

APPRENTICESHIP:

A CONSTRUCTION INDUSTRY PERSPECTIVE

CONTENTS:

**APPRENTICESHIP: A CONSTRUCTION INDUSTRY
PERSPECTIVE**

RECOMMENDATIONS

APPENDICES

- ⇒ Apprenticeship Questionnaire Results
- ⇒ Apprenticeship Questionnaire Comments
- ⇒ Discussion Paper: Trade Certification Seal
- ⇒ Task Force Membership



APPRENTICESHIP: A CONSTRUCTION INDUSTRY PERSPECTIVE

April 1997

INTRODUCTION

Over the course of the last several years there has been increasing concern within the construction industry about the future direction and stability of the apprenticeship training system in British Columbia. As a result of these concerns, the construction industry established a Task Force to review the state of the system and, where possible, make recommendations for joint construction industry action on those issues. The Terms of Reference for the Task Force were:

- To review the effectiveness of the existing apprenticeship delivery system and identify current problems or concerns.
- To evaluate the current funding mechanisms to determine their adequacy and, if appropriate, consider alternatives.
- To consider and provide policy recommendations for the following:
 - alternative/flexible delivery options
 - compulsory certification for trades persons
 - enforcement mechanisms for existing compulsory trades
 - industry funded training
 - grant levy systems
 - modularized versus lockstep training
 - UI or other financial support for apprentices during training periods
- To develop strategies for coordinated industry initiatives to achieve the recommended policy objectives.

The Task Force added the following items:

- To consider the appropriateness of the current definitions for the construction trades.



- To consider issues related to maintaining current curriculum for apprenticeable trades.
- To consider the appropriateness of the current structure of the apprenticeship system.
- To review issues related to the existing processes underway to establish national standards for apprenticeable occupations.

Apprenticeship is an industry-based training system characterized by a tripartite agreement between the employer, the worker and the Provincial government. The agreement provides for the apprentice to be paid for work performed throughout a specified time period, during which the apprentice learns a technical trade. The employer's role is to make available practical and theoretical training of an established length and scope, during which every effort is made to keep the apprentice employed. The government's role is to establish training standards, manage the technical training aspect of the system and maintain registration.

The Provincial government funds the in-school portion of training, including both equipment and facilities. Traditionally the Federal government has participated in the funding of in-school technical training, as well as providing training allowances and income support through the UI fund. This federal funding is now in jeopardy.

For the construction industry, the apprenticeship training model has many benefits. As a work study program, it combines on the job training with classroom technical training. At least 80% of the time spent in an apprenticeship term is workplace based. Students have the opportunity to earn while they learn. The progressive pay scale recognized in the apprenticeship contract provides for increases in the pay scale as the skill levels improve. The system provides a provincially recognized certification that, for most trades, is supplemented by a nationally recognized red seal certification.

The employer's investment in apprenticeship training ensures a highly mobile and skilled work force.

ELEMENTS OF THE IDEAL CONSTRUCTION APPRENTICESHIP SYSTEM

In order to establish a benchmark against which both the current system and future recommendations could be measured, the Task Force defined, in general terms, the elements of the ideal construction apprenticeship system.



- An ideal system will provide the employer and worker with effective and cost efficient training.
- The result of the training will be a highly mobile work force with skills that meet national standards.
- Skill levels will be maintained with appropriate opportunities for upgrading in a post apprenticeship environment.
- An integrated system of credentials will give appropriate credit to enable laddering of construction opportunities between other trades' technical and academic training.
- Apprenticeable occupations will be seen as desirable career options.
- Opportunities for access to apprenticeships will begin in high school in a secondary school system that both recognizes the value of trade careers and better prepares students for the world of work.
- Individuals entering an apprenticeship will meet appropriate entrance standards and will undergo a probationary assessment period to determine the appropriateness of the selected trade for that candidate.
- Equity access to the trades will be based upon a principle that guarantees equal access to opportunity, not outcomes.
- The technical training system itself will include pre-apprenticeship training and will accommodate the full range of employer and worker needs.
- The workplace based elements of the training will be done with qualified employers who monitor the work experience element of training, ensure that a range of appropriate work experience is gained, and that the apprentice's progress is appropriately tracked and recorded.
- Technical training will be provided by qualified instructors through delivery systems that ensure up to date curriculum is delivered throughout the province in a manner that meets the needs of both the worker and the employer.
- The system will recognize competencies that go beyond journey status.



- Effective links will be maintained between industry (the client) and the system (the service providers). The service providers need to take direction from and respond effectively to industry needs in terms of both training infrastructure and curriculum.
- In order to maintain the viability of the system, effective certification and enforcement measures will be established.

ISSUES/CHALLENGES

The construction industry and the apprenticeship system are faced with some key issues and challenges that impact on the long term viability of the system. This section of the paper will discuss some of these issues and challenges and their implications for the industry.

Effectiveness of the Existing Apprenticeship Delivery System

In its Terms of Reference, the Task Force was requested to review the effectiveness of the existing apprenticeship delivery system and identify current problems or concerns. In general terms, the industry survey (see Appendix A) revealed an acceptable level of satisfaction with the current apprenticeship training system. Some 84% of the survey respondents indicated average to high levels of satisfaction with the overall system. When questioned on more specific elements of the system, the responses included the following:

- appropriateness of curriculum
over 81% indicated average to high levels of satisfaction
- convenience of access to technical training
only 63% indicated average to high levels of satisfaction
- scheduling of technical training
75% indicated average to high levels of satisfaction
- apprentices knowledge of up to date practices and equipment
80% indicated average to high levels of satisfaction
- apprentices knowledge of safety issues
81% indicated average to high levels of satisfaction

From these results it seems apparent that there is a fairly high level of satisfaction with what is being taught. The issues of access and scheduling of the technical training, have much higher levels of dissatisfaction. This dissatisfaction is borne out in the comments that were appended to



the survey (see Appendix B). Many of the firms responding that they were unsatisfied were located outside the Lower Mainland. They were concerned with not only the expense and inconvenience of living away from home but also with the scheduling of technical training time during peak construction season when the apprentices skills are needed the most on the job site. As will be discussed later in the paper, these firms also expressed a much higher level of interest in alternative delivery forms than those in the Lower Mainland.

As mentioned earlier, the consolidated survey data indicated average to high levels of satisfaction with the overall system in the range of 84%. This number alone would appear to make a strong case for the status quo. However, when the data is sorted based on those firms who employ compulsory trades workers from those with non-compulsory trades workers, a somewhat different picture emerges in several key areas, including:

- overall satisfaction;
- the willingness to consider alternative methods of delivery technical training curriculum;
- the level of satisfaction with the current block release system; and
- most significantly the levels of support for mandatory pre-apprenticeship, mandatory apprenticeship and mandatory certification.

These other key areas will be discussed later in the paper.

General satisfaction with the system was lower for those who employ non-compulsory trades workers with only 33% indicating above average satisfaction. For those with compulsory trades workers, just over 50% indicated above average levels of satisfaction. In either case, the indication is that the system performs well in general terms, however, almost everyone associated with the system identified areas of concern for their particular situations. The comments submitted with the survey (Appendix B) demonstrate a wide variety of specific issues and concerns associated with the current system.

Funding Mechanisms

The current BC apprenticeship system funds technical training and system costs out of two ministries, the Ministry of Labour and the Ministry of Education, Skills and Training. The Ministry of Labour focuses on responsibility for promotion and delivery of apprenticeship services while the Ministry of Education, Skills and Training funds apprenticeship technical training and entry level trades training in the college and institute system. The total amount of funds dedicated to apprenticeship and trades training is \$68.31 million broken down as follows:



- Apprenticeship Technical Training
 - Public Training Providers \$15 million *(includes \$7 million in federal contributions)*
 - Private Training Providers \$3.1 million
- Secondary School Apprenticeship \$1.5 million
- Co-Op Apprenticeship \$0.9 million
- Skills Upgrading \$0.91 million
- Curriculum Development \$1.2 million
- Expansion and Equity Programs \$0.7 million
- Entry Level Trades Training \$45 million

Of the total \$68.31 million, \$61.9 million is under the direct control the Ministry of Education, Skills and Training and the balance of \$6.41 million under the Ministry of Labour. In terms of the federal government’s contributions, \$7 million is provided annually for technical training and approximately \$20 million per year for income support and training allowances paid directly to apprentices. These federal funds are in jeopardy. The amount provided for technical training is scheduled to be phased out over the next three years and the continuation of income support and training allowances continues to be reviewed at the federal level.

