

SUPPORT STAFF

**SSEAC**

*Education and Adjustment Committee*

## **Trades Workforce Planning Resource Paper**

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***Prepared by the Support Staff Education Adjustment  
Committee***

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- I. District Specific Demographic Information.....1
- II. BC Trades Demographics.....1
- III. Options for Workforce Planning.....3
- IV. Apprenticeship Success Stories.....7
- V. Appendix: SSEAC Background.....9



Maintaining a sustainable and qualified trades' workforce has historically been a challenge and this continues today. In the face of an aging population and an overall shrinking population and labour pool this trend may only worsen. Districts and locals need to be aware of the specific demographic challenges their trades group are faced with and will be faced with in the coming years. Succession and workforce planning is an imperative and initiatives may need to be undertaken or programs launched to ensure that districts have a skilled and fully staffed trades' workforce. The Support Staff Education Adjustment Committee has put together this resource paper to aid districts and locals in understanding the issues surrounding the trades workforce and to provide options to consider as potential solutions.

## **I. District Specific Demographic Information**

In 2006 and 2007 districts submitted to the SSEAC HR Plans that included a comprehensive demographic view of all of their support staff employees. Since that time districts demographic information has been analyzed and summarized to provide a useful overview of the support staff demographics in each specific district. These district summaries should aid each district in workforce planning efforts as they show average age and years of service by classification, as well as a gender and salary breakdown, and a status and hours of work breakdown. A similar provincial summary was also completed so districts can view themselves in relation to the province as a whole. These summaries will provide a useful starting point in analyzing the support staff and trades demographics and will help to drive the discussion regarding succession and workforce planning. Moving forward the Public Education Employment Data and Analysis System(EDAS), a data project that will compile employee data from each district, will become a rich resource for demographic analysis and workforce planning.

## **II. BC Trades Demographics**

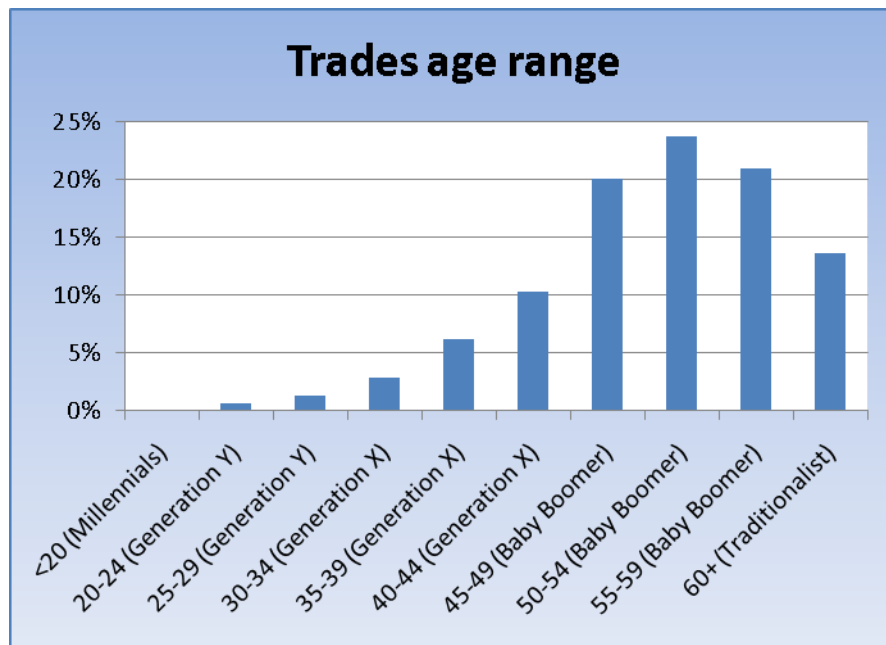
With the changes to the labour environment and the increasingly complex challenges, organizations can no longer maintain their static practices. A number of demographic factors are contributing to BC's labour environment and the ability to attract, motivate, and retain employees in BC. The ongoing retirement of the baby boomers (those between the ages of 45 and 60, who currently constitute 23% of the population) is creating a significant gap in the labour force. Generation X (age 30-44) and Generation Y (age 20-29) will be responsible for filling this gap, even though they only account for 22% and 14% of the population respectively.

Unemployment in BC is well below the national average of 5.9% at 4.3%, with 4% being considered full employment. Currently, the lowest regional unemployment rate is in the Vancouver Island/Coast region at 4% and the highest rate continues to be experienced

in the North Coast and Nechako region at 7.4%.<sup>1</sup> The result of the aging population (which is creating a steady decline in the labour force) and a strong Canadian economy (which creates a growing demand for workers) is a critical labour shortage.

