

Landscapes

Published by **FORED BC** Est. 1925

Volume V Fall 1999

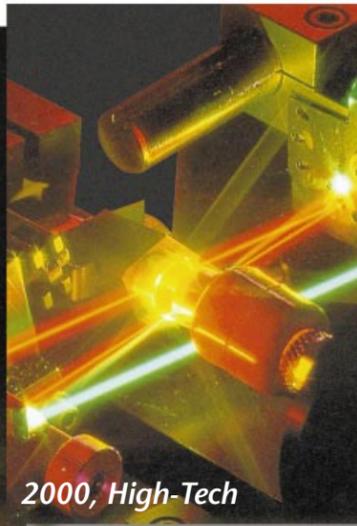
WHERE WILL OUR KIDS WORK? BC Jobs in 2010



1980, Oil and Gas



1990, Pop and Pills



2000, High-Tech



2010?

- Jennifer Kroepfl

There was a time when professions were so predictable that they worked their way into last names. Thus, people with surnames like Stewart, Taylor and Miner can most certainly trace their heritage to somebody in those respective occupations. When Napoleon decreed that, for the first time, everybody in his conquered countries should have a last name, surnames based on professions throughout Europe were an easy choice in the hasty scramble to comply.

If surnames today were selected based upon occupations, many would likely be meaningless in less than a generation. This volatility in the career marketplace poses a vexing question to parents, teachers and educational planners. The question, "Where will our kids work?", has particular importance in British Columbia where the puzzle pieces that make up our economy will be moved, reshaped or discarded in the next 10 years.

This question was the focus of a study released by the Laurier Institution in partnership with Human Resources Development Canada. The Laurier Institution is a non-profit agency established to study the social and economic impact of cultural diversity in Canada. The study, entitled *Youth 2010: Where Will the Work Be?* examines the changing job market in British Columbia, region by region, in an effort to predict where the student who currently sits in a Grade 4 classroom is likely to find occupational security.

Looking at the entire province, the study draws some general conclusions with respect to job growth. Forecasts indicate a dramatic increase in managerial positions in small business and the professions, a drop in clerical occupations such as executive assistants, and a much more diversified workforce in terms of ethnic background, abilities and gender participation.

Of the 300,000 new jobs predicted in the province by 2010, over 200,000 are projected to involve management, particularly in small business, the professions and self-employment. A further 130,000 jobs will be found in the service sector and sales. On the other side of the scale, the study concludes that while industries like mining, forestry and fishing "will still be important," occupations in these industries will be decreasing and they will be looking for more highly skilled workers. In the same period, the province is projected to lose 32,000 clerical jobs as computers take on more of these functions.

In terms of specific industries that will offer opportunity, the study concludes that services, finance, insurance and real estate, which include jobs extending from healthcare to high-tech, will offer the largest opportunity. The caveat is expressed that even in these industries, the increasing availability of services on the Internet combined with a computer-literate population will "byte" away at job growth. By contrast, the study contends that jobs in resources, trade, government and construction "will all decline in the future." The document predicts that "resource-related jobs such as sawmill workers, fishers and miners will not be common in



"Will that be carpenter or carpentier?"

STOCKS BREAKING THEIR BONDS

At the end of 1980, seven of the 10-biggest North American stocks, according to the Wall Street Journal, were oil stocks. In 1990, five of the top-10 places were taken by companies producing products like pharmaceuticals and soft drinks. In

1999, five of the top-10 stocks are in the high-technology field.

Based on this historical record, even the experts are cautious about predicting which industry will hold the majority of the top-10 places in 2010.

TSE NASDAQ DOW NIKKEI TSE NASDAQ DOW NIKKEI NASDAQ TSE

the future. Instead, jobs as computer programmers and engineers will be in greater demand by 2010." In addition to the obvious requirement for technical skills that will be required in this kind of a job market, the authors advise that communication skills, both written and verbal, will have high importance in an economy increasingly dependent upon relationship businesses.

Regional Outlook:

In the Vancouver Island/Coast region, the message for students in the study is quite direct. "Don't plan on a career in construction, processing, manufacturing, clerical, material handling, logging and fishing." These jobs will not be found in the growth areas of management, sales and services, which account for virtually all of 50,000-plus new jobs for the region. While the greatest job opportunities are projected to occur in finance, business, healthcare and tourism, all showing strong job growth, an employment reduction of eight per cent in primary industry jobs is forecast.