Given the transfer of responsibility for funding technical training to the provinces and the uncertainty of federal income support for apprentices, Task Force members discussed a wide range of options for the construction industry. These ranged from strong advocacy for maintaining the status quo where government pays the full cost of technical training and income support for apprentices at school, to a completely industry driven, controlled and funded system.

a) Funding of Technical Training

In considering any of the possible scenarios, the Task Force considered it critical that the construction industry be treated in an equitable manner to other industries or occupations that receive funding as part of the approximately \$1.1 billion invested through the university, college or institute system. The employer is responsible for eighty percent of the full cost of providing apprenticeship training. As such it is a relative bargain when compared to the level of government subsidy for virtually all other post secondary education. For any funding options that are considered, the construction industry must receive an equitable share of the total funding directed to post secondary education.

The industry survey demonstrated wide variations in the levels of support for the five funding options proposed. Not surprisingly the highest overall support was shown for maintaining the status quo with 71% indicating average to high levels of support for fully funding the system through government general revenues. At the same time almost a



quarter of the respondents indicated they were either unsupportive or very unsupportive of this option. The option of tuition fee funding of the system had a slightly higher indication of unsupportive or very unsupportive at over 29%. The concept of a dedicated payroll tax received the strongest opposition with a full 59% indicating unsupportive or very unsupportive. The indication of a 'maybe' was demonstrated for the suggestion of a grant/levy approach where a general payroll tax is offset by a tax credit for those who train. This option received 36% on the positive side and 41% on the negative with 18% in the middle level of support. Support for the fifth option was weaker with 23% positive and 51% negative.

In reviewing the results of this section of the survey the Task Force concluded that the only real indication of support for anything other than the status quo was for the possible introduction of some level of tuition fees for apprentices. The lack of enthusiasm for any additional taxation was clear but even these options received strong support from some members. It was felt that a great deal more detail would need to be provided before any support could be directed towards tax based solutions.

b) Funding of Income Support for Apprentices

The industry's response to the issue of income support for apprentices attending in-school training was much clearer than for the funding of the technical training. Almost 80% of respondents (41% very supportive) support continuation of the current practice of funding through the Employment Insurance system. Conversely an equivalent of 80% opposed the concept of no government funding. In the event of changes to the status quo the only acceptable option is the provision of access to student loans or bursaries. The options of employer funded support or no support at all were equally unpalatable with neutral to very unsupportive levels of 81% and 76% respectively.

On this issue the task force concluded that the current position adopted by the Canadian Construction Association was the most appropriate response. The position calls for the Federal Government to maintain existing levels of funding and that there should be no reduction in this support unless and until appropriate alternatives are in place. In terms of the alternatives there appears to be some consensus, but certainly not unanimity, that access to student loans or bursaries is the only reasonable alternative.

Alternative/Flexible Delivery Options

The current method of delivering technical training to apprentices is based on a block release system that places the apprentice in a training institution for a specified period of time (generally two to ten weeks depending on the particular trade) over the course of a specified number of



years. This type of instruction, described by noted B.C. economist Roslyn Kunin as “full frontal instruction”, has traditionally been accepted as the most appropriate for the apprenticeship system. However a number of factors are contributing to increased pressure on the system to find alternative and more flexible methods of delivery. These factors include:

- the increasing cost of delivery of technical training in institutions in an environment where government needs to reduce its expenditures
- increasing pressure to expand curriculums to accommodate new technical and regulatory requirements
- the increasing cost and difficulty institutions have to maintain technologically current equipment and instruments
- concern with the lack of an appropriate means to ensure that instructors are up to date with the most current requirements of the trades
- the difficulty and disruption experienced by many apprentices who are required to travel long distances and/or live away from home in order to attend their training
- the disruption to an employers operations when apprentices are at school
- the apparent inflexibility of the current system to accommodate the varied needs of employers and apprentices
- the fact that technological advances now provide a range of effective options for the delivery of elements of the technical curriculum

As part of the industry survey respondents were asked to identify if the current block release system suited their operations and if it suited the needs of their apprentices. 65% of the responses said that the system suited their operations. Other related studies have demonstrated that the apprentices’ level of satisfaction are even lower than the employers’. The task force considered a number of possible alternatives to the current system. They were included in the industry survey as follows;

- distance learning using correspondence courses
- multimedia and interactive computer based programs
- upfront delivery of technical training (4-6 month period in which the apprentice receives all or most of the technical in-class training)
- day release programs (apprentices attend school 1 day a week and work the other 4)
- delivery of technical training in comprehensive modules (i.e. 24 one-week training packages)



The indications of support for the various options were widely dispersed throughout the survey sample. The overall response indicated average to negative levels of support for virtually all the choices. This appears to indicate a general preference for the status quo. However when sorted by region there is much higher support for alternative approaches outside of the lower mainland. This is an understandable result and is supported by the lower levels of general satisfaction with the convenience of access and scheduling of technical training discussed earlier in this paper.

Given these factors it is clear that for many apprentices and employers a higher degree of flexibility in the method of delivery is desirable. At the same time, some of the task force members expressed concerns that any changes in the method of delivery could damage the overall system. In either case there was virtual unanimity that any options had to ensure that the current high standards of qualification for graduates not be compromised.

A potential solution to this issue is for the industry to work with the colleges and institutes to pilot a variety of the new methodologies. After evaluation, offer those options that enhance system flexibility while maintaining standards to apprentices and employers for whom it is appropriate at the same time as maintaining the current “full frontal” approach for those who prefer it. This menu-like approach may be the compromise that is necessary to accommodate the wide variety of different needs identified by the Task Force in the industry survey.

Modularized Versus Lockstep Training

This issue is an extension of the preceding discussion of alternative/flexible delivery options. Much of the discussion on this issue focused on the traditional culture of apprenticeship and the craft approach to training. Those who favour the lockstep approach (e.g. 6 weeks x 4 years) argue that an individual cannot be credentialled as a tradesperson until they have learned and demonstrated competence in all facets of a trade. Those who favour a modularized ‘task training’ approach argue that an individual should be given the opportunity to receive credentialled recognition for each component or competency as it is learned, and that once all competencies are achieved, full journey person status is granted.

A second element of this debate centers on the way curriculum is developed and delivered. Traditionally the curriculum is an integrated package that teaches elements of each of many of the competencies in each of the four years (for example) of the apprenticeship. In recent years and in response to the realities of the marketplace where many workers are employed full time at occupations that do not require training in the full scope of the trade, employers and training institutions have begun to develop training packages (modules) that address only limited parts of the full trade curriculum. Additionally, some provinces and states have begun to cooperate on the development of curriculum using a modular approach in part to help deal with the high cost of developing the material.



It is clear that within the construction industry there is a widening gap between the realities of the marketplace and the ability of the existing full scope of trade approach to meet the needs of a diverse workplace. At the same time there are legitimate concerns that breaking trades into small skill components with little or no motivation to obtain all the relevant skills will result in a deskilling of the industry and will have detrimental effects in the long term. These differences were highlighted in the industry survey when 65% of respondents indicated a need for workers with multiple trade skills while 35% needed workers with specialized skills.

When questioned directly on the issue of lockstep (full scope, craft approach) versus modularized (task training approach) 73% indicated a preference for lockstep and only 27% preferred modularization.

There was a high degree of consensus on several elements of this issue within the Task Force. It was agreed that there are a large number of workers who were not part of the formal apprenticeship system even though they performed work that was at least part of an apprenticeable occupation. It was agreed that it would be better for the industry and the worker if ways could be found to integrate these workers into a formal apprenticeship system. It was agreed that no person should receive journeyman status until they had completed training and demonstrated competency in all the required elements of a trade. The issue that remains unresolved is whether or not the integrity of the 'system' would be damaged by implementing a fully modularized training approach as opposed to the traditional block training model.

A potential solution to this issue is to include the modular training approach as an element of the strategy proposed in the previous section on alternate/flexible delivery options with the strictest attention paid to ensuring that standards are maintained. It may well be that in the absence of a concerted effort by the industry to address this issue (barring any legislative or regulatory requirement to the contrary) the industry will continue to follow the marketplace down the road of fragmentation with the result being the deskilling that many people are attempting to avert.

Compulsory (Mandatory) Certification and Enforcement

An interesting situation exists within the construction industry. The industry itself operates within a highly regulated environment that is very prescriptive about what has to be done to achieve compliance with a vast array of requirements such as: development bylaws; building and related codes; WCB regulations; environmental legislation; transport regulations; etc. At the same time, and with limited exceptions (those being the existing 7 compulsory trades) there are few requirements relating to the qualifications of the companies and individuals who perform the work. Attempts at achieving consumer protection and public safety have been through regulating the work not the worker.



There are currently 7 trades designated under the Apprenticeship Act (the Act) as compulsory. Most of them have been designated for many years. The Electrical trade was only recently designated. Despite the requirement to have a valid certificate of apprenticeship or a valid Trade Qualification (TQ) in order to be qualified there has been extensive disregard of the requirements. There are several factors that contribute to this disregard of the law:

- there is no effective compliance enforcement mechanism in place;
- consumers and workers are unaware of , or in some cases unconcerned with the requirements;
- other elements of the construction system facilitate unqualified workers (building inspectors assist in correcting deficient work by identifying what is necessary to achieve code compliance); and
- contracting companies generally operate in an environment where there is no requirement for either the firm or their workers (except the designated 7) to meet minimum qualifications.

