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ABSTRACT

This 1994 environmental scanning report from Vancouver Community College (VCC) reviews the expected effects of the separation of VCC into a new Vancouver Community College and Langara College (LC). The report examines the projected service area student-intake capacity; student characteristics; population growth trends; other postsecondary institutions; future job opportunities; VCC support staff, faculty and administrators; operating space; accessibility; source of revenue; management information; strong and weak points; threats; opportunities; recommendations; and suggestions. Highlights of the report include the following: (1) 48% of the new VCC's students will be enrolled in Adult Basic Education and English-as-a-Second Language programs, less than 1% in apprenticeship programs, 11% in career and technical programs, and 41% in vocational programs; (2) full-time equivalency enrollment in the new VCC is projected to grow at the rate of 0.4997% of the 18-64 age group in the Greater Vancouver Regional District and expected to climb to 6,190 by 2000; (3) the main strength of the new VCC is its location at the center of the largest municipality in British Columbia; (4) the main weak point is the lack of university transfer programs; (5) the main threat to the new VCC is the growth of private training institutions in the Lower Mainland; (6) the main opportunity for revenue is in government training and training-related contracts; and (7) the greatest challenge is to raise morale and get out of the old VCC's chronic financial difficulties. (KP)

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# Environmental Scanning

## Vancouver Community College

December, 1994

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## Executive Summary

- After the Langara-VCC separation, 48% of the new VCC's students will be enrolled in ABE and ESL programs, less than 1% in apprenticeship programs, 11% in career and technical programs, and 41% in vocational programs.
- Based on the enrolment data at KEC and City Centre in the past eight years and the population growth projected by Statistics Canada, FTE enrolments in the new VCC are projected to grow at the rate of 0.4997% of the 18-64 age group in the GVRD general population and are expected to climb up to 6190 in Year 2000.
- The main strength of the new VCC is its location. Located at the centre of the largest municipality in B.C., the new VCC will enjoy a stable student intake source and abundant employment opportunities for its graduates.
- The main weak point of the new VCC is the lack of university transfer programs. Without university transfer programs, the new VCC is hardly a comprehensive community college.
- The main threat to the new VCC is the growing private training institutions in the Lower Mainland. The private institutions are getting training contracts in VCC's traditional fields from government agencies that would otherwise have been awarded to VCC.
- The main opportunity for revenue the new VCC has is in government training and training-related contracts. Each year, both federal and provincial governments spend millions of dollars on contracted training and training related services. The new VCC has quality instruction and support services needed to win these contracts if cost of delivering services is competitive.
- The greatest challenge for the new VCC is to raise morale and get out of the old VCC's chronic financial mess. The new VCC needs to set up an efficient organization structure and build up a healthy organization culture.

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## **Environmental Scanning - 1994 Vancouver Community College**

Much has changed since the last VCC environmental scanning (1992). Internally, the existing Vancouver Community College (VCC) is scheduled for a disintegration, from which two new institutions shall be born - a new Vancouver Community College and Langara College. Externally, VCC's reporting and funding organization, the Ministry of Advanced Education, Training and Technology, has disappeared as part of the provincial government's effort of reorganization. In its place came the Ministry of Skills, Training, and Labour, which created a new topic for professors of educational administration in universities all over the country to debate whether higher education is skill training or research. While the theoretical debate in universities has little impact yet upon the daily life of the largest community college in the province of British Columbia, the separation of the existing VCC concerns everybody within the organization, collectively and individually. Collectively, the immediate questions are where the two new colleges are heading and how the new VCC can deliver quality education to its students. Individually, the immediate question is what my role is in the two new organizations. To ensure a smooth transition from the existing VCC to the two new institutions, it is vitally important that these questions are adequately addressed. To address these practical questions, there is a need for a review of VCC's environment, i.e., who we are and where we are, internally and externally. As the old Chinese saying goes, to win, thou have to know thyself. We need to create a win-win situation for the two new colleges, and a win-win situation for the management, faculty, staff and students. To do so, we need to know ourselves. With such a purpose, the current report attempts to provide information for planning and decision making for the transition of the old to the new and the birth of a new Vancouver Community College.

### **Service Area and Student-intake Capacity of the Current VCC**

With its three main campuses, Langara, KEC, and City Centre, the current VCC provides education and training services to students mainly from Vancouver, and parts of Burnaby and Richmond. This basic service region overlaps those of Kwantlen College in Richmond, Douglas College and BCIT in Burnaby, and Capilano College in North Vancouver. In the 1992/93 fiscal year, the College provided education and training to

9,270 full-time equivalent students (FTE's) and achieved an FTE utilization rate of 91.5%. Of the 9,270 full-time equivalent students, 24.8% were enrolled in adult basic education programs, 19.1% in career/technical programs, 30.6% in academic programs, and 24.8% in vocational programs. In total, VCC FTE enrolment was 14.7% of that of the whole BC college and institutes system (16 colleges and 2 institutes). However, in terms of funded FTE utilization, VCC had the lowest utilization rate of the six urban community colleges in the 1992/93 fiscal year.

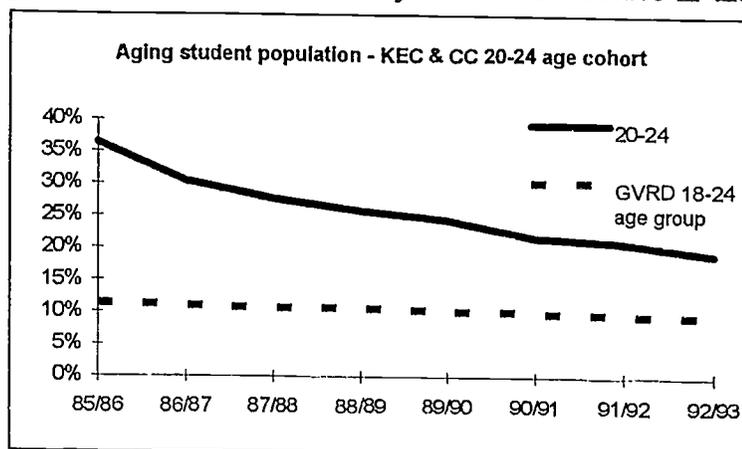
### Projected Service Area and Student-intake Capacity

Based on the current funding level and program profile, the new VCC and Langara College are projected to retain the current VCC service region, with the incoming Langara College focusing on the needs of students for academic programs and the new VCC concentrating on students wishing to take vocational and technical training programs. The incoming Langara College will have an education capacity for 4,700 FTE's, with 70% of the FTE's in academic programs, 28% in career/technical programs, and about 2% in vocational programs. With such a projected FTE delivery capacity, the incoming Langara College will take the fourth place of BC's urban community colleges (after Kwantlen College, the new VCC, and Camosun College).

Based on the current program profile and funding level, the new VCC will be the second largest community college (second to Kwantlen College) in British Columbia with an education/training capacity of 5,400 FTE's. Of the 5,400 FTE's, 48% will be in ABE and ESL programs, less than 1% in apprenticeship programs, 11% in career and technical programs, and 41% in vocational programs.