For the Lower Mainland, looking at future employment opportunities, the study asks, "What's hot?" and "What's not?". In the hot category can be found small business, sales and service, with the example of restaurant servers being cited. Under "What's Not?", the study suggests that "logging, fishing and mining do not offer a great deal of opportunity" for students in the Lower Mainland.

Because the Lower Mainland is the largest economic region in British Columbia "with more than half of the jobs in the entire province," the volume of job opportunities is staggering. In services alone, 185,000 new jobs will need to be filled over the next decade. With reference to the primary and trade industries, the study predicts that while these will also show the greatest decline in job opportunities, those vacancies that do become available will require people who are "computer-literate and who have strong writing and communication skills."

continued on page 2

IN THIS ISSUE



Two jurisdictions tackle teacher accountability (page 4). Environmental education under attack (page 3). How do our elected members view the big education issues (page 6).

Plus: Lesson plan contest for teachers (page 16) and new classroom resources (pages 3-8).

Publication Agreement No 1484214



Where Will Our Kids... continued from page 1

The Okanagan is seen as a rapid-growth area for the period under study. While small business management occupations, mainly for the self-employed, are predicted to create the most jobs in the Okanagan region, the outlook in the "Not-So-

RESOURCE ROBOTS

The decline of resource-industry jobs in the next 10 years might be more accurately described as a decline in jobs as we now know them.

Research being conducted in the mining industry gives a glimpse of the not-too-distant future. Mining companies like Inco Ltd. have long used a large machine called a *scoop tram*, a combination of a small train and a front-end loader, to clean up tonnes of rubble and rock as far as a kilometre beneath the surface. Until now, *scoop trams* have been operated by an on-board driver.



Traditional resource jobs come to the city.

This year, Inco gave a demonstration of a robotic *scoop tram* called *RoboScoop* in operation in one of its Sudbury, Ontario mines, but being "driven" by a computer operator 400 kilometres away in Toronto in contact by satellite. The same technology is being explored by other mining companies as well as NASA, which is developing similar equipment for its Mars mission.

With developments such as these, the resource worker of the future is just as likely to be found in a Vancouver office tower as in a forest or mine.

Hot" category includes construction, clerical, primary sector jobs such as forestry and processing, and material handling. The study contends that these sectors "will not offer many opportunities for employment in this region in 2010," with jobs in the primary and processing industries declining by 11 per cent and 12 per cent respectively.

Because the Okanagan region is becoming a popular place to retire and visit, the authors suggest that most of the growth will occur in areas that cater to the needs of tourists and older residents. They advise job hunters to "look for recreation, healthcare and related occupations to be in demand." By contrast, the study warns that "forestry...has historically been a major employer of people of this region, but this trend will not continue."

For people living in the Kootenays, the good news in the study is that they need not worry about the pressures of rapid urbanization. "The Kootenays will probably not experience the kind of rapid job growth that will occur in the rest of BC," state the authors. Employment reductions in traditional areas such as processing and primary industries in the region are projected to be up to 15 per cent, with the drop of clerical employment at twice that level.

Service-related occupations in the region are the only bright spot with some 5,700 new positions predicted by 2010, but this growth is almost balanced by the loss of 4,700 positions in the more traditional industries.

In the Cariboo, the hot occupations are predicted to be in management and services. The authors warn that percentage growth should not be emphasized without understanding the hard numbers. For example, while a 12 per cent growth in transportation jobs is in the cards for the Cariboo, that only translates into a little more than 400 new jobs in the next 10 years because of the small number of people working in this occupational sector. In

In services alone, 185,000 new jobs will need to be filled over the next decade.



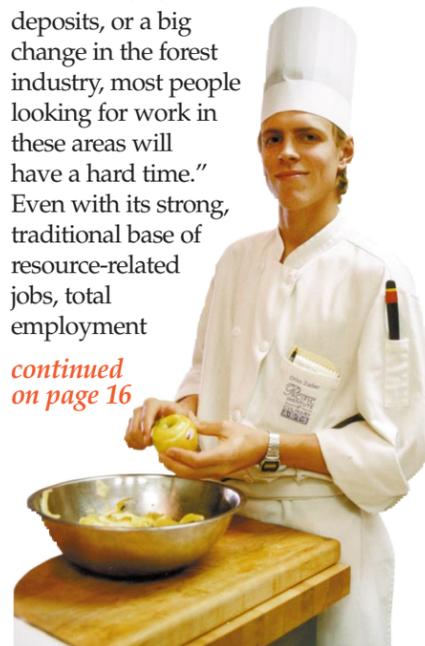
Jennifer Kroepfl

Student chefs in training at Vancouver's Pacific Institute of Culinary Arts. From left to right: Vernon Last (instructor), Adrian Webb, Nancy Chen

absolute terms, the biggest job losses will in the clerical area, with construction and primary industries also dropping significantly. The service industries in the Cariboo region are predicted to lead job growth in areas from high-tech consulting to healthcare. Primary sector jobs will decrease, as will jobs dependent upon government funding.