The industry survey asked several specific questions relating to the qualifications of workers. Respondents indicated their level of support for the following:

- a totally voluntary apprenticeship system
24% indicated higher than average levels of support with 59% non-supportive
- mandatory pre-apprenticeship training
54% indicated higher than average support with only 23% non-supportive
- mandatory apprenticeship training
72% indicated higher than average levels of support with only 15% non-supportive
- mandatory certification of individuals
70% indicated higher than average levels of support with only 17% non-supportive
- voluntary certification through industry self regulation
27% indicated higher than average support with 48% opposed
- quality assurance programs that focus on the work not the worker
44% indicated higher than average support with 21% non-supportive



It is clear from the above numbers that the industry as a whole generally favours a stricter, more compliance based approach to the qualifications issue, including mandatory certification coupled with mandatory pre-apprenticeship training. When the data is reviewed separately, the levels of support in the non-mandatory trades are somewhat lower than in the mandatory trades; however, the levels of support are still very high.

There was general agreement that in order to make mandatory certification effective, appropriate compliance measures needed to be established. On this issue the Task Force reviewed the work and recommendations of the Provincial Apprenticeship Board Subcommittee on Compulsory Certification. Three elements were described in this work that were seen as appropriate in today's fiscally restrained environment for government:

- increased penalties for workers and companies that do not comply with the requirements of the Act;
- increased public and industry awareness of the requirements of the Act; and
- changes to the Act to facilitate the establishment of industry or sectoral councils charged with, among other things, the enforcement of worker qualifications

With respect to the third element described above the Task Force reviewed a discussion paper that outlined one possible approach to establishing an industry driven mechanism to ensure compliance. A paper more fully describing this option titled *Trade Certification Seal: The Seal of Quality* is attached to this paper as Appendix C. While there was not unanimous agreement to this specific approach it was seen to contain elements that could be useful in forming the basis for further discussion within the industry and between industry and government.



Task Force Issues Added to the Terms of Reference

a) Current definitions for the Construction Trades

The discussion of this issue was limited. It was seen to be directly linked to the question of modularized training and as such should be considered in light of any future discussion relating to modularization.

b) Curriculum for Apprenticeable Trades

The discussion of this issue was also quite limited. There is a general concern expressed that the system was not effectively implementing the curriculum related advice of the Trade Advisory Committees. This concern was also raised by a number of the survey respondents in their comments to the Task Force. Maintaining current curriculum is seen as essential to the viability of the system and the Task Force felt that government should devote more resources to achieving and maintaining technologically current curriculum.

c) Appropriateness of the Current Structure of the System

As a result of an increased focus within government on apprenticeship matters, a number of initiatives are underway to modify the current structure of the system. For the most part these changes are driven from within the existing bureaucracy and have little if any support from industry. The kinds of changes contemplated include regionalization of the trade advisory and program delivery elements of the system. Task Force members were strictly opposed to these measures. They are seen to devolve control of the system away from industry towards the colleges and institutes with a resulting fragmentation in the consistency and quality of training. Any changes to the system need to move towards more control for industry rather than less as proposed.

d) National Standards

The Task Force reviewed the various activities underway at the national level to maintain and enhance national trade occupational standards. There was virtual unanimity on the need to maintain the current Red Seal program in order to ensure a consistent quality of training and full national mobility for the construction labour force. The Task Force agreed that the current activities of the Canadian Construction Association directed at this issue are appropriate and supportable.



CONCLUSION

The work of the Task Force has been one step in the continuing efforts of the construction industry to determine its own destiny in terms of maintaining a highly skilled workforce capable of delivering world class construction. The conclusions reached on the various issues considered are not the end of the work. The next step is for the various interests represented on the Task Force to consider this document and its conclusions. At that point there may be further work for a similar group of industry representatives to develop joint industry strategies for achieving the measures for which there is a consensus. If this process can be used as an indication of the potential for continuing cooperation within the industry to find solutions to issues of mutual concern then there is a high likelihood of further success.

APPENDICES

- A Construction Industry Questionnaire Survey Results
- B Construction Industry Questionnaire Survey Comments
- C Discussion Paper: Trade Certification Seal - The Seal of Quality
- D Apprenticeship Task Force Members

RECOMMENDATIONS

RECOMMENDATIONS
OF THE
CONSTRUCTION INDUSTRY APPRENTICESHIP TASK FORCE

April 1997

FUNDING OF TECHNICAL TRAINING

- The apprenticeship system must receive an equitable share of the total funding directed to post secondary education.
- The apprenticeship system should continue to be fully funded out of provincial government revenues. There should be no further reductions at either the federal or provincial level.
- No form of additional levies or payroll taxes be imposed to fund apprenticeship.

FUNDING OF INCOME SUPPORT FOR APPRENTICES

- The federal government maintain existing levels of funding for income support for apprentices.
- There be no reduction in the federal government levels of support unless and until appropriate alternatives, such as student loans or bursaries, are in place.

ALTERNATIVE/FLEXIBLE DELIVERY OPTIONS

- Any options for providing flexible or alternative delivery of apprenticeship curriculum maintain the current high standards of qualification for graduates.
- Alternative delivery methodologies be tested and evaluated on a pilot basis. Tested options that enhance system flexibility while maintaining standards be incorporated as options within the system.
- The existing block release, multi year approach be maintained as the core method of delivering apprenticeship.

MODULARIZED VERSUS LOCK STEP TRAINING

- Methods need to be established for incorporating workers who perform work that is part of an apprenticeable occupation into the formal apprenticeship system.
- No person should receive journeyperson status until completion of training and/or demonstrated competency in all required elements of a trade.
- The modified system incorporating modular elements recently approved for the electrical trades be adopted as a model for other appropriate construction industry trades.

COMPULSORY CERTIFICATION AND ENFORCEMENT

- As indicated by the survey conducted by the Task Force, the industry favours a stricter, more compliance based compulsory approach to trades qualifications. All but one of the organizations represented by the Task Force strongly support this position.
- Consistent with the current policy recommendations of the Provincial Apprenticeship Board, compulsory certification of trades must be supported with appropriate compliance enforcement measures including the following elements:
 - increased public and industry awareness of the requirements of the Apprenticeship Act;
 - increased penalties for workers and companies that do not comply with the requirements of the Act;
 - changes to the Act to facilitate the establishment of industry or sectoral councils charged with, among other things, the enforcement of worker qualifications; and
 - enforcement provisions need to be consistent with the industry's objective of reducing the paper and compliance related burden on construction businesses and should include, for example, audit based measures rather than replicating a WCB-like enforcement regime.

CURRICULUM FOR APPRENTICEABLE TRADES

- Government devote additional resources to achieving and maintaining technologically current curriculum

APPROPRIATENESS OF THE CURRENT STRUCTURE OF THE SYSTEM

- Any changes to the system need to increase industry's control of the system in terms of both management and policy setting.

NATIONAL STANDARDS

- The national Red Seal program be maintained in order to ensure a consistent quality of training and full national mobility for the construction labour force
- The BC construction industry support the efforts of the Canadian Construction Association in establishing an effective national policy advisory structure on apprenticeship issues.

APPENDIX A

APPRENTICESHIP QUESTIONNAIRE RESULTS



5. Over the past three years, how many apprentices have you employed?

How many?	Average:	7.84
	Median:	4
	Range:	0 – 150
	Total:	2,852

In what trades?

carpenter	30.00%	heat & frost insulator	1.56%
electrician	22.50%	joiner	1.56%
plumber	17.50%	millwright	1.56%
sheet metal	9.06%	mason	1.25%
refrigeration	6.88%	powerline technician	1.25%
pipefitter/steamfitter	5.00%	tilsetter	1.25%
painter/decorator	3.44%	welder/steel fabricator	1.25%
roofer (damp & waterproof)	3.44%	crane operator	0.94%
drywall finisher	3.13%	floor coverer	0.94%
sprinkler fitter	3.13%	piledriver/bridgeman	0.94%
glazier	2.81%	bricklayer	0.63%
wall & ceiling installer	2.81%	heavy duty mechanic	0.63%
gas fitter	2.50%	landscape horticulturalist	0.63%
ironworker	2.19%	industrial instrumentation	0.63%
plasterer	2.19%	security alarm installer	0.31%
		elevator constructor	0.31%

Note: Total is greater than 100% due to some respondents hiring more than one apprenticeable trade.