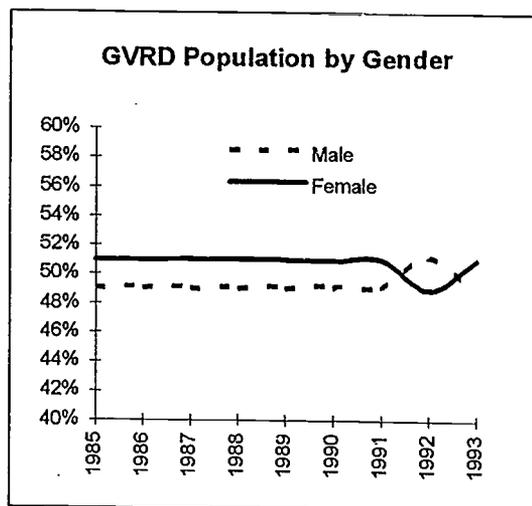
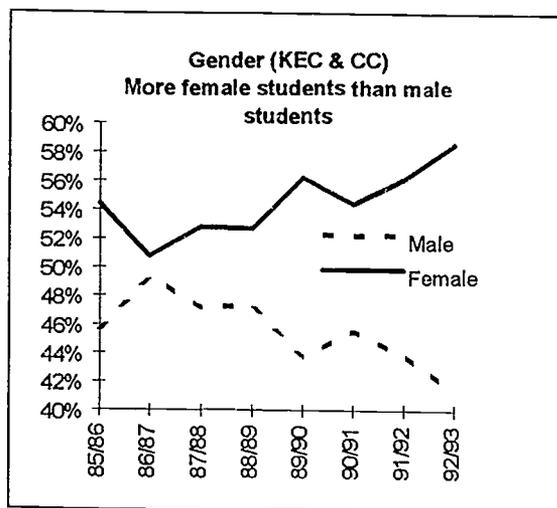
### Student Characteristics

*Age distribution.* In general, VCC's students are getting older. This is more obvious in VCC's non-academic programs. In the past eight years, the enrolment of the student cohort of 20-24 years of age at KEC and City Centre has been consistently declining from 36.4% of the total student population in the 1985/86 fiscal year to a low 19.1% in the 1992/93 fiscal year. The same pattern, though to a less degree, can also be observed at Langara. In comparison, the 18-24 age group in the GVRD total population has been fairly stable over the past eight years. In addition, the 20-23 age group enrolment at BCIT has been stable in the past four years. This suggests that the aging

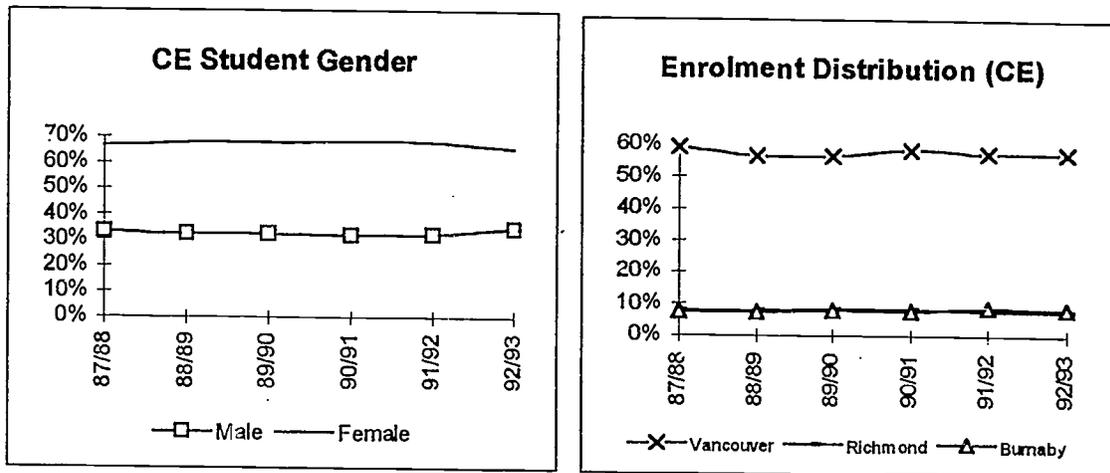


student population is a VCC phenomenon. For some reasons, we have not been as much an attraction as BCIT to the 20-24 age cohort of the general population in the Greater Vancouver Regional District (GVRD). For detailed information on VCC student age distribution, please see Appendix.

**Gender.** VCC's student records at KEC and City Centre indicate that over the past eight years female students' participant rate at these two campuses is consistently higher than that of the male students, and the gap is getting wider. Currently, VCC's female participation rate at KEC and City Centre is nearly 59% while the male participation rate is only 41%. In comparison, the male-female ratio of the general population in GVRD is more or less evenly distributed and stable in the same eight years. This suggests that VCC's traditionally women-centred programs such as Practical Nursing and Institutional Aide at KEC and City Centre are doing fine. On the other hand, this also suggests that there is still room for the existing programs to attract more male students from the general population.

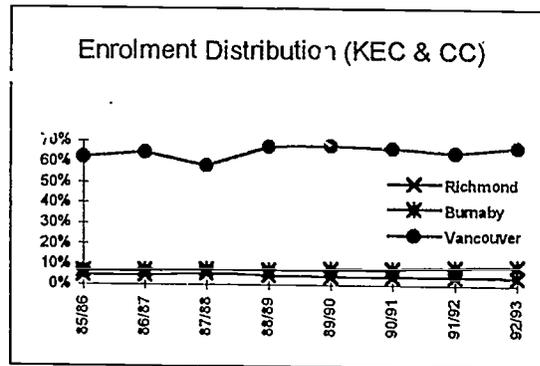


The same pattern of disproportional gender participation is also observed in Continuing Education Division. Over the past six years, there has been a consistent high participation by women students (67%) in various CE programs. Male participation rate remained at about 33%. Please see the next page for a graphic presentation of CE student gender distribution.



*Student residence.* Student records indicate that over the last eight years consistently about 60% of the students at KEC and City Centre were from Vancouver, 10% from Richmond, and 6% from Burnaby. Similar student residence distribution is also observed

of CE students. This suggests that despite the new establishment of Kwantlen College in Richmond and the expansion of Douglas College and BCIT in Burnaby, the number of students enrolled in the career/technical and vocational programs at KEC and City Centre from Vancouver, Burnaby and Richmond has been stable. On the other hand, as predicted in the



VCC 1992 Environmental Scan, we are beginning to see a decline of student enrolment in academic programs at Langara, which seems to be a result from the increasing enrolment of Kwantlen College's new campus in Richmond. We will discuss each of VCC's neighbouring public post-secondary institutions in details in later sections of this report.

**Local Population Growth Trends**

In general, VCC's student enrolment is mainly affected by four local population related factors: aging population, the 18-34 age cohort, inter-provincial migration flow, and immigration flow.