The trend of BC’s aging workforce is also evident in BC’s education sector trades group. The average age of the trades group is 51 years of age with 74% of this group being over the age of 45 and 30% being over the age of 55. This is similar to that of all support staff in the province. This means a significant percentage of trades employees may retire in the next several years. The percentage is even more alarming when you look at the trades’ workforce that will be replacing these baby boomers; only 2% of the trades group is currently under the age of 30. The average age of the trades group is over the provincial support staff average of 48 years of age and well over that of the IT group average of 43 years and the Educational Assistant average of 46 years of age.

**Figure 1**



Analyzing the age as well as years of service together is important in order to understand the implications an aging workforce has on the experience and skill in a specific classification of employee. The average years of service for the trades group in the province is 11.2 years which is over the provincial average of 9.8 as well as the educational assistant average of 8.1 and the IT average of 7.4. Of the trades group that will likely retire in the next several years (those over age 55) 51% of them have over 15 years of service. This over age 55 group also accounts for 44% of the employees that have over 20 years of experience. This is important because in the coming decades not only will gaps be created in the trades workforce but districts will be losing some of their

<sup>1</sup> BC Stats. Labour Force Statistics, August 2007 <http://www.bcstats.gov.bc.ca/pubs/lfs/lfs0708.pdf>.

most experienced trades people. This is why succession and workforce planning becomes vital.

### **III. Options for Workforce Planning**

#### **Skill Upgrading**

In any workforce there will be pressures on various employee groups that a certain degree of alternative training may relieve. Within the current support staff group there are likely skills sets or interests that are going untapped which if utilized may ensure a sustainable trades' workforce. Skill upgrading/alternative training opportunities where possible would provide an employee with underutilized skills or interests with the skills to complete the under pressure classification. While many of the trades classifications do not lend themselves to upgrading, there are a few that with some additional training employees in those classifications can add to their skill sets. The following are a few examples (not exhaustive):

- Welding has three levels that build on one another. The credits of one level can be used towards the next; Welder C is a pre-requisite for Welder B and both are a pre-requisite for Welder A.
- Domestic /Commercial Gas fitting is a BC certified apprenticeship. All of the practical experience and technical training credit earned during this apprenticeship may be transferred if the employee then wants to upgrade and attain their HVAC (Refrigeration and air conditioning mechanic) certificate.
- Plumbing is a Red Seal endorsed trade that takes approximately four years to complete. If an employee wants to become a plumber and has the steamfitter/pipefitter, sprinkler system installer, or domestic/commercial/industrial gasfitter certificates, the practical experience and technical training credit earned in those apprenticeships would be transferable to the plumbing apprenticeship; this would reduce the amount of time it would take to complete the plumber apprenticeship.
- Employees in an Automotive Service Technicians apprenticeship who already have a Heavy Duty Mechanic or Commercial Trailer Mechanic certificate may receive practical experience and technical training credit towards their AST apprenticeship (and visa versa).

#### **ACE-IT/SSA Program**

In order to ensure districts have enough qualified trades people another option to consider is the untapped labour pool of students. Both the ACE-It and SSA program are centered on student apprenticeships and are a great opportunity for both students and employers. In a recent examination of both employers they were described as a “win-

win for students and employers- an opportunity for the employer to train them the way they want them.”<sup>2</sup>

### ***ACE-IT***

While the ACE-IT program focuses more on the course work aspect of an apprenticeship there is the opportunity for work based training within the district. “ACE IT is an industry training program for high school students. Through an ACE IT program, students can take courses that will give them credit towards both high school graduation and towards completion of an apprenticeship or industry training program. ACE IT programs are developed and offered as partnerships between school districts and post-secondary institutions, and classes are often taught at colleges. Local employers also get involved in the development of ACE IT programs, and students who complete these programs typically have very good success in finding employment. Once a student has successfully completed an ACE IT program they will receive credit for at least level one of the technical training (in-class) component of an Industry training Program. And through work experience placements that are usually part of the program, they may also receive credit towards the on-the-job component of an apprenticeship as well. This provides a significant head start on post-secondary education by high school graduation – as well as providing the opportunity to acquire practical and in-demand job skills.”<sup>3</sup>

Brian Clewes, CEO of ITA stated that “with an aging population and record job growth creating shortages of skilled workers in B.C., initiatives such as ACE-IT are crucial to developing a skilled workforce that both meets employers’ short-term needs and is sustainable in the long-term.”<sup>4</sup> Districts who get involved in the ACE-IT program are assisting in building the trades’ labour pool in its entirety and also will have increased the likelihood that the ACE-IT student will come back and work for their district when graduated. In fact “61 percent of employers have gone on to hire their ACE-IT students as apprentices and 3 out of 4 are planning to take on additional ACE-IT students.”<sup>5</sup>