6. Is your firm certified to a BCYT Building Trade union, a non BCYT Building Trade union or neither?

BCYT Building Trade Union	36.46%
Non-BCYT Building Trade Union	7.18%
Neither	56.35%

7. In general terms, how satisfied are you with the current apprenticeship program?

0 – no response	4.37%
1 – very satisfied	6.01%
2 -	34.97%
3 -	39.07%
4 -	11.48%
5 – very unsatisfied	4.10%



8. More specifically, how satisfied are you with the following elements of the system:

	0 no answer	1 – very satisfied	2	3	4	5 – very unsatisfied
appropriateness of curriculum	5.74%	6.56%	40.98%	33.88%	9.84%	3.01%
convenience of access to technical training	4.10%	11.20%	29.51%	28.14%	18.85%	8.20%
scheduling of the technical training	3.83%	10.93%	29.78%	34.43%	13.39%	7.65%
apprentices knowledge of up to date practices & equipment	3.84%	7.40%	34.52%	34.52%	16.99%	2.74%
apprentices knowledge of safety issues	4.13%	7.71%	36.64%	33.33%	13.77%	4.41%

9. Do you or have you employed persons other than registered apprentices or Trade Qualified journeypersons to perform work you would normally consider to be part of an apprenticeship occupation?

Yes 43.99% (161 respondents)
No 56.01%

If yes, please indicate your level of satisfaction with the work performed by this person(s).

1 – very satisfied 11.98%
2 - 43.71%
 3 - 35.33%
 4 - 8.38%
 5 – very unsatisfied 0.60%

Are you aware if these persons had any alternate types of training such as:

a) Entry Level Trades Training Yes 31.68%
No 68.32%

b) Co-op Yes 6.21%
No 93.79%

c) UI or Welfare sponsored programs Yes 19.88%
No 80.12%

d) Other Yes 8.70%
No 91.30%

Specify: On-the-job training (10)
 Post high school (1)
 High school (1)
 Correspondence courses (1)
 Permit worker through union office (1)



10 The current method of delivering in-school technical training curriculum (generally) provides for 2 – 10 week blocks (block release) of training over two to four annual sessions. Thinking about other options for training modes please indicate your level of support for each of the following:

	0 no answer	1 – very supportive	2	3	4	5 – very unsupportive
distance courses using correspondence materials	3.83%	8.74%	18.31%	19.13%	24.32%	25.68%
multimedia and interactive computer based programs	4.10%	9.02%	23.50%	25.68%	22.68%	15.03%
upfront delivery of in-school technical training (4-6 month period in which the apprentice receives all or most of the technical in-class apprenticeship training)	3.83%	13.93%	18.03%	19.67%	27.60%	16.94%
day release programs (apprentices attend school 1 day a week and work the other 4)	3.28%	11.75%	24.59%	15.85%	21.31%	23.22%
delivery of technical training in comprehensive modules (i.e. 24 one-week training packages)	5.46%	10.66%	24.32%	23.50%	21.31%	14.75%
Other	maintain current system (8) night school (5) combination of c & e a more accountable program RCABC satellite training night school and extend program to 5 years teaching should not be by book or computer local schooling in the Okanagan possible common core training 2 weeks every 4 months pre-apprenticeship training and 1 week on the job every 6 months one year of school non-stop one month local colleges or approved training groups self training and writing TQ					

11. Does the current block release (2 – 10 weeks depending on trade) mode of providing technical in-school training suit your business operations?

Yes 65.57%
 No 34.43%



12. Does the current block release mode of providing in-school technical training suit the needs of your apprentices?

Yes 59.84%
No 40.16%

13. Thinking about the specific needs of your company, would you prefer to employ individuals whose technical training supports multiple skills or specialized skills?

Multiple Trade Skills 65.23%
Specialized Trade Skills 34.77%

14. There are a number of components to each trade (i.e., forming, finishing and framing components in the carpentry trade.) Some think apprentices should be required to learn all facets of the trade in school and practice all facets on the job site before being granted journeyman status. This is known as the “Full Scope of the Trade Approach.” Others believe that individuals should be given formal recognition for the mastering each component of a trade both in the classroom and in the field. If the individual masters all components then he would receive a master craftsman designation. This is termed “Task Training Approach”. Which approach do you prefer?

Full Scope of Trade 73.33%
Task Training Approach 26.67%

15. Thinking about the qualifications of the individuals who actually perform the work, please indicate your level of support for the following:

	0 no answer	1 – very supportive	2	3	4	5 – very unsupportive
a totally voluntary apprenticeship training program	6.87%	12.91%	11.54%	9.89%	20.60%	38.19%
mandatory pre-apprenticeship training	5.74%	36.07%	17.49%	17.21%	16.12%	7.38%
mandatory apprenticeship training	3.83%	54.10%	17.49%	9.29%	9.29%	6.01%
mandatory certification of individuals	5.19%	53.83%	16.39%	7.92%	8.74%	7.92%
voluntary certification of individuals to an industry driven compliance/assurance program (self regulation)	6.01%	12.57%	15.03%	18.58%	20.49%	27.32%
quality assurance programs that focus on the work not the worker	7.40%	19.18%	24.66%	27.40%	13.15%	8.22%



16. Given the increased pressure on Provincial and Federal governments to reduce expenditures it is possible that the funding of in-school technical training may be reduced. Thinking about a range of funding options, please indicate the level of your support for each of the following:

	0 no answer	1 – very supportive	2	3	4	5 – very unsupportive
fully funded by government through general revenues (status quo)	4.37%	30.87%	20.22%	20.22%	15.03%	9.29%
funded by apprentice tuition fees like college/university students	4.40%	14.84%	26.92%	24.73%	17.31%	11.81%
funded through a dedicated payroll training tax	5.19%	5.74%	13.39%	16.94%	22.68%	36.07%
funded through a grant/levy system (a general payroll tax on industry that is offset by a tax credit for those who train)	4.92%	17.21%	18.58%	18.03%	16.39%	24.86%
funded through an industry controlled system supported by a dedicated payroll tax	7.71%	9.84%	13.39%	16.67%	21.58%	30.87%
Other	no more taxes (3) apprentice should pay like a university student (3) tax deductible donations from corporations or individuals if there is no government funding, industry should fund on the job supported by employer 100% mixture of a & b (2) high school age level should have direction during school hours partial government and partial tax of some form combination of b & shared apprentice & employer politician retirement funds revoked and used partially funded through general revenue by government through nightschool welfare payroll deduction of employees (savings plan) student to fund themselves % of gross revenue submitted with permit pay upfront UIC while at school funded by employee and employer parents who can afford to support					



17. Government income support for apprenticeship training is diminishing. The two week training allowance for apprentices in school has been eliminated. There have been discussions about eliminating the UI support for apprentices while they are attending school. Given reduced government funding, indicate you support for each one of the following options:

	0 no answer	1 – very supportive	2	3	4	5 – very unsupportive
only UI support continues, as currently exists	1.91%	40.98%	22.13%	15.57%	10.38%	9.02%
no government income support or assistance	5.19%	9.02%	6.28%	16.39%	23.50%	39.62%
access to student loans/bursaries	3.56%	27.95%	29.86%	22.47%	8.77%	7.40%
employer required by approved contract to continue a specified level of income	4.37%	7.10%	7.65%	12.57%	24.59%	43.72%
no income support	7.65%	9.84%	6.56%	14.48%	24.04%	37.43%

18. In what geographical region are you located?

Lower Mainland	39.11%
Vancouver Island	12.29%
Southern Interior	24.30%
Northern BC	12.29%
More than one location	.84%

19. Any other comments?

See attached comments (14 pages).

APPENDIX B

APPRENTICESHIP QUESTIONNAIRE COMMENTS

APPRENTICESHIP QUESTIONNAIRE COMMENTS

I've had a union shop for 16 years. We always need 1-2 year apprentices for cheap labour. By the time their 4th year at 90% wage, we only need 10% of them. This will always be the case for all contractors. What they have to do is have a pre-apprentice program in shop for four years +/- to weed out who is really suited to the trade and learn the basics over a long period of time. I believe they did this in England many years ago. A university student goes to school for 4-7 years, gets paid nothing, has a big loan and then comes out and works as a janitor. We are offering much more than that.

Apprenticeship programs are important to the construction industry. Government should have an active role in the enforcement and also in the promotion of qualified employees.

Day release to apprentices, in our opinion, is the only way to bring young members on board. More emphasis on quality workmanship and tax relief for small businesses will stimulate company hiring for apprentices.

We need people in our industry who are committed and dedicated to it. Apprenticeship training while receiving UI gives the wrong impression to young people. It's too easy. Why do we provide such while college, university and other students receive no pay to attend class. UI should be stopped entirely for trades training call attendance. Apprenticeship rates are too high. They should start lower with more steps to full rate. Pension should not be payable until full journeyman status has been achieved. One unit of basic supervision should be required at completion of the training program for all journeymen. Our biggest problem is in finding journeymen who are interested in being foremen.