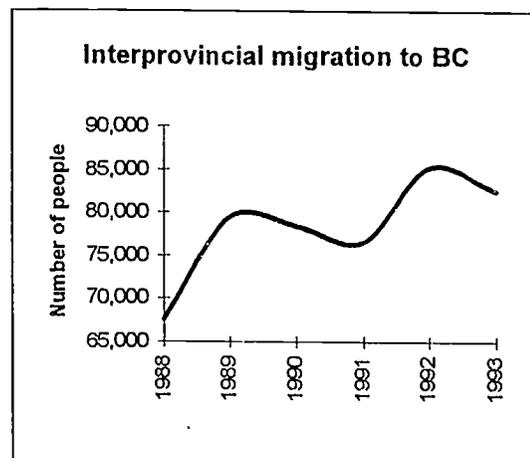
*Aging population.* If the population projections made by the Planning and Statistics Division of BC Ministry of Finance and Corporate Relations are correct, the portion of



older people in the local population is increasing, and by the year 2021 about 33% of the GVRD population will be 55 years old or older. This will have a tremendous impact upon VCC's student enrolment. On the one hand, it implies that if the new VCC does not adjust the target audience of the current programs, by 2021 it may be difficult to fill in the seats in the classrooms. However, as the total GVRD general population is increasing, the absolute number of young people in the GVRD population will not decrease, and we probably will not experience any noticeable drop of enrolments in the next 20 years. On the other hand, it may be an opportunity for the new VCC's ABE and continuing education programs to expand. If the subjects of the programs are interesting to this age cohort (e.g., planting, cooking, wine making, photography, and dancing), some members of this age group will take part in the training. Financially, this older age cohort is the most affluent of all age groups and will not hesitate to pay a small fee for something they like to learn. In addition, given the aging trend in GVRD population, perhaps the new VCC should also consider extending its fund-raising efforts to this older affluent age cohort rather than focusing on alumni and corporate partners alone.

*The 18-34 age cohort in GVRD.* The growth of this age cohort in GVRD will be slow. The statistics released by the Planning and Statistics Division of BC Finance and Corporate Relations project that the 20-29 age cohort, the main enrolment source, will grow at a very slow pace in the next twenty years. The 30-34 age cohort, the second largest enrolment age group, will stop growing by 1995. The flat growth curves of these two age cohorts will prevent the enrolment in the existing programs from growing as these programs are targeted at these younger cohorts. To increase student enrolments, it is important that the new VCC reviews the goals and contents of its existing programs and makes them suitable to an audience with a wider age range.

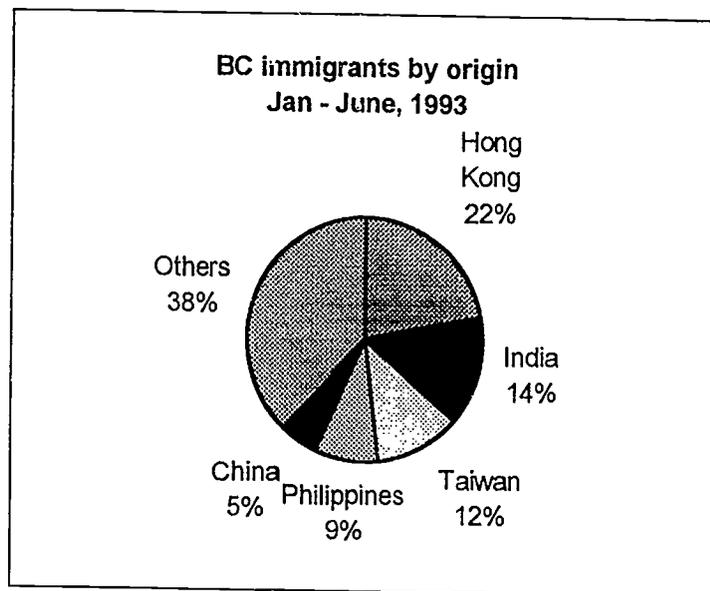
*Migration flow to BC from within Canada.* Interprovincial migration is gradually increasing. Over the last five years, there were more people moved to BC from other provinces and territories than people who moved out to other places in Canada from BC. According to the most recent Statistics Canada data, Ontario contributed the largest number of people (5,836) to BC in the third quarter of 1993, and Alberta was the second largest contributor (4,863) in the same period of time. Generally speaking, there are two kinds of people in the Interprovincial migration flow. One is younger people attracted to BC by the West coast's healthy economy and job opportunities; the other is the retirees who like the milder climate in BC for their golden years. If BC's economy remains healthy and the job opportunities do not improve in the East, the interprovincial



migration by the younger group will keep growing. As for the older group, they will come to BC regardless of the economy. One factor that might have contributed to the migration from Alberta to BC is the difference between the amount of welfare money paid by BC and Alberta governments. As long as the difference exists, we will see more migrants from Alberta lured here by the higher welfare cheques. The steadily growing interprovincial migration of the younger group to BC will keep the demand for job training high. As the second largest community in BC after the VCC-Langara separation, the new VCC is expected to play an important role in meeting the demand of job training from these people.

*Immigration flow.* Because of BC's geographic location, healthy economy, and mild climate, in the past ten years about 15% of Canada's total new immigrants settled down in BC. Statistics Canada data show that Asia has been the major source of the new immigrants.

For the first half of 1993 alone, 74% of the BC immigrants came from Asia. The steady flow of a large proportion of non-English speaking immigrants from Asia will continue the demand for ESL training and job skill training. Since VCC is a large urban community college with a heavy ESL and vocational component, the demand for training at VCC from immigrants will continue to be high and steady. As the new Liberal federal government seems to continue the Tory's



immigration policies, there will be little change in funding level for language and job training in the immediate future. However, as the provincial NDP government is restructuring the ministries responsible for education and training and that the provincial election is getting close, it is expected that there will be some change in funding for education and training on the provincial level in the next few years.

### FTE Growth Projections for the New VCC

We have talked about VCC's service region, student characteristics, and local population growth trends. Now you may ask what the future VCC enrolment will look like after Langara is no longer part of VCC. In this section, we will project the FTE enrolment of the new VCC in the next six years based on the population trends in GVRD and VCC's existing program profile. The model for the projection is modified from the Ministry of Skills, Training, and Labour for allocating FTE funding. The formula is as follows:

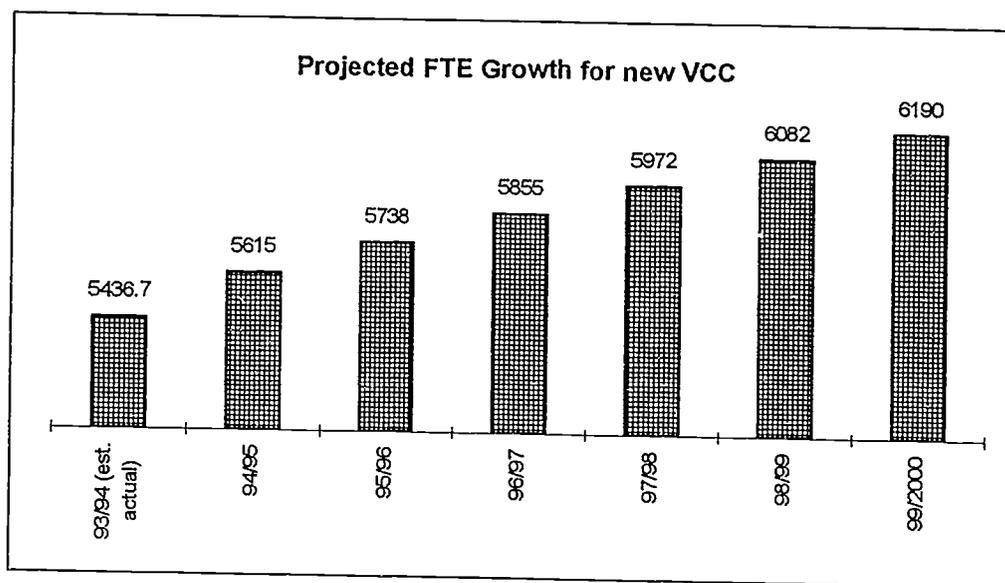
**Step 1:**

# of KEC/CC/CE actual FTE's ÷ # of 18-64 in GVRD population in the last eight years  
 = New VCC FTE growth rate (0.4997%)