### ***Secondary School Apprenticeships***

Another way for a district to increase the trades’ workforce capacity is through a secondary school apprenticeship. “Secondary School Apprenticeship (SSA) is a career program that provides students with the opportunity to begin an apprenticeship while still in high school and to earn high school credits for doing so... A Secondary School Apprenticeship involves part-time work within a trade - something many secondary students are doing anyway. Once they register as Secondary School Apprentices, such students can get academic credit for their work

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<sup>2</sup> Fulford Harbour Consulting. An Examination of Barrier to Student Enrolment in ACE IT and SSA. April 2007.

<sup>3</sup> ITA. Training Providers: K-12 School Programs – ACE-IT. <[www.itabc.ca/TrainingProviders-ACEIT.php](http://www.itabc.ca/TrainingProviders-ACEIT.php)>

<sup>4</sup> ITA. News Release. June 29, 2006.

<sup>5</sup> Ibid.

towards high school graduation and work experience credit towards completion of their apprenticeship. Like other apprentices, Secondary School Apprentices are responsible for finding an employer who will hire them and commit to their training. The key benefit of the Secondary School Apprenticeship program is the head start - as much as two years - that it gives students towards a trades' career."<sup>6</sup> The key benefit for the employer is that they are helping to sustain the trades' labour pool, they have an additional trades' worker in their district, and they have increased the likelihood that the student will become an apprentice in their district once they graduate. It is possible for students to participate in both the Secondary School Apprenticeship and the ACE-IT program.

## **Apprenticeships**

### ***Benefits***

"The availability of skilled workers ultimately depends on the willingness of employers to hire and train apprentices. Only by finding employment can apprentices get the work based training they need to earn their certifications."<sup>7</sup> Creating an apprenticeship program and hiring apprentices, either existing employees or new employees, is a great way to build capacity within your trades' workforce to ensure that there will be enough employees to fill the positions and to ensure the transfer of skills and knowledge. Training apprentices "can be an excellent part of an organization's long term human resources development strategy... [it] can give you the benefits of an employee who is eager to learn and committed to quality work and long-term skills development. In fact, in a recent survey of existing sponsors, almost three-quarters indicated that their apprentices made a positive financial contribution to their business in the second or third year of their program."<sup>8</sup> Employers gain a tradesperson and apprentices receive a sponsor through which they can complete their apprenticeship. Where employers may not be able to offer the full scope work for an apprenticeship districts and locals are encouraged to look at options that might include collaborating with other school districts, municipalities or other institutions in order to allow for the full scope of work exposure.

### ***The components***

Apprenticeships are a three way agreement between the Industry Training Authority, the apprentice, and the employer that take into consideration the collective agreement provisions and are supported by the local union. They can vary in length from one to five years; however, the majority is four years in length. If a district decides to sponsor an apprenticeship the apprentice's employment will consist of 80-85% work-based training and 15-20% technical training taken in a classroom

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<sup>6</sup> ITA. Training Providers: K-12 School Programs – SSA. <[www.itabc.ca/TrainingProviders-SSA.php](http://www.itabc.ca/TrainingProviders-SSA.php)>

<sup>7</sup> ITA. Employers and Industry: Introduction to sponsorship. <[www.itabc.ca/Employers-overview.php](http://www.itabc.ca/Employers-overview.php)>

<sup>8</sup> Ibid.

setting at an institution. “Work-based training is meant to provide an opportunity for students to put into practice the theory that they learn in the classroom and lab environments. Technical training programs are designed to ensure that apprentices receive a broad based education related to their trade of choice and not all material learned in the classroom will be available to every apprentice on every jobsite.”<sup>9</sup> During the work-based training portion of the apprenticeship “it is recommended that employers have facilities and work opportunities that will expose apprentices to all aspects of the trade.”<sup>10</sup> For smaller or more remote districts this may not be possible and as such districts and locals are encouraged to look at options that might include collaborating with other school districts, municipalities or other institutions in order to allow for the full scope of work exposure. The technical training usually takes approximately four to eight weeks and will take place at one of a variety of training institutions all over BC. For some trades, however, such as HVAC, the lower mainland may be the only technical training location. The apprentice will need to successfully complete both the work based and technical training component of their apprenticeship before they will earn a certificate and become a certified tradesperson in that trade. In addition there are a number of trades, “known as Red Seal trades [that] have nationally recognized certification standards. The credentials of a certified tradesperson who has successfully earned a Red Seal ticket are recognized across Canada.”<sup>11</sup>