Cutting funding for these people does not alleviate an already poor situation. It is very difficult to try and provide meals and accommodations in Vancouver and support families elsewhere with only UI. This government (elect) promised to increase spending on education. These apprenticeship programs are a very critical part of their education. It's time the provincial and federal governments put up or shut up.

We feel the present system is open to abuse from apprentices and employers. We would like to see apprentices meet a pre-apprentice standard level of achievement which would give employers a better indication of their future completion of the program. Tuition fees would help to promote commitment. The pay schedule for apprentices should coincide with completed schooling blocks. If more responsibility was placed with the apprentice (i.e. tuition fees) employers might improve on their turnover of apprentices that begin to move up on the pay scale. The incentives to complete these training programs are not high enough for employees or employers. The Fair Wage Policy has motivated many people, apprentices and employers alike, to take interest in the program. But, realistically, what motivation is there to complete the training when the majority of jobs available do not require trade qualifications?

Sorry I have not completed your questionnaire but your survey isn't really indicative of our industry. In the curbing business there has never been one iota of government funding or support in the 26 years I have been in the industry. It didn't matter what the circumstances, nothing was ever available yet most of the independent curbing companies in BC are offshoot employees of mine from earlier years plus I suspect in excess of 100 people in the industry were trained by my company over the past 26 years and all at my expense.

I think the apprenticeship training program my men attend is going downhill. The cost contracted out per man is enormous, and I think the quality of teaching is very poor.

The requirement to use trained apprentices must be entrenched in both the labour laws and building codes AND enforced.

I am in the insulation application business and there is a growing concern and interest within our trade to become a certified trade. Preliminary investigation into doing this is very discouraging because of all the bureaucracy. We would be very interested in any ideas of yours that would help us in this direction.

Q.15b - Do not support if self motivated; if back to a time schedule, yes.

Q. 16 - Who would police the non-union payroll tax deductions, etc.?

Perhaps multi level trade certification in certain trades could be considered with an appropriate TQ being the result (i.e. plumber) - residential TQ for residential service and construction only.

Have no apprentices employed (road building & underground utilities) therefore questionnaire was basically blank.

If all funding, including UI, is taken away, our level of apprentices will diminish to the point of none. It will force us as employers to carry the entire load, thus asking us to make them certified under government rules. This is not acceptable.

I believe our apprenticeship schooling for electrical trades is good. Apprentices should be treated like any post secondary student. I do believe student loans should be available. Students should be penalized for missing school times and could have entrance exams on math, physics, etc. To save cost on apprenticeships you could look at proper Grade 11 & 12 electrical training with qualified instructors and possibly some field time.

There is much duplication in mechanical trades training. All mechanical trades could share a basic entry level training program that focuses on safety, tools, equipment, job site familiarity, WHIMS, etc. There are too many mechanical specialized trades, i.e. plumber, steamfitter, gas fitter, welder, refrigeration mechanic, sprinkler fitter, pipe fitter. There could easily be one pipe mechanic designation and other endorsements added through the career of the mechanic with encouragement to have at least 2 or 3 endorsements.

Government must be involved in apprenticeship programs to ensure a highly skilled work force. Skilled people always find their services in demand throughout life and pay various taxes as a consequence. Teaching self reliance through skills is a must.

Apprentices must have a level of wage after a level of training is reached. Pride in himself or herself of work is the key to good tradesperson. All tradespeople must have completed a quality of workmanship.

I believe that apprenticeship training (not unlike university or BCIT or Langara or Camosun College training) should be at the cost of the student. I believe, however, that student loans (repayable) should be made available by Government through banks at Bank of Canada type rates. If they are not repaid - should be pursued by the banks & Government with a passion as they would be on any other debtor. If apprenticeship training and its costs were handed in this way I believe we would get a better quality and a more responsible product.

Note to question 16f: All other forms of education (university & tech school) student pays - why not apprenticeship?

Disappointed that there is no apprenticeship & training program that applies to the insulation industry

The apprenticeship program that exists today is the best way to train carpenters for safe work in the field today - Course context has to change to keep up with technology, but field work mixed with technical training is a must for a job that varies from day to day i.e. foundations one day, finishing millwork the next. I have found that someone that has to hang a door will pay more attention in trimming the opening correctly.

1. If you require the employer to carry the full cost of the program that will be the end of it as far as most small constructors are concerned.
2. With the Fair Wage Policy when and where will working carpenters be able to get a TQ it was promised. The only programs I have seen for this you must be on Welfare or UI to qualify. Help the ones that are constituting and are not burdened with a lot of other problems that keep them from working not the lack of a TQ

As a union contractor we pay \$23.00 per hour into the piping industry apprenticeship fund. This works out to at least \$12K per year. If the government pays for schooling & UI pays for lost wages, surely this money is under utilized or could be directed in a more effective manner. My point is, we pay enough. Any further requirement for a direct funding would be onerous. What do non-union contractors pay?

Any program should encourage early apprenticeship training. The average age of an apprentice in BC is 29 years! My son is enrolled in the high school apprenticeship program for 1st year of apprenticeship training with credits being earned toward graduation. This is a wonderful way to get more and younger apprentices.

Note to 10d: Out of the question. Too far away from institute.

Comments: Our business operates around supply and demand. It is very hard to be consistent with work and security for any length of time. The amount of work done by our trade has diminished drastically over the last 20 years. At this time it is hard for me to employ an apprentice for these reasons. I fully support apprenticeships and I know we will need them in the future. Our company will be participating in the apprenticeship program in the future, because there isn't enough young people involved at this time.

Our apprenticeship program seems to be way behind the times. There is not enough training on the use of current materials. Technology does not stop, so neither should they.

Much time is wasted during the school day. More could be taught in same time. Many that pass should not. Many receive just as good a training without the program if all you require are specialized fields. Lack of mandatory requirement enables employers to hire unskilled workers thereby keeping wages low and discouraging good people from entering construction.

Note to Question #10: "In school training". A great improvement in the school system could be achieved by requiring students to enter the system with a minimum high school standard in Math and Science. A great deal of time is spent teaching Math and Science skills as low as grade 8 (adding & subtraction of fractions) that could be spent teaching trade techniques. I also believe the apprentice could benefit from a longer early training period at the beginning of their apprenticeship. Too much effort is being spent "rushing" students through training leaving them unprepared journeyman. Correspondence and computer based programs should only be used for "ticketed" tradesman furthering their education.

Note to Question #16f: Payroll tax on all contracting firms, large and small, association members and non members.

Note to Question #19: As the system is now, apprentices cannot afford to go to school and employers cannot afford to send them to school. I am concerned about a system that would penalize contractors that train apprentices (through costs) so firms (large & small) that never participate in apprentice training are given a financial advantage over firms that do train apprentices.

Note to Question #16f: Apprentice pays 1st and 2nd year then if he gets to 3rd year government reimburses only if he passes.

Comments: Spending cuts are inevitable but we still need education in trades and if we don't fund it or help we are going to have a lot of unqualified people doing all the work on one person's ticket. There has to be indenture like university.

The apprenticeship program has to change its focus. Most firms need an employee who is well versed in customer service, report writing and is flexible and adaptable. Technical skills should be proven and apprentices should not be passed until true knowledge of a module is confirmed by employer. Employers should be more involved with the training process with on the job assignments being given at school to be completed in the work place under direct employer supervision. No funding should be available. If people complete engineering and accounting degrees without help, why should the trades be any different? Starting wage is much higher than a degreed person.

At present the level of training being given to apprentices in the refrigeration trade is unacceptable. The schooling hours should be 8 am to 4 pm or at least 8 hours. At present most apprentices are bored due to inadequate training and other apprentices are being passed to next term when they lack the skills etc. to pass the term they are in now.

Apprenticeship training is expensive and has to be controlled in a more rigid manner. They have to be indentured to someone and because of the nature of construction the government must be the person to indenture. Another issue not addressed is the lack of protection of the apprentice once he passes his second year. The perception of apprentice being cheap labour has to change. If the training is done properly they are our future.

I think our RCA fees and levies are high enough. If a person can perform a task then it shouldn't matter if he has a government ticket that says he can. I know the RCA is trying hard to justify all its expensive management personnel when really we should be fighting against all the rules and regulations that our government is continually trying to force upon legislated contractors. Our government has created a society where you can collect welfare, work for cash and make a much healthier and easy living than anyone else who has to try and follow all the rules and pay his taxes. Of course they should cut expenses and let the private sector take care of ourselves. There is no need for government to fund training if the need is there the private sector will fill it.

Apprenticeship training program and school located in Northern or North Central BC as well as the one in Southern BC.

If the apprenticeships are canceled there will be no journeymen. People will be paid less. Less pay, less tax to collect.

The present system works well. We do not need changes.

Apprentice to learn all aspects of the trade then be given Journeyman's status with industry driven certification. Only a journeyman after minimum of 4 years "practical" experience be allowed through "further" training to obtain "Master Craftsman Designation" with the appropriate certification.

