than those that
prevail at present. As long as competitive jobs exist, some
apprentices will no doubt leave to fill them.

The results of the age, number of dependents, and
pre-credit comparisons of the first study together with replies
to the fifth, sixth, eleventh, and twelfth questions of the
questionnaire of the second study all seem to indicate that
something that might be labelled "immaturity" plays a very large role in causing "drop-outs".

Further study must however clarify what is meant by "immaturity". It must answer such questions as, "Why is the person disinterested?", "Is he unsuited for this trade but not for another by virtue of his particular abilities?".

The present study strongly suggests that one solution to the problem of the high drop-out rate is the administration of a battery of aptitude and interest tests to all apprentice-ship applicants prior to the commencement of training. By doing this, the numbers of misfits and disenchanted will be reduced. Interest in one's trade training can profoundly affect such things as attendance, performance and interpersonal relationships. It can even deter one from leaving the trade for such incentives as more money. We have known for some time that job satisfaction can outweigh monetary incentives for many individuals.
REFERENCES


Dear

The Department of Labour is presently attempting to assess the reasons why a number of apprentices fail to complete training courses under our apprenticeship programme. We notice that you have employed an apprentice who at some stage in his training failed to continue. It is felt that as this apprentice's employer you would be in a good position to be able to assess some of the reasons for his failure.

We have enclosed a short questionnaire on this apprentice which we hope you will complete and return to us at your earliest convenience.

Your answers and comments will play an important role in helping us develop a selection procedure whereby the number of drop-outs can be significantly reduced in the future.

Thanking you in advance,

Yours sincerely,

P. H. D. Tacon,
RESEARCH CONSULTANT.
Please check one (1) box for each numbered question:

1. Do you feel that this apprentice had sufficient formal education to prepare him for the training program?
   - [ ] Yes
   - [ ] No
   - [ ] Barely enough

2. A certain level of intelligence is required to learn the skills involved in your trade.
   - [ ] The apprentice possessed more than sufficient intelligence to learn these skills.
   - [ ] The apprentice possessed sufficient intelligence to learn these skills.
   - [ ] The apprentice possessed sufficient intelligence but would need to work much harder.
   - [ ] Even with hard work the apprentice did not seem to possess sufficient intelligence to learn the necessary skills.

3. A certain talent or aptitude for the type of work involved in your trade is frequently an asset in learning these skills.
   - [ ] The apprentice appeared capable of mastering the skills.
   - [ ] The apprentice could have mastered the skills with greater effort.
   - [ ] The apprentice did not seem suitable to the type of work involved in the trade.

4. Do you feel a lack of interest in your trade was a factor in the apprentice's not completing training?
   - [ ] Yes
   - [ ] No
   - If Yes did the apprentice
     - [ ] never appear greatly interested,
     - [ ] lost interest after the training program was in progress
5. Was the apprentice a hard worker?

☐ Yes  ☐ No  ☐ Perhaps at a different job

6. What type of work record did the apprentice possess? (attendance, tardiness etc.)

☐ Good  ☐ Fair  ☐ Poor

7. What type of relationship did the apprentice maintain with his co-workers?

☐ Got along well with all
☐ Got along fairly well
☐ Was not liked by his co-workers

8. Was the apprentice able to take orders from you and others in authority?

☐ Yes  ☐ No

9. Did the apprentice leave the program to train for another trade?

☐ Yes  ☐ No

10. Did the apprentice have steady employment offered to him or did he feel certain of being able to obtain steady employment before he left the training program?

☐ Yes, and at higher wages
☐ Yes, at equal wages
☐ Yes, but at less wages
☐ No
11. Did immaturity play a role in the apprentice's inability to continue the training program?

☐ This was the greatest factor in his failure

☐ This was a large factor

☐ While important, it was not the main contributing cause

☐ This was a factor to some extent

☐ This was not a factor

12. What do you think was the greatest factor in the apprentice's failure to complete training?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

13. Do you have any further comments which you would like to add?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________