### ***Incentives***

Maintaining a sustainable trades' workforce is important in the BC education sector and as such a number of incentives have been put in place to ensure this. As discussed above in the SSEAC background, employers/locals can create an apprenticeship plan and then apply to the SSEAC to receive funding for various costs associated with the apprenticeship such as travel, tuition and tools etc<sup>12</sup>. In addition a federal Apprenticeship Incentive Grant was created to provide a, “taxable cash grant of \$1,000 per year, to a maximum of \$2,000 per person. For further information on the grant visit

[www.hrsdc.gc.ca/en/workplaceskills/trades\\_apprenticeship/AIG/program\\_info.shtml](http://www.hrsdc.gc.ca/en/workplaceskills/trades_apprenticeship/AIG/program_info.shtml).

The grant is available to registered apprentices once they have successfully completed their first or second year/level (or equivalent) of an apprenticeship program in a Red Seal trade. The AIG is meant to:

- Increase access to apprenticeships in the Red Seal trades by helping apprentices cover expenses such as the purchase of tools and other materials required for learning on-the-job and travel expenses associated with classroom training;

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<sup>9</sup> Apprenticeship Toolkit. <[www.tradesbc.org/toolkit/process.htm](http://www.tradesbc.org/toolkit/process.htm)>

<sup>10</sup> ITA. Apprentices and Trainees. <[www.itabc.ca/Apprentices-apprenticeship.php](http://www.itabc.ca/Apprentices-apprenticeship.php)>

<sup>11</sup> Ibid.

<sup>12</sup> To learn more about the SSEAC apprenticeship opportunities fund please see the appendix

- Encourage the apprentices progression through the technical and on-the-job training requirements in the early years of their apprenticeship program, building momentum towards certification;
- Promote interprovincial mobility by increasing the number of apprentices who remain in the Red Seal trades and get their Red Seal.”<sup>13</sup>

In addition each district/local has an allocation from the Skills Enhancement Fund set aside to use on pre-identified training initiatives. These initiatives could include cross training, trades upgrading and currency, or any other number of initiatives that would aid in the development of support staff skills. As stated above if both a district and local want to change the training initiatives they previously identified they must re-submit the new training initiatives to the Support Staff Education and Adjustment Committee (SSEAC)<sup>14</sup> prior to completing the training. These incentives were designed to be utilized by districts and apprentices to ensure the growth of a sustainable trades workforce.

*Any workforce planning considerations contemplated must fit within the collective agreement unless otherwise agreed to by the parties.*

## **IV. Apprenticeship Success Stories**

### **SD 59 (Peace River South)**

Peace River South currently has seven apprentices (Carpenter, Electrician, Plumber (2), Auto Service Technician, Painter, Joiner) and is looking for an eighth; all of these apprenticeships have received funding through the SSEAC. Due to their lack of success in recruiting trades personnel because of competition with oil and gas in their area, Peace River South made a decision to ‘grow their own’. Most of their apprentices are part of young families who “without the financial assistance of funding through the SSEAC apprenticeship program, would have been unable to commit to attending school. Schooling is not always available in [their] community and the funding enables these apprentices to build careers and produces a strong commitment to the school district for making a trades career a reality.” The following is a brief description of three of their apprenticeships:

- One of their apprentices was a support staff employee who as a hobby was interested in mechanics. His wife was an employee with the district and both were dedicated to remaining in the community and working for the district. He is currently in his third year of a mechanics apprenticeship.

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<sup>13</sup> Human Resource Skills Development Canada. Apprenticeship Incentive Grant. <[www.hrsdc.gc.ca/en/workplaceskills/trades\\_apprenticeship/AIG/program\\_info.shtml](http://www.hrsdc.gc.ca/en/workplaceskills/trades_apprenticeship/AIG/program_info.shtml)>

<sup>14</sup> See Appendix for additional information on the SSEAC

- The district posted both internally and externally for an electrical apprentice. A support staff employee saw the posting and contacted a friend who was interviewed and hired. The newly hired apprentice had been previously unable to find a job as a first year apprentice in another community and was willing to make the move to Peace River South.
- Another one of their apprentices was a resident of a rural community who had lots of previous experience doing carpentry work in the community but was never ticketed. He benefited from having his schooling paid for and the district benefited from having an experienced carpenter working for them.

“The ‘grow [their] own’ initiative has been very successful.”