Currently, employees and employers pay so much an hour, which is put into a fund. When the employee goes to training school, he is reimbursed this amount to help him or her pay for his room/board while he/she attends school.

I have just had an apprentice complete his apprenticeship - during the four years he earned in excess of \$150,000. In the same four year period a friend of his that he graduated with attended UBC and has now completed with a degree in business management and a debt of \$30,000. The electrician has a job and a career. The other fellow has no job and he lacks experience in any field to fall back on. Given this comparison, I don't think there is any reason for the government, industry or employer to fund the apprentices schooling. The apprentice can pay his way! Don't make apprentice programs any less attractive to the employer, or there won't be any apprentices, especially in the electrical trade, where apprentices need to work the full time.

As we must send our apprentices to Vancouver to attend school we do not agree with the time of year. Our apprentice is currently attending school May-June 1996. This is a busy time of year and he & us lose work opportunity. Jan-Feb-March-April are less likely to affect his earning ability.

I fully support the apprenticeship system but apprentices must be encouraged to save money to go to school and go to school on time. Shorter time in school to 1 month per year during a full 8 hours of instruction for a 40 hour week. Start on time and finish on time. Utilize teachers and classroom space better. We all have to work harder.

Note to Question #10f: Let contractors control the apprenticeship training with a provincial or federal test at the end for minimum standards.

Comments: As a union contractor I am fully controlled in all aspects by my labour force (union). Geographically certain people are not available. I am not allowed to be creative by hiring a technical local person as per my collective agreement. The Union does not have such people. Most union members refuse to take a course without being fully paid by the employer. Organized labour does not accept change. I personally scream for help on de-regulation where I can be in charge only then will the system work. Some of these questions are difficult to answer with the information included.

Note to Question #12: More current standards need development.

The union contractors should have control of the hiring of apprentices, not the unions.

I feel the apprentices do not get enough in depth training on the practical work, for example blueprint reading. In regard to financial support for apprentices, I feel that as long as our apprentices have to be schooled in Vancouver the government should be providing financial support for the entire period they are in school during the 6 weeks. Most of these individuals have to support a household in Northern BC and pay for accommodation in Vancouver. This is very unfair once again when you live out of the Vancouver area. Our tax payers' dollar should go towards apprentices so that the construction industry can continue or we won't have apprentices as they will not be able to go to school, as they cannot afford to.

Training is critical for all employees. Funding for this training must be government sponsored and not passed on to employers.

Note to Question #16f: Employee tax credits 100% for successful completion of year and trade.

We should be using the schools and colleges or open learning for portions of each course and shorten the length of stay and the cost associated with out of town students; maybe some of the employers could facilitate some training in their shop as well. We have to make apprenticeship accessible and affordable for all. The TQ's should be scaled as to the ability and marks of the apprentice as some employees are more qualified than others in the same trade. The employer should also be a part of the evaluation team as he knows the abilities and work habits of the employee better than any.

Note to Question #10f: One month module 2 times per year with specialized field training as opposed to training an apprentice with all sorts of unrelated theory which won't be used or retained.

Note to Question #16a: General purpose tax levy on used population who benefit from trained tradesmen. Because we in Northern and Western BC have a lower population base than the interior and lower mainland and cannot at the present time support a local education facility for certain technical trades, so bluntly put we need to send our apprentices to higher density areas to get the higher level of training. I do not support colleges taking over the apprenticeship training. They will treat it as a crash course and the quality of technical teaching will suffer. When teachers and instructors can teach an 8 hour day instead of a 5 hour day maybe we can take it into consideration.

More localized training facilities are required.

Thanks for an avenue to express my views! The present system is a waste of everybody's time. There is nothing wrong doing qualified, productive work, typing or painting. Direct the person into a marketable skill before they leave high school! At 18 they could be fully employed, have a good attitude, realistic wage expectations while learning the position(s) in school. On the job training will give apprentice respect for the masters of the trade. This requires an investment by apprentice of little money per hour as a wage while learning something. An employer finds it difficult to reach someone who earns a wage that is too high. i.e. age 12 - 14 - helps out on the job and learns basic skills of painting, earns very little. Age 14 - 16 - employed at wage after school and on weekends. Age 16 - 18 - finishes learning curve with formal training, earns 1/2 journeyman wages which is already better than minimum wage. After passing exams, etc. fully employable and contributes to company and pays taxes.

I feel the tax base that the shelter industry provides there should be government sponsored apprentice programs.

We are turning out far too many electrical apprentices. This is creating a surplus of apprentices and journeymen. This in turn drives wages down, which in turn drives employees to moonlight which in turn drives profit margins for business owners down which in turn drives wages down, etc. etc.

The apprenticeship program needs updating. Forget learning about antique hand tools and get current with modern practices. As far as any kind of tax to be taken from employers - that idea is way out of line!! We are already taxed to death and the last thing I want to see is someone suggesting that!! Get the current government programs streamlined and cut some of the bureaucratic fat.

Note to Question #10f: 8 week module to include 6 weeks of plumbing and 2 weeks of gas each year.

Note to Question #19: A good look at other provinces and/or states to see how they are coping with lower government funding. We can learn and help each other through co-operative efforts. The Alberta apprenticeship trades training in plumbing and gas is far superior to BC. Let's get our heads out of the sand and look around!

College level trades training programs need to be in place at each satellite campus. Should be able to respond more quickly to training needs and set up training modules in a hurry. Present system is bogged down in educational bureaucracy and special interest groups (e.g. unions). Should have a strong federal or provincial apprenticeship program similar to Europe.

We need to find ways to reduce the responsibility of our governments to pay for our education and place more responsibility on the individual. Technical training for apprentices needs to be more structured. As it exists, electrical apprentices have too much freedom during their school time. 1/2 hour coffee breaks and 1 hour lunch breaks in a 6 hour day does not leave much time for instruction. There is a vast difference in the quality of tradesmen here in BC as compared to the tradesmen coming from Alberta and Saskatchewan. Too much emphasis is placed on theory and not enough on the practical aspect of the trade. Very little, if any time, is spent on safety related issues.

College and university tuitions only cover a small part of actual costs. Trades people should have certain privileges based on the fact that they are only utilizing a fraction of the resources. The employer is providing the majority of the training and should not be penalized. Applicable diplomas should be given credits for apprenticeship training and should include some curriculum, i.e. diploma in landscape horticulture should qualify for apprenticeship training requirement. Colleges and universities should provide adequate training in related fields so that additional training is not required should people decide to enter the trades. Students should be better prepared with math, reading and writing skills before entering apprenticeship training. Hear complaints of time wasted learning basic math rather than trade skills. Approximately 40% of time spend on basic math and algebra. More prerequisites required.

I believe both employer and apprentice should "invest" in their futures by sharing costs. This could be accomplished by a requirement of the employer to pay higher minimum wages than contracted in the apprenticeship agreement and that dollar value put in a training fund for that particular apprentice. The government could possibly give a tax credit to the apprentice for the value of the fund.

Question #15 is unclear. Eliminate the regional pre-apprenticeship programs (i.e. Selkirk College). We have experienced very poor results. Direct these funds towards support of four year apprentice programs. Technical school in the Kootenays would be appreciated.

We have a concern about the way union representatives are permitted to solicit within the school premises and how students which we sponsor can get persuaded into signing with the unions not knowing the long reaching commitment they are making. Also the effect this may have upon our operations. The school should be an unbiased place where students can learn their trade without these types of pressures.

More input from employers & recognition by the different government levels. To date they pretend to listen and do their own thing. The old rules and regulations are like a "bible" to them. Times are changing and if they can't change let's get rid of them.

To work on any government funded project and provincial and city project require that employees doing the actual work under the designated trade or fair wage that employees are registered in an apprenticeship program or hold a TQ ticket. Since the government wants to enforce this policy they should not be looking at cutting funds for the apprentices but increasing the funds to encourage apprentices to attend the proper schooling in whatever trade they belong to. Our schooling for apprentices is done in Langley at the Roofing Institute which means traveling time and expenses, room & board, loss of wages and still maintain residence and food for their families while at school for a month at a time for a period of three years. If this government funding such as UI is eliminated for our apprentices I cannot see too many of my first, second or third year apprentices attending.

Regarding gas tickets: Tradesmen have no experience using a monometer to set up furnaces, boilers, etc. They have no hands on experience to set up gas valves which is critical to a proper installation.

All classroom work presently takes place at BCIT entailing enormous costs to apprentices. More local venues are desirable.

Plumbing apprentices should be training for gas fitting from first year to journeymen instead of last year of schooling

To improve the skills of young Canadians and stay competitive in the world market is the responsibility of industry and government together. A lot of in school training is only available in Vancouver. This creates a lot of cost to the apprentice and the company. The government has a responsibility to help offset this cost. A journeyman is a higher paid employee and will earn more money and has a better chance to stay off UI, which is a benefit to the government and society as a whole

More responsibility should lay with the apprentice. Too much is put on the contractor and the government. It should be a user paid system.

I believe qualified tradesmen skilled in a certain aspect or even a variety of skills is essential but legislating it through government is the wrong approach. Too many apprentices, I believe, feel that once they have a TQ they will be guaranteed a good paying job. Apprentices have to learn to take pride and ownership of their training. There is no real cost to them while they train. UI kicks in immediately while any other student has to earn their own money while going to school or post secondary training, while a construction worker decided to be a labourer he gets top dollar right away. What incentives are there left for one to get a TQ. Comments like "why bother for the extra couple of bucks - this way I have no responsibilities". This should be industry regulated, not government legislated.

Apprentices should be indentured to companies not unions, and companies should be more responsible for training.

In my opinion apprentices should go for one year to a government approved technical college and be introduced to all facets of the trade for which they are hired. This will enable them to appreciate the scope of work in their field to choose which direction they are best suited for in their trade, as in carpentry framing compared to finishing. In steel fabricating, welding compared to steel fitting. This could be funded partly by government, be it federal or provincial plus a commitment by the companies and the unions who support these trades. For every 3 to 6 journeymen a company hires there should be a tax deductible fee that the companies pay to support the training of apprentices for that year. If there are no apprentices in a company but there are journeymen, the fee should still be paid in order to encourage companies, both union and non-union alike to hire apprentices. From then on the apprentices should be on day release with a commitment to complete an evening class on their own time. This will encourage only the people committed to learning a trade to attend. I also feel that the rate scale should be reviewed so that the companies are encouraged to take on apprentices by incentives and grants.

Apprenticeship rates (%) are too high and don't justify productivity in the current union/non-union marketplace. Who regulates percentage rates in the non-union market? What is the journeyman rate in the non-union market. Not convinced this is a good questionnaire! Especially for employers who do not participate or serve on apprenticeship committees.

Lower levels of pay for apprentices - less than 50% of journeymen rate. Lower level of pay for junior journeymen for 3 years after completion of apprenticeship.

Unions should be more involved in the apprentice development. This should include funding as well. This should not be an employer remittance to the union but rather a deduction from each worker to help with the development of the trade. Some responsibility should also fall on the apprentice to fund his own schooling just like any other person going to school.

Delivery of in-school training should be by night school with one week per year for practical for those not near a community college and balance on interactive video.

Apprentices should be indentured directly to the employer, not controlled by the unions. With employer "ownership", continuity and the consistency of the various training required can be controlled from start to finish, producing, in our opinion, a better qualified and seasoned tradesperson. It's a "win win" situation. The apprentice has confirmed sponsorship for the term of his apprenticeship and the employer typically ends up with a loyal, fully qualified tradesperson.

If funding for training or UI funds are diminished, the following alternatives should be considered: 1. full or partial night school for apprentices so they can still work days; and 2. Pre-apprenticeship program similar to telecommunication courses with possible partial rebate upon satisfactory completion.

Government required to invest in training. These kids are our future. Government also needs to cut or trim the fat but not to the point where the quality of training is effected. Having seen government in action - which tends to go from one extreme to the other - I'm afraid of what the outcome of this is going to be. I think the dice has been rolled and this is just an exercise.

We are in favour of a pre-apprenticeship program, whereby it can be pre-determined if an individual has the necessary qualifications before he enters the workforce.

Absolutely critical if program is to continue would be for apprentices to receive more practical training.

Most apprentices have a very hard time to go to five weeks of school once a year with reduced income.

Note to Question 11: Our work is seasonal. Have them in school in winter months, i.e. Dec-Jan-Feb)

Note to Question 14: Task training approach won't work - dangerous.

Comments: Work all in BC.

The questions that were not answered were not clear.

To achieve our goal of a well trained and educated tradesman, we must not lower the quality of education by imposing hardships on our apprentices. We must train smarter. Perhaps interactive computer modules are the way. As a union contractor we play by the rules and we would like everyone to.

Starting wages for apprentices is too high. Most alternatives for these people is unemployment or McDonald's. Starting wage should be minimum wage plus health & welfare. Training period should be longer and graduated in technicality of the work being performed. Start at housing, learn code, simple accounts, layout and run one job, move to commercial, learn building code difference, material difference, safety, renovations and tracing out existing control work in regards to lighting and heating, then go on as he goes on in the job market. Not everyone needs training in PLCs. Fire alarm and emergency lighting are governed by building codes, not just the electrical code. No one should get any more than basic minimum wage to be trained in something he doesn't know how to do, no matter how long he has been in any trade. No customer can afford that.

The current electrical program has become out of touch with the needs of our company. I would like to know the % of failures. Our most recent apprentice was one of 5 to fail in a class of 15.

When I was a student, government income support for apprenticeship training was the only way I could be assured to get on site training I needed to be employable. Now, as an employer, I was looking forward to being able to provide that opportunity to someone new. However, with diminishing income support my company would be hard pressed to do so, especially because it is (as many companies are) in its most critical stages of growth. I am also more than strictly opposed to a payroll training tax and grant/levy system.

We are in a trade class of our own. We specialize in installing and maintaining lifts for handicap people: currently we look at people with strong electrical technical skills and do on the job training as well as factory run seminars held in our plant in Port Moody. These seminars are conducted by one of our design engineers from our head office in Toronto. We also send our people to BCIT for night classes in electrical courses. We find these very beneficial. Although our trade is different in many ways from the elevator trade, i.e. codes, designs, application, we are currently classified under the same trade. With over the 25 years in the business I have hired a variety of people including fully qualified elevator mechanics and found that most people had to be trained to enable them to understand our complex systems. We would find it very beneficial if the apprenticeship branch could incorporate some of these concerns in their curriculum.

The apprenticeship programs for all trades needs to be funded and controlled by a non-partisan group such as the ACA not by the BC Yukon Trade Unions. This would allow equal access to all individuals who qualify and are motivated. Not just individuals connected to the big trade unions.

Trade apprentices should be students at grade 8 or 9 level to give early start on trade.

In general, post secondary education fees and costs are a student responsibility. If trade school costs are entirely funded then so should be all university or all other post secondary courses.

I feel that there should be a continuing education system for Journeymen to keep up with new ideas in their fields - voluntary with appropriate compensation for those who take the time to use it.

I feel that the if apprentice has the drive to be a tradesman, then the tax payer shouldn't have to put them through training. Student loans or other sources should be available to them.

Technical school must become more accountable. Provide the type of schooling required based on the level of apprentice. More information should be provided to apprentice prior to attending school. These years could be reduced to two years of school attendance. The current system of demanding employers to pay apprentices 1/2 of journeyman's wage is only fair if all employers pay same wage. Employers who pay decent wages get penalized by current system. Employers need to have more input into curriculum and be provided with information more easily. More information to apprentice so that he know where he is so far so his marks are.

Let's try and keep the apprenticeship programs in place. I do not believe there is any room for so called "self administered" programs.

I am concerned about a trend at Camosun College to "self-paced" learning. I am also concerned about the general slackness of the system, i.e. write exams every Friday morning with the rest of the day off, etc.

A system of common core training as put forward by the "TAC".

Note to Question 10f: Delivery of Level 1 with the first 9 months of apprentice sign up agreement.

Note to Question 19: I feel industry/employers should be more involved in the apprentices working for them, show more interest by being a part of local PAC or TAC. I feel an industry evaluation should be done of the instructors of our apprentices. I feel an evaluation of all instructors would only help to bridge the communications gap which our work force generally has a problem with these days. I feel the instructors should be more accurately and emphatically preparing the apprentice (1st and 2nd year) to the upgrading of the profession of a carpenter/tradesman. Instructors need recognition, for training well done/and received, by the apprentices. Instructors should not be encouraging any specific affiliation with organizational groups. The job is to train, not to support collective agreements. If talking performances of collective agreements, then an accurate report on wages earned by non-collective group should also be provided. Get rid of the old tired horses within the TAC committees. Put people into the apprentice halls who are keen workers demonstrated through the work volume produced with apprentices (referring to Burnaby Centre of Apprentice Skills, Labour).

Apprentices should have a 5 year apprenticeship training.

They should be treated as any other college or university student.

I feel that if apprentices do not get some level of financial support a good percentage of them will drop out of the carpentry program.

We have always trained all of our employees. In today's market, we cannot afford to contribute any further to training, other than that which we already do on site. We believe any change to the status quo would be counter-productive in the long term, and would contribute to a gradual deterioration of the quality of workmanship in general.

Apprentices could attend night school so there would be no interruption to their wages during the apprenticeship period.

Apprentices concentrate on detail to the exclusion of practical skills. Our man reports having to memorize stair stringer details for example, while this is readily available in BC Codes and parts 4 & 9 in HBC. I support knowledge of how to build stairs, not to memorize useless details that change yearly. Interprovincial TQ info was not supplied at a provincial level.

The present system does not recognize the investment the employer makes in training. Apprentices treat their indentureship only as a job and as a result are treated as a cheap labour commodity. If a more dedicated commitment (contract) was formed by both parties, training would be improved by a joint commitment. As well, our public school system needs to start directing students, not choosing an academic route to partnership with trades/technical environments. Our quality of people is steadily decreasing.

Keep government involvement as minimum as possible. Have employers assist his apprentices with training costs.

I like the idea of upfront training - 4 to 6 months with refresher courses every year (1 week). Generally the instruction at BCIT needs updating, less union involvement, new blood in the teaching ranks.

2-3 week courses as most not used to school. If have to do 2x/year or more years okay. Employer encouraged to pay for comprehensive modules.

In these decisions for multiple training course such as 24 in four years, you must consider travel expenses, same as in house schooling, where would this be? That would change support for these types of programs.

The course content should be reviewed. Some of the topics covered are obsolete in the plumbing industry and should be removed from the curriculum. Asbestos piping and lead pipe wipe joints are two examples, though there may be others.

A pay-your-own-way approach would ensure that apprentices would be dedicated and motivated! The down side is that not enough apprentices would be attracted to the trades.

In this day and age it is a waste of time for an apprentice to learn all facets of the carpentry trade. Should be certified for form sitters, framers, finishers, cabinetry. No certificate as master craftsman - could be misleading. Should have four separate certificates.

We have found in the past that apprentices that do well at school are offered higher paying jobs by other employers. They do better than others because we train them better/more variety. Also, after the apprentice gets his TQ, he looks for a higher paying job elsewhere or where he wants to live. Sometimes you wonder why you spend the time for someone else to benefit.

Night school instead of days, then the apprentices won't need UIC!! They can work days and receive training at night (4 nights a week for 12 weeks, etc.).

As an open-shop contractor we believe that the whole future of our industry depends on a high degree of apprenticeship training. If government funding is eliminated, is up to organizations like the ICBA to step into the breach to keep a viable program operating. This would be funded by all ICBA members and all ICBA members would have access to this apprenticeship pool. Failing this, is incumbent on the individual companies to indenture their own employees, which would be fine for those companies that have good continuity of work and one centralized area of work, but is extremely unworkable for companies that do not have one or both of these attributes.

If the governments are going to reduce the apprentice funding, our tax structure must be adjusted to compensate the company's added burden of funding the apprenticeship program.

The current apprenticeship program is too difficult to work in for a working full time employee. Also Ironwork has a crazy stipulation asking for rebar experience. This is long outdated and should be dropped.

Ticketed crane operators are in short supply in our industry. The present apprentice training program has/is producing operators with valid TQ, who do not possess the necessary knowledge and skill to function in all aspects of the industry. This creates a problem, as employers, we assume that when an employee produces a TQ we can place that employee out in the field, only to find out after the fact that the employee is not trained enough to accomplish the task at hand, or worse yet after a mistake has been made. More thorough and accessible training is needed in our field.

Industry involvement is imperative. UIC support for active apprentices is important. Distance education, reducing in-school time, is inevitable and necessary.

Note to Question 10f: Distance education condensed to a 6 to 8 week program with 1 - 2 weeks in-school directly following.

Of all the apprenticed trades, I feel that proper formal training of the electrical tradesman is of prime importance for consumer safety. The cost of training and retraining of those who fail through the process must be brought under control. Prequalification of apprenticeship applicants is highly important both for control of training costs and for quality of tradespeople.

I fully support the apprenticeship system but apprentices must be encouraged to save money to go to school and go to school on time and when designated. Bring the in school back to 4 weeks once a year and have it for 8 hours a day, 5 days a week. Utilize teachers and class rooms and equipment fully. We all have to work harder for a dollar, including workers, teachers, contractors, etc.

Training in trades that require manual dexterity and hand/eye coordination should be started in high school from age 15-16 max.

APPENDIX C

DISCUSSION PAPER: TRADE CERTIFICATION SEAL

TRADE CERTIFICATION SEAL

“The Seal of Quality”

The Trade Certification Seal is a voluntary registration available to all journeypersons upon successful completion of their apprenticeships. A journeyperson who registers with the Trade Certification Board pays an annual fee for the right to use a registered seal. The “Seal” is a certification of trade competence. Physically it consists of a wallet card certifying trade competence and a rubber seal (similar to other professional seals such as architects/engineers) that may be applied to building permits, quotations, business cards and other appropriate locations.

It’s credibility can be established in the marketplace through several vehicles, including:

1. **PREFERRED PERMIT FEES**

A lower scale of building permit fees for the projects that will have a “sealed” tradesperson responsible for the work. The Seal of the responsible individual must be applied on site to the building permit in a designated location. Building inspectors will require less or no time (spot check only) to be spent on projects for the components of the project that are sealed. The Seal is only required for trades that involve issues of health and life safety, such as carpenters, electricians and plumbers. The individual who seals the project is responsible for ensuring the work meets all building code and other related requirements. It is their responsibility to monitor who is performing the work they certify. The consequence for not ensuring code compliance is the loss of the Seal and the right to its use or other sanctions as may be determined by the Trade Certification Board.

2. **AWARENESS CAMPAIGN**

An ongoing and continuous campaign to create a public awareness of the value of using trade certified persons. The “Seal of Quality” provides assurances that the individual is a certified tradesperson and that they have maintained their knowledge of current technical and trade practices. The Seal provides both a marketable credential as well as a vehicle for consumer protection and complaints. The campaign creates an awareness of the trades and pride of accomplishment for the individual who is the holder of a Seal.

3. TRADE CERTIFICATION BOARD

- The establishment of a Trade Certification Board responsible for issuing Seals and ensuring that “certified” tradespersons maintain the standards necessary for certification of their competence. The Board would monitor complaints against an individual and undertake appropriate actions that may include, for example:
 - issuance of a reprimand and warning;
 - issuance of an order to take upgrading to maintain certification;
 - removal of a Seal and related right; and
 - issuance of sanctions or penalties as may be appropriate
- The operations of the Board would be paid for out of the annual fees for the right to use the Seal.
- Board members would include appropriate individuals appointed from industry. There would be separate panels of each certifiable trade. Panel members would be paid on a per diem basis and would be supported by a full time secretariat responsible for the operational, legal and administrative aspects of the Board.
- The Board of Directors would be responsible for:
 - appointment of Trade Panel members;
 - overall supervision of the operations of the Board; and
 - establishment of policies and procedures of certifications, complaints, appeals, sanctions, etc.
- The Trade Certification Board would receive its authority through enabling legislation. The legislation would provide government with the ability to frame the purposes and authority of the Board as well as to retain the responsibility to appoint Board members.

This model for certifying and policing trade qualifications has the following advantages:

- All trade qualifications are based upon existing standards and no additional process is required.
- The policing aspect applies only to those trades and tradespersons who wish to be policed.
- Persons who are not certified are not barred from working in the trade, only from marketing themselves as certified.
- The Seal provides a recognizable indication of trade competence that carries with it rights and responsibilities that can be controlled or removed.

- Consumers are provided with a vehicle to ensure qualifications as well as for complaints.
- Inspection authorities are provided with a vehicle to know the qualifications of the individual's work they are inspecting as well as a vehicle for complaints of substandard work.
- Government is able to provide consumer protection with no direct cost to itself.
- Industry controls its own destiny with respect the credibility of the program.
- The Seal is an additional credential that is available to qualified tradespersons at a reasonable cost that defines them as individuals who meet and adhere to appropriate standards of practice.

APPENDIX D

TASK FORCE MEMBERS

CONSTRUCTION INDUSTRY TASK FORCE

APPRENTICESHIP & SKILLS TRAINING

MEMBERS

Ben Backman		Kingston Construction
Pat Dennett	Chair	Landmark Glass & Aluminum Inc.
Kevin Fletcher		Parklane Homes
Phil Hochstein		Independent Contractors & Businesses Association
Alan Jones		c/o Mechanical Contractors Association of BC
Joe Lingren		c/o Independent Contractors & Businesses Association
Dee Miller		JJM Construction
Bob Morrison		Construction Labour Relations Association of BC
Jack Moxam		Roofing Contractors Association of BC
Cliff Pilkey		Electrical Contractors Association of BC
Dave Robertson		BC Construction Association
Keith Sashaw		Canadian Home Builders Association of BC
Wilf Scheuer		Pro-Star Mechanical Ltd.
Betty Spalton		Argo Road Maintenance
Dana Taylor		Mechanical Contractors Association of BC
Roz Thorn		Northern BC Construction Association
Tony Toth		BC Road Builders & Heavy Construction Association