**Step 2:**

New VCC FTE growth rate \* projected # of 18-64 in GVRD population = Projected new VCC/CC FTE's

The outcome is as follows:



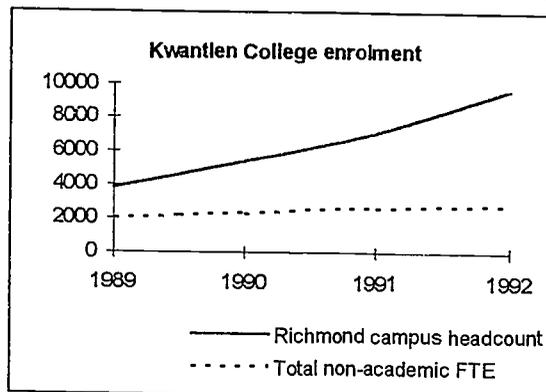
This means that if (1) the population growth projections by Statistics Canada is correct and (2) the program profile of the new VCC will largely remain unchanged, it is expected that the new VCC FTE enrolment will be growing in the next six years.

**Other Postsecondary Institutions Sharing the new VCC's Service Area**

From business point of view, we may just call the postsecondary institutions sharing the same service area with VCC as VCC's competitors. This may sound a little commercial. However, if we consider job training and language training as services, then it is not inappropriate to call VCC's neighbouring educational institutions as competitors, because they are competing with VCC for students from the same area and for funding from the same source. In terms of VCC's service area which mainly consists of Vancouver, Burnaby and Richmond, VCC's competitors include Kwantlen College, Douglas College, Capilano College, BCIT, UBC, SFU, and to some extent small private institutions and school board night schools. However, in terms of the program components at KEC and

City Centre, the two universities are much less competitors, unless KEC and City Centre decide to offer academic programs after the VCC-Langara separation. In the following paragraphs, we will discuss these competing institutions in more details.

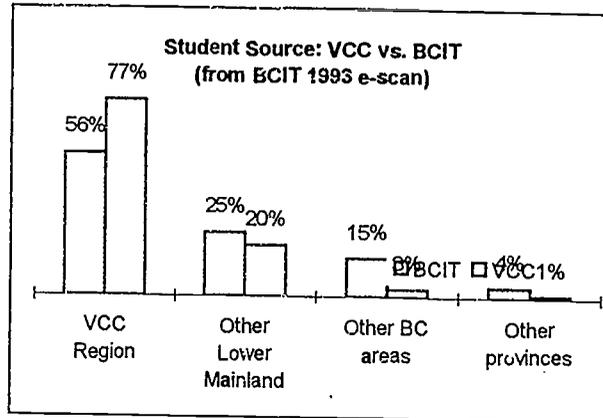
*Kwantlen College.* Kwantlen College is the youngest but fastest growing urban community college in GVRD. Geographically, it stretches from as far as Langley to as close as Richmond, covering all of Surrey and Delta. Its student enrolment has been jumping bounds and leaps and so has its funding. For example, in the 92/93 fiscal year, it was funded 5,002 FTE's but delivered 5,216 FTE's, achieving an amazing 104.3% utilization rate. As a result, in the 1993/94 fiscal year it was awarded 6,052 FTE's, a 21% increase over the previous fiscal year. It has the newest, and the best, instruction and administration facilities of all BC urban community colleges, and has become an envy in the BC



college and institute system. After VCC-Langara separation, if the new VCC's funded FTE's are not increased, Kwantlen College may easily replace VCC as the largest community college in the province. In terms of competition, Kwantlen College's real threat to the new VCC is its Richmond campus. Up until now, about 10% KEC and City Centre students have been from Richmond. With the permanent establishment of Kwantlen College's Richmond campus, VCC's student enrolment from Richmond may decline substantially if VCC does not find some ways to attract students from Richmond. Kwantlen College's Richmond campus was built to house 2,400 FTE's, most of which were designed for career and technical programs. According to Kwantlen College's enrolment report (1992, 1993), the enrolment at its Richmond campus now stands at 38% of the college's total enrolment. In terms of program areas, 20% of its enrolment at Richmond is in business programs, 17% in applied design and communication programs, 4% in college preparatory programs, 2% in technology programs, and 57% in academic programs. Furthermore, enrolment in 1993 at Kwantlen College's Richmond campus increased as much as 15.8% over 1992. With the increasing funding from the government and the growing population in Richmond, Kwantlen College is meeting its target as set in its three-year plan for its Richmond campus (c.f. *Kwantlen College Three-Year Plan 1991-1993*). To attract more students from Richmond, the new VCC must review and improve its programs and make them more attractive than those at Kwantlen College.

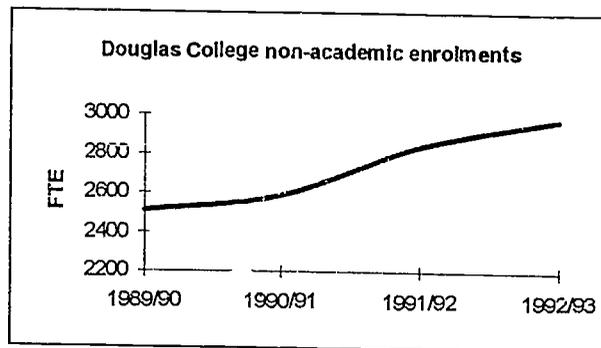
*BCIT.* As a specialized public educational institution, BCIT is focusing on establishing expertise in specific technological areas and developing applications for BC business and industry. It has an annual enrolment of 32,000 students (about 8,000 FTE's) from all over the province. Although its programs are generally high-tech oriented, BCIT competes with the new VCC in a number of programs such as ABE programs, apprentice programs,

some career and technical programs, vocational programs and nearly all of its night-school programs. This is obvious if we examine BCIT's service region which is substantially overlapping with VCC's. According to BCIT's 1993 *Environmental Scan Report*, in 1993, 27% of BCIT students were from Vancouver, 9% from Burnaby, 8% from North and West Vancouver, and 6% from Richmond. The report indicates that 56% of BCIT's students were from



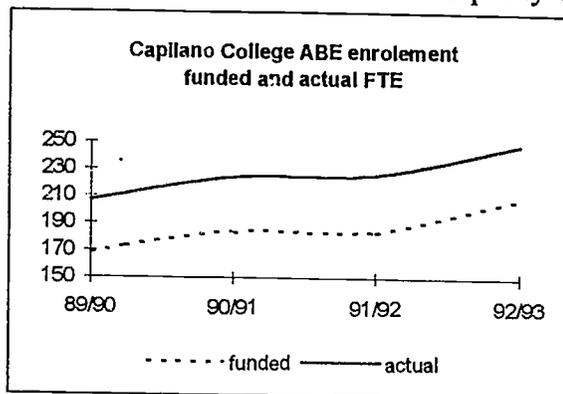
VCC's service region. Given BCIT's geographic location and program profile, BCIT will continue to gain students from VCC's service region. However, if the new VCC is able to enhance and improve its traditional strong programs such as ESL and ABE, the new VCC may be able to remain a serious competitor to BCIT. The question is how and where should the new VCC begin?

*Douglas College.* As one of the older colleges in GVRD, Douglas College has one main campus in New Westminster, one new medium-size campus in Coquitlam, and two small campuses in Maple Ridge. It has a tradition of building and maintaining partnerships with local communities and school boards, and has been enjoying strong community support. Despite Kwantlen



College's separation from it in 1981, Douglas College managed to expand its service capacity from the low 2,000's to 4,800 FTE's (1992/93). According to Douglas College's three-year plan (1991-1994), about 16% of its students come from Burnaby, 11% from New Westminster, and 12% from Vancouver. That is, in total, Douglas College recruits about 39% of its students from VCC's service area. Facing this challenge, the new VCC has to come up with some good strategies to maintain VCC's student enrolment in the overlapping areas with Douglas College.

*Capilano College.* Capilano College's basic service region is North and West Vancouver, which is often referred as the North Shore area. Currently, it has a service capacity of 4,170 FTE's, of which 6% is in ABE programs, 30% in career/technical programs, 56% in academic programs, and 8% in vocational programs. Over the past five years, Capilano College has been enjoying a stable student enrolment and funding, and has consistently achieved 100% or better funding utilization rate. It is aiming at serving 7,000 FTE's annually by Year 2000 (*Capilano College 1991-1994 Plan*). In short, Capilano College is a healthy and growing public postsecondary institution. As a successful postsecondary institution, Capilano College is able to attract about 22% of its students from Vancouver, and 10% from Burnaby (*Capilano College Enrolment Report 1994*). Namely, about 32% of their students are from VCC service region. In contrast, 60% of the students at KEC and City Centre are from Vancouver and only 6% from Burnaby. In a sense, VCC is doing less well than Capilano College in attracting students from Burnaby. Capilano College is doing particularly well in its ABE program. Although its ABE program is only 6% of its total program profile, Capilano College's ABE enrolment has been soaring and outperformed its funding level by as much as 20%. Given the geographic proximity between Capilano College and KEC, Capilano College's ABE enrolment growth should be monitored closely.



*UBC and SFU.* There are two universities, University of British Columbia and Simon Fraser University, in VCC's service region. However, because the mandates and program profiles of these two universities differ so much from that of the new VCC, there is little impact from the universities upon the regular enrolment at KEC and City Centre. The competition, if any, is in continuing education since both universities have vigorous programs in their extension divisions.

*Private Training Institutions.* In the 1992/93 fiscal year, various federal agencies awarded about 22 million dollars to private training institutions in B.C, which is equivalent to 6000 training seats. According to the registration records at the Ministry of Skills, Training and Labour, there are about 600 private training institutions registered in British Columbia under the B.C. Private Post-secondary Education Act. About 80% of these private training institutions are located in the Lower Mainland and offer training in VCC's traditional program areas such as ESL, ABE, hairdressing, and other service-oriented programs. As matter of fact, many of the private ESL training schools hired former VCC instructors to teach their students. Because there are little support services in these private training institutions and the salaries for instructors are lower than those at VCC, the overall cost in these private institutions is low. Therefore, when federal agencies are

looking for ways to reduce training cost, these private training institutions are often successful in obtaining federal grants and contracts, some of which could have otherwise come to public training institutions. In view of the new Liberal federal government's policies to cut down cost and create jobs, it is expected that these private training institutions will continue to win training grants and contracts over public institutions from the funding agencies at the federal level, thus posing a serious threat to VCC's existing contract programs and services. Unless VCC is competitive in terms of training cost, it will be difficult for VCC to obtain federal training contracts and services, and in turn VCC may also lose some of its instructors to private training institutions.

### **Future Job Opportunities for VCC Students**

With the unemployment rate staying as high as 10.1% in B.C. (*B.C. Stats: Labour Force Statistics, Feb. 4, 1994*), the main concern for most KEC/CC students is if they are able to find jobs after they complete their training at VCC. In this section, we will review employment prospective for students in the programs currently offered by KEC and City Centre. The main reference we will use for the review is *Job Futures: British Columbia Occupational Outlooks* released in 1993 by Employment and Immigration Canada. Other related publications such as *British Columbia Labour Market and Training Needs Analysis (Winter, 1993)* by the Open Learning Agency were also be consulted.

Although B.C. economy has been better than that of the rest of the country in the last two years, the slowdown in the business sector is evident. High unemployment rate seems just reluctant to part with us, and employment future for young people in the next two years is not bright at all. This forced the Liberal federal government to modify its optimistic view about job future in the country. In his release of the new budget for the next fiscal year (94/95), the federal Finance Minister Paul Martin projected that the national unemployment rate would stay around 11% in the next two years. Then, the question is "Where are the jobs?"

If you believe the findings by Employment and Immigration Canada, then the answer is that jobs are getting fewer because we are experiencing what they call a "jobless recovery of economy". That is, although our economy is getting better, we are improving our economy with little increase of human resources. In B.C., jobs are being created, but not as fast as the pace of migration flow. As a result, there is still a high unemployment rate in B.C. Further, most of the jobs created in B.C. are part-time and most likely in service-oriented industries. Statistics Canada data suggest that three quarters of B.C. workers now are working in service industries.

According to Employment and Immigration Canada (1993), jobs in the following fields will grow strongly and possibly experience a shortage of qualified applicants:

- ⇒ Management jobs, especially in health and education
- ⇒ Electronic, electrical, mechanical and software engineers \*

- ⇒ Chemical, biological, and environmental scientists
- ⇒ Electronics, environmental, forest technicians \*
- ⇒ Social workers
- ⇒ Physiotherapists, occupational and speech therapists
- ⇒ Dental hygienists \*
- ⇒ Technicians in radiology, respiratory, dental fields \*
- ⇒ Home care workers \*
- ⇒ Horticulturists/technicians for biotech, organic and greenhouse farming
- ⇒ Forestry conservation, tree planting
- ⇒ Bakers \*
- ⇒ Machinists with computer related skills \*
- ⇒ Electronics repairers \*
- ⇒ Auto mechanics/technicians with technical skills \*
- ⇒ Autobody repairers \*
- ⇒ Industrial mechanics
- ⇒ Electricians \*
- ⇒ Plumbers/Pipe fitters
- ⇒ Construction jobs related to housing renovation
- ⇒ video and sound equipment technicians and operators

\* indicates training program for the field is available at the new VCC

The same source also indicates that the following fields will have the most job openings in B.C. in the 90's:

- ⇒ Registered nurses in specialist fields and with bachelor's degree
- ⇒ Secretaries with specialized skills - legal, administrative, desktop publishing \*
- ⇒ Bookkeepers with computer skills \*
- ⇒ Salespersons, especially in services
- ⇒ Sales managers
- ⇒ Cashiers and tellers
- ⇒ Chefs and cooks \*
- ⇒ Waiters and waitresses \*
- ⇒ Childcare workers
- ⇒ Accountants and financial managers
- ⇒ Computer operators \*
- ⇒ Receptionists \*
- ⇒ Janitors \*
- ⇒ Executive and general managers
- ⇒ Elementary school teachers

- ⇒ Jobs in welfare and community services
- ⇒ Managers in services \*
- ⇒ Computer programmers and systems analysts
- ⇒ General office clerks \*
- ⇒ Restaurant and hotel supervisors \*

\* indicates training program for the field is available at the new VCC

The following job fields are projected to experience the fastest DECLINE in B.C. in the 90's:

- ⇒ Government administrators
- ⇒ Government inspectors
- ⇒ Middle/lower managers
- ⇒ Drafting-unless computer oriented
- ⇒ Various office workers - typists, file clerks
- ⇒ Inventory clerks
- ⇒ Telephone operators
- ⇒ Travelling salespersons
- ⇒ Buyers
- ⇒ Farmers
- ⇒ Fishing occupations
- ⇒ Processing inspectors & equipment operators in manufacturing
- ⇒ Processing labour: sawmill, plywood, food processing labour
- ⇒ Shoe repairers
- ⇒ Furriers
- ⇒ Railway conductors, operators, repairers
- ⇒ Deck crew, officers
- ⇒ Route drivers
- ⇒ Packaging & material handling labour, longshore workers
- ⇒ Projectionists

As we can see from the above lists, VCC offers quite a number of programs in the fields projected to have strong job growth or most job openings in B.C. in the 90's, and none in the fastest declining job fields. It implies that, in general, VCC is on the right track. The only job field in the fastest decline category VCC may be associated with is drafting. However, fortunately, CAD training has long been incorporated in all of VCC's drafting programs, and therefore VCC's drafting programs are on the healthy side. Nonetheless, to stay competitive, the new VCC needs to keep an eye on job market trends in B.C., and regularly review and revise its programs accordingly.

In the following section, we will present more detailed information on the current and future job prospective for VCC's existing programs by instructional division. Because the curriculum goals of ABE/ASE/Academic Division and ESL Division are not directly associated with job placement, the information is provided only for the three career\technical\vocational divisions. Programs within a division are sorted by the projected employment growth rate.

#### Tourism, Hospitality and Service Division

	B.C. Employment Trends & Projections					Full-time annual income 1992	% of Jobs in Lower Mainland
	Number of Employed			Annual Growth (1992-2001)	Job Openings (1992-2001)		
	1986	1992	2001				
Retail Meat Processing	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Asian Culinary Arts	20950	26840	36890	3.6%	15580	\$ 19,500	51%
Baking and Pastry Arts	20950	26840	36890	3.6%	15580	\$ 19,500	51%
Culinary Arts	20950	26840	36890	3.6%	15580	\$ 19,500	51%
Food & Beverage Management	6790	8130	10070	2.4%	3530	\$ 25,200	59%
Hairstyling/Ethetics	13130	11790	14570	2.4%	5300	\$ 19,600	57%
Institutional Aide	4780	5510	6400	1.7%	2370	\$ 17,900	42%
Hospitality Administration	8910	11110	14760	3.2%	7780	\$ 26,700	53%
Travel Agent	4320	5380	6200	1.6%	1920	\$ 28,600	71%
Building Service Worker	22590	24760	26300	0.7%	9220	\$ 24,800	53%

#### Business and Health Division

	B.C. Employment Trends & Projections					Full-time annual income 1992	% of Jobs in Lower Mainland
	Number of Employed			Annual Growth (1992-2001)	Job Openings (1992-2001)		
	1986	1992	2001				
Business Ed. Preparation	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Small Business Development	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Dental Assisting/Reception	3840	4230	6180	4.3%	2850	\$ 26,900	57%
Dental Hygiene	3840	4230	6180	4.3%	2850	\$ 26,900	57%
Pharmacy Technical Assitant	4530	5430	7210	3.2%	2780	\$ 36,100	66%
Long-term Care/Allied Health	9660	11880	14510	2.2%	5570	\$ 26,000	53%
Practical Nursing	9660	11880	14510	2.2%	5570	\$ 26,000	53%
Medical Office Careers	38620	46060	55340	2.1%	21120	\$ 25,300	62%
Accounting Computer Mgt	43460	51400	58410	1.4%	19950	\$ 26,300	59%
Office Administration	15800	18120	20560	1.4%	6800	\$ 26,700	61%
Dental Technical/Denturists	950	1000	1050	0.5%	280	\$ 30,700	70%

**Applied Arts and Technical Division**

	<b>B.C. Employment Trends &amp; Projections</b>					Full-time annual income 1992	% of Jobs in Lower Mainland
	Number of Employed			Annual Growth (1992-2001)	Job Openings (1992-2001)		
	1986	1992	2001				
Electronics Technician	3620	4520	5650	2.5%	1620	\$ 40,000	62%
Computer Graphics	2110	2800	3360	2.0%	1110	\$ 27,300	75%
Jewellery Art and Design	2110	2800	3360	2.0%	1110	\$ 27,300	75%
Music	2290	2250	2640	1.8%	950	\$ 31,400	70%
Printing Production	1700	2180	2420	1.2%	520	\$ 37,900	70%
Drafting	3670	3940	4350	1.1%	920	\$ 36,100	65%
Automotive Collision Repair	14800	16770	17600	0.5%	2550	\$ 31,900	51%
Automotive Technician	14800	16770	17600	0.5%	2550	\$ 31,900	51%
Diesel Technical	14800	16770	17600	0.5%	2550	\$ 31,900	51%

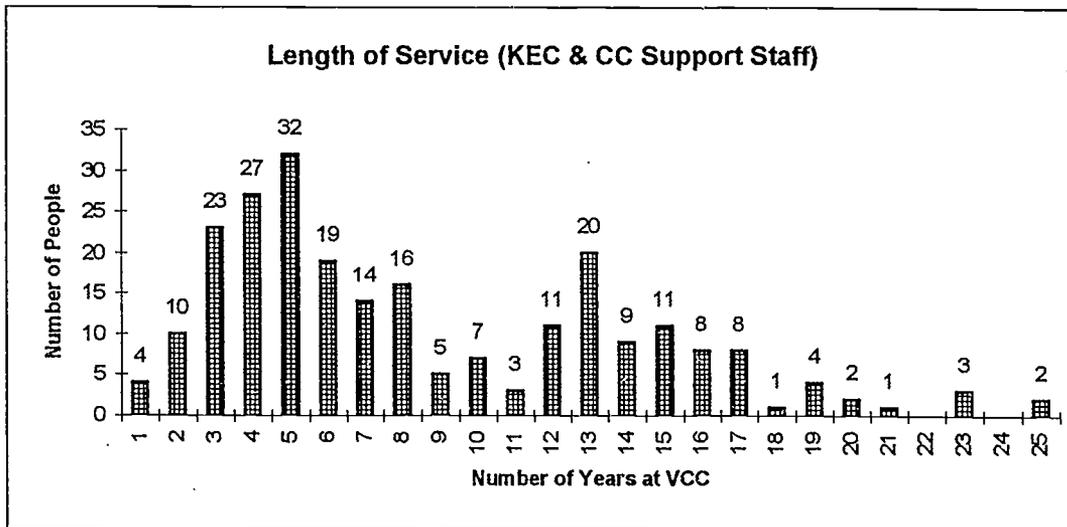
**VCC Support Staff**

In any organization, support staff play an important role in the day-to-day operation of the organization. The efficiency of an organization depends, to a large extent, on the efficiency of its support staff; the efficiency of the support staff in turn depends on, among other things, their job skills and education level. While computerized information on VCC support staff's job skills and education level is not available at the moment, which should be part of the future management information database, payroll data show that there are 376 full-time support staff at the current VCC.\* Of these 376 full-time support staff members, 91 are working at City Centre, 13 at Continuing Education, 97 at KEC, 136 at Langara, 2 at KEC West, and 37 at the College Administrative Services (359 are permanent employees, 2 on probation, and 15 temporarily employed). After the separation, if there is no change in the structure of support staff, the number of full-time support staff in the new VCC will be 240.

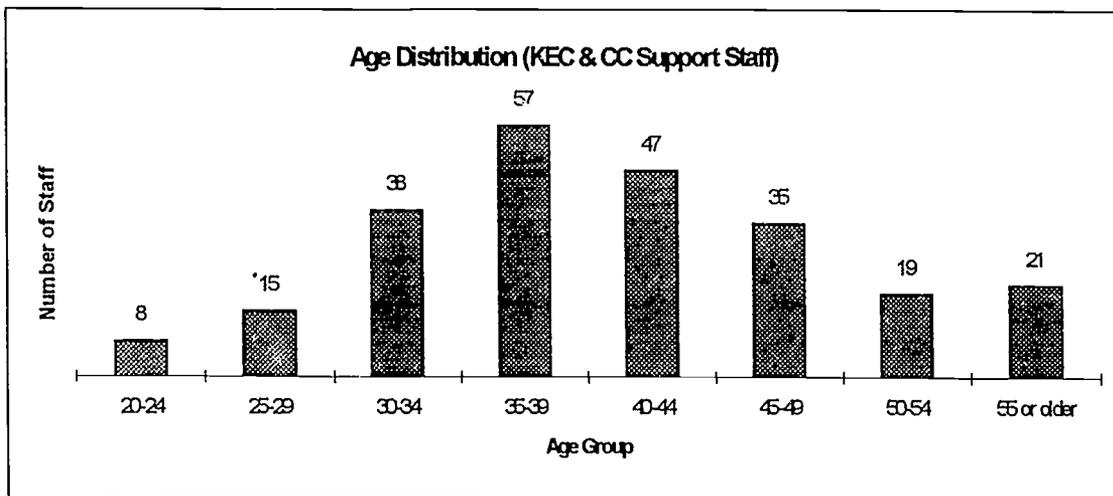
A quick review of the employment statistics shows that more than a one-third of the full-time support staff at KEC and City Centre (including CE and satellite instruction centres) have been with VCC for more than ten years. The relative stability of VCC's support staff is an advantage to the institution. Recent literature on educational administration suggests that it takes from a few weeks to half a year for new employees to get familiar with their work and perform their duties efficiently. Thus, the stability of the support staff means that the new VCC does not have to spend too much time orienting new workers. However, on the other hand, long-term service within an institution also calls for the need to upgrade skills to keep in pace with the ever changing technology. For example, computer was relatively new in most work places ten years ago, and therefore computer literacy was usually not required at work. However, nowadays, computer is part of institutional life. Most employees have contact with computers one way or

\* For the purpose of this report, a full-time support staff member is defined as working 70 hours per pay period (two weeks), and the number of staff reported here is based on VCC payroll data on February 7, 1994.

another. The question, then, is how can the institution make sure that all employees are in pace with the fast changing technology?



The fact that a large number of VCC's support staff have been with the institution for a long time also calls for the need to review VCC's plans for workforce natural attrition. Currently, about 9% of VCC's support staff are 55 years old or older and will retire in the next ten years. The new VCC should prepare and plan for their replacement.



In terms of the pay scale, 68.2% of KEC and City Centre support staff have reached Step 5 of their respective pay grades. For financial planning, this implies that only

the remaining 32.8% will have step increase. As for gender, 24% of VCC's support staff are men and 76% are women.

### KEC & CC Support Staff Salary Summary

Full-time employees only (as of January 5, 1994)

Grade	Pay Step										Total	%
	1		2		3		4		5			
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male		
13					1		1	2	5	5	14	6.4%
14			2		1		2	1	4	1	11	5.0%
15				1	4	1	4	1	9		20	9.1%
16					1		3		10	1	15	6.8%
17					4		4		14	2	24	10.9%
18						1			15	3	19	8.6%
19		1	1			2	4		11		19	8.6%
20		1			4		4		10	4	23	10.5%
21	1		1					1	9	1	13	5.9%
22							1	1	9	5	16	7.3%
23		1			1		2	1	1		6	2.7%
24							4	1	7	4	16	7.3%
25					1		1		4	6	12	5.5%
26					1				4		5	2.3%
27									1	1	2	0.9%
28								1	1	2	4	1.8%
29											0	0.0%
30										1	1	0.5%
<b>Total</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>18</b>	<b>4</b>	<b>30</b>	<b>9</b>	<b>114</b>	<b>36</b>	<b>220</b>	
<b>%</b>	<b>0.5%</b>	<b>1.4%</b>	<b>1.8%</b>	<b>0.5%</b>	<b>8.2%</b>	<b>1.8%</b>	<b>13.6%</b>	<b>4.1%</b>	<b>51.8%</b>	<b>16.4%</b>		

Note: 20 support staff had a blank gender field in the database and therefore were excluded from the table.

### VCC Faculty and Administrators

Because of lacking an operational definition of full-time instructors in the database due to varying employment contracts for a large number of VCC instructors, it is difficult to produce an accurate table of full-time instructor statistics. Further, some management data such as "education level" and "degree obtained", which should be computerized to facilitate planning and decision making, are not captured in the payroll database. As for VCC administrator statistics, since the new VCC organizational structure is not finalized at the time of this report, we cannot report on VCC administrator statistics either. Nonetheless, it is important for the new VCC to have the data collected as soon as possible and stored either in the existing database (payroll system) or a new human resources management system. It is not important where the information is stored or on what system it is stored; what is important is to capture the information and use it. Without accurate human resources information, it is impossible to plan and make decisions

for the new VCC. After all, it is people who make up an organization and develop an organization culture.

### **Operating Space**

Once again, VCC does not have a space-schedule management system and therefore no information is available at this time. Ideally, a good space and schedule system should provide information about both space (physical space of the institution) and schedules (class, laboratory, and meeting/conference schedules). It is hoped that this problem will be solved in the new VCC.

### **Accessibility**

*Accessibility.* Is VCC easily accessible for its students? To answer this question, we need to review at least three factors related to an educational institution: location, tuition, and transportation. In terms of location, the new VCC has two main instructional campuses, City Centre in downtown Vancouver and KEC in Vancouver East. As more than 60% of VCC's students are from Vancouver, VCC is easily accessible for the majority of its students, geographically. In terms of transportation, both City Centre and KEC are on main public transit routes and therefore are relatively easy for students to come to school if they take public transportation. However, for those students who have to drive to school (usually part-time, on-job training students who have to rely on their cars to save time spent on the road), parking may be a problem for going to City Centre as parking is expensive and not always available in downtown area. In addition, the ever rising house price in Vancouver is driving more and more young people to buy houses outside VCC's service region, resulting in more and more commuters on the road. Traffic congestion along the major routes to Vancouver such as Highways 1 and 7 may make prospective students not living in Vancouver think twice before deciding to enrol in VCC's programs. In view of this factor, perhaps the new VCC should schedule part-time classes for on-job training mainly at KEC where parking is available at a small fee. However, since most students at City Centre attend school full-time and take public transportation to school, transportation therefore is not a main problem for most of VCC's students. In terms of tuition cost, VCC's existing tuition is comparable to that in other B.C. urban community colleges and roughly makes up about 17% of the total revenue. However, if VCC wants to modify the existing tuition fees (e.g., differential tuition fees for different programs), a thorough feasibility study is needed.

### **Source of Revenue**

At present, 78.5% of VCC's revenue is from the Ministry's regular funding, 17.2% from tuition, and 4.3% from other revenues (contracts, international education, continuing education, fund raising, etc.). Given the slow recovery of the recession, both the federal and provincial governments are looking for ways to increase revenue and reduce spending. Although higher education in Canada as a whole is a provincial responsibility, federal government transfers part of its tax revenue to provinces and thus indirectly funds higher education in provinces. With mounting national debts, the federal government has been

and will be reducing transfer funds to provinces, thus affecting funding to colleges and universities in the provinces. To increase revenue, the new VCC has to explore unconventional channels such as offering more cost-recovery courses, increasing international student enrolment, bidding for government contracts (instructional and non-instructional), and initiating more fund raising activities.

### **Management Information Availability**

How many times have we heard "that information is not available at VCC"? While people within the institution may be used to the situation, it is incomprehensible for people from outside to learn that simple information such as the number of full-time instructors is not electronically available. Therefore, one of the challenges the new VCC faces is how to set up a good management information system. A good management information system does not often require spending a lot of money and purchasing new products, but it does mean a lot of planning and soul searching. A good management system may be set up by improving the existing systems with the existing resources.

### **Strong Points and Weak Points of VCC**

After a review of VCC's environment, we feel that the following are VCC's strong points:

- **Excellent location:** Located at the centre of the largest municipality in B.C., VCC has the advantage of having a good source of student intake from Vancouver and its surrounding areas and plenty of employment opportunities for its graduates. In addition, because of the advantageous location, VCC will benefit from the continuing flow of interprovincial migration and international immigration to B.C. since most of the new comers settle down in Vancouver and its surrounding areas. The increasing population growth in GVRD provides a stable source for increasing student enrolments at VCC.
- **Providing education opportunities for students with diverse backgrounds:** VCC provides learning opportunities to people of all ages and with diverse cultural backgrounds, and meets their different needs.
- **Equity education and training access for women:** Women students have a high participation rate (60%) at VCC.
- **Healthy job markets:** According to Employment and Immigration Canada's job future projection, graduates from VCC's career/technical and vocational programs are expected to enjoy good employment opportunities in Vancouver and its surrounding areas.
- **Stable support staff:** Many of VCC's support staff are long-time employees and provide a stable organization culture.
- **Easily accessible for students:** Both KEC and City Centre are on major public transit routes and therefore can easily be accessed by most of VCC's students.

In addition, feedback from Future's Conference, the College-wide forum, identified the following as VCC's strong points:

- Students, faculty and staff participating in decision making (by attending board meetings and other high level administration meetings)

- Provide learning opportunities for employees (e.g., CE courses)
- Encourage professional development
- Have high-level of professionalism amongst faculty and staff
- Have computer labs for students and staff
- Accessible for non-traditional students (e.g., older students for ABE and ESL programs)
- Flexible registration time (late evenings and by FAX)
- Respect students' and employees' rights (hiring harassment officers)
- Have an open-minded board
- Recognize achievement faculty, staff, and students
- Have team spirit and cooperation
- Have student work-study programs (training opportunities and financial support)
- Provide opportunity to do diverse jobs

The review of VCC's environment indicates that the following are VCC's weak points or areas that need improvement:

- ◇ **Lack of academic programs:** Because there are no university-transfer and other academic programs (PDC 57xx) in the new VCC's program profile, VCC has a disadvantage in terms of achieving a high FTE utilization rate. In addition, without funding for academic and university-transfer programs, it is difficult for VCC to compete with other comprehensive urban community colleges on equal footing, possibly resulting in reduced funding in the future.
- ◇ **Low male student participation:** Male participation rate is only 40% at VCC. VCC needs to explore the possibility of attracting more male students from the general population.
- ◇ **Relatively high operational cost:** VCC has higher cost for delivering some educational and training programs than private institutions and Vancouver School Board.
- ◇ **Lack of a good management information:** Without good management information, it is impossible for the new VCC to make good plans and sound decisions.
- ◇ **Mono-source of revenue:** Currently, most of VCC's funding (79%) was from the Ministry. With the slow recovery of recession, it will be impossible for VCC to obtain significantly more funding from the Ministry.

In addition, the College's Future Conference has identified the following as areas that need improvement:

- ◇ Lack of trust in VCC's future
- ◇ Scepticism and low morale
- ◇ Lack of mission and goals
- ◇ Organizational instability
- ◇ Poor labour and management relations
- ◇ Frequent work stoppage
- ◇ Lack of harmony and unity
- ◇ Territory and turf wars
- ◇ Animosity between campuses
- ◇ Complicated registration process and system

- ◇ Poor communication between departments
- ◇ Poor or no orientation for new employees
- ◇ Inappropriate marketing
- ◇ Lack of understanding of how and why decisions are made
- ◇ Historical distrust between faculty and administration and board
- ◇ Out-dated equipment
- ◇ Poor and antiquated financial tools (R.O.E. reports)
- ◇ Lack of sufficient library services
- ◇ Long waiting list for some programs
- ◇ Enormous amount of energy and time spent on crisis management, cutbacks, EPD plans
- ◇ Poor publicity/public image
- ◇ Chronic budget crisis
- ◇ Declining international student enrolments and ABE enrolments
- ◇ Poor community links/support
- ◇ Disruptions to work environment (strike)

### Threats

*External threats.* With this environmental scan, it is obvious that the external threats to the new VCC are of two categories - other urban public postsecondary institutions in VCC's service area, and private training institutions in the Lower Mainland. Because of sharing the same funding source, other public institutions in VCC's service area compete with VCC for regular funding from the Ministry of Skills, Training and Labour. These institutions include Kwantlen College through its Richmond campus attracting students deterred by the traffic barriers of Knight and Cambie Bridges, BCIT with its higher prestige taking students from Vancouver and Burnaby, Douglas College and Capilano College winning students by its stability, and the universities and school board with its lower overhead recruiting students via its extension programs and night-school courses. In addition, if Langara begins to expand its occupational programs, there will be a new threat to the new VCC right in the centre of the service area.

The other main threat to the new VCC is the booming of private training businesses. With lower operational costs and good skills of lobbying funding agencies for contracts, these private institutions are posing the greatest threat to the new VCC for obtaining and securing revenues from contract services. Because these private institutions are small in size, it is easier for them to make and implement changes needed to compete with larger public institutions such as VCC.

*Internal threats.* The main internal threat to the new VCC is low morale and lack of confidence for the future, as suggested by the feedback from the Future's Conference. Without a healthy organization culture, it is impossible for the new VCC to grow and be successful. Therefore, it is important to develop a healthy organization culture for the new VCC. Other internal threats include lack of short-term and long-term plans. The new VCC needs to have good short-term and long-term plans. Planning is important as a science taught in various management programs, but it is even more important as a practice exercised in the