Northern BC offers some of the biggest surprises in the study. The authors warn, "Unless there is a significant discovery in mineral or oil deposits, or a big change in the forest industry, most people looking for work in these areas will have a hard time." Even with its strong, traditional base of resource-related jobs, total employment

continued on page 16



Otto Zeller, student.

WHERE WILL OUR TEACHERS WORK?

Roslyn Kunin is the Executive Director of the Laurier Institution. In a commentary on the study, she ponders whether teachers in the K-12, post-secondary and private school systems in BC will be immune from the impact of career change.

"Almost one in three workers in our society is currently over 45 years of age, and in certain professions such as teaching, the over-45's make up almost one in two.

Does that mean that over the next 20 years, as half of the province's 70,000 teachers reach retirement age, there will be more than 30,000 teaching jobs opening up, complete with tenured job security, benefit plans and long summer holidays? Don't count on it.

Where is it written that in 20 years, we will be delivering all or any education in full-frontal instruction in classrooms staffed by government employees? In twenty years, many child and adult students could well be learning in cyber-space with only occasional weeks or weekends, all in one place, with an instructor. In the future, teachers are more likely to be fewer in number, highly specialized and working on contract to develop and monitor electronic courses or to teach occasional intensive seminars."

From The Readers

Since the spring 1999 edition of *Landscapes*, we've received a number of responses from our readers. Here are excerpts from some of these letters:

"*Landscapes* is an excellent publication and I look forward to receiving it. Even though my work is in the field of marine education, I read *Landscapes* with great interest and there is always something that I can apply to my work."

– Sue Wallace, Education Coordinator, International Marine Mammal Association (IMMA), Guelph, Ontario

"I picked up a copy of the newsmagazine *Landscapes*, that you produce for educators. I was quite impressed by its quality and the amount of information you have included in it."

– Lise Rivais, Education Sector Consultant, Statistics Canada

"Many teachers receive and speak very highly of your publication."

– Bonnie Jeston, President, BC Primary Teachers' Association

"I am pleased to see that biotechnology received a full page of text and I anticipate that this will help us with our awareness campaign."

– Theresa McCurry, Executive Director, BC Biotechnology Alliance

"I can't thank you enough for the wonderful articles you put in the latest *Landscapes*. Isn't it wonderful that teachers may soon believe that agriculture is also a resource-based industry. I thank you for blazing the trail in resource-based education."

– Lindsay Babineau, Project Coordinator, BC Agriculture in the Classroom

Where Will Our Kids... *continued from page 2*

in this region of BC is predicted to drop by more than 7,000 jobs in the next 10 years. Even the fields such as management and services, which have a rosy outlook in other regions of BC, are predicted to experience job losses in this region with the only bright spot being a growth in transportation occupations.

In terms of “What’s Hot” in Northern BC, the authors caution, “In the future, the North will have to make a big adjustment to the new high-tech and service-based sectors.” On a brighter note, it adds, “Settling Aboriginal treaties will lead to investment and growth and the creation of many jobs in the Aboriginal and other communities of the north.” On a sober note, it warns that “fisheries, mining and forestry industries will all be reducing their work forces.”

Northern BC offers some of the biggest surprises in the study.

Conclusion:

The certainty of unprecedented economic change in British Columbia poses some daunting questions for the education community. Some will ask how much faith can be placed in predictions about job classifications. Others will wonder if the education community can respond quickly enough. After all, it can take up to four years to fully integrate a new course into the curriculum. And there is a large body of opinion within the education community holding the view that education need not respond to changes in the economy because it is not the task of educators to prepare workers.

While these perennial questions are being sorted out in academic papers, policy conferences, and collective bargaining agreements, there is one certainty. The students entering Grade 4 this September will one day work in a very different British Columbia.