### **SD 57 (Prince George)**

Prince George had an apprenticeship program prior to the creation of SSEAC but have since received SSEAC funding for four apprentices (Carpenter, Plumber, Mechanic, Painter). The reason Prince George is pursuing apprenticeships is for succession purposes as well as to facilitate the skill growth and education of the workplace. It “gives an opportunity to existing staff to further themselves”. They have had some challenges with the mentoring of the apprentices as well as the aptitude test but have overcome the challenges and think apprenticeships are a great idea and are hoping all apprentices will stay on with the district.

## **V. Appendix: SSEAC Background**

The SSEAC was created during the last round of support staff bargaining that covered the period from July 1, 2006 to June 30, 2010. The SSEAC was created during a mediated settlement between 11 School Districts and 13 support staff locals that concluded May 22, 2006. This settlement formed a Framework Letter of Understanding (FLOU) that was made accessible to all school districts and support staff locals that signed on to it. All school districts and union locals signed on to the FLOU.

The SSEAC was comprised of seven employer and seven union representatives and was responsible for managing agreed upon funding comprising of several components. The following are the funds that may relate to the trades workforce (does not include the Labour Market Adjustments):

- \$10,000,000 for Workforce Issues
  - a. \$3,000,000 for Apprenticeship Opportunities
  - b. \$3,000,000 for Skills Enhancement and Retraining
  - c. \$4,000,000 Workforce Adjustment Fund
- Apprentice Sponsor Funding
  - a. July 1, 2007 - \$828,000
  - b. July 1, 2008 - \$828,000
  - c. July 1, 2009 - \$828,000
- Trades Adjustment
  - a. July 1, 2006 - \$1,656,000
  - b. July 1, 2007 - \$828,000
  - c. July 1, 2008 - \$828,000

### **Apprenticeship Opportunities Fund**

The Apprenticeship Opportunities Fund was created, due to the general shortage of trades' people in BC, to encourage school districts to train apprentices thereby increasing the number of qualified trades' people in their district and the education sector. In order to access the Apprenticeship Opportunities funds districts and locals were required to complete an apprenticeship application and put together an apprenticeship plan. Based on districts and locals meeting the approval criteria they would be approved in principle for the requested funds. Once the parties submit documentation that the apprentice is registered with ITA the funds will be released annually until the apprenticeship is complete (SSEAC has not finalized how it will allocate remaining moneys for Apprenticeships should the term for SSEAC expire before the completion of the Apprenticeship plan. SSEAC has committed to provide all the moneys approved to districts for the Apprenticeship plan). SSEAC will cover predetermined costs such as tuition, books, travel, accommodation, supplies and tools. Districts may still apply for apprenticeships.

Districts that have already been approved in principle must submit ITA registration forms by June 30, 2009 or the funds will no longer be approved in principle and may be allocated elsewhere. The following is a brief synopsis of how many districts have applied for and received funds from the apprenticeship fund as at September 2008.

- Thirty three districts went through the majority of the application process, however, only twenty-two districts fully completed the application by providing an apprenticeship plan – these latter districts were approved in principle.
- Of those districts approved in principle five have submitted ITA registration forms for their apprentices and thus have received funds to cover those apprentices.
  - The types of trades that have been approved in principle for apprenticeships include but are not limited to: Carpenters, Electricians, HVAC technicians, Horticulturists, Auto Service Technicians, Heavy Duty Mechanics, Painters, Plumbers, and Commercial Gasfitters.

### **Skills Enhancement and Retraining Fund**

The Skills Enhancement and Retraining Fund was created to provide opportunities to increase the skill level of support staff employees. In order to access the Skills Enhancement and Retraining Fund districts and locals were required to submit a plan specifying what training they would offer their employees. The districts and locals were then allocated funds in principle pending invoices documenting what training the money was spent on. School districts are required to complete training and submit invoices by June 30, 2009. In some cases where documented training will take place over the summer and fall of that year districts can apply for an extension whereby all training and invoices must be submitted by December 31, 2009. If both a district and local want to change the training initiatives they previously identified they must re-submit the new training initiatives to the SSEAC prior to completing the training.

### **Apprentice Sponsor and Trades Adjustment**

A subcommittee was created to determine who would receive adjustments and therefore how much of an adjustment each eligible employee would receive. The apprentice sponsor and trades adjustment funding resulted in a 60 cent increase in each of July 1, 2006, 2007, and 2008 and a 30 cent increase for July 1, 2009. To be eligible an employee was required to be in a position that required a certified Trades Qualification (TQ) certificate. Employees that had a TQ but were in a position that did not require one were not eligible for the adjustments and also employees employed in IT jobs were also not eligible. It should also be noted that as each eligible employee was receiving the apprentice sponsor adjustment, they could be asked to provide a support role for any apprentices the school district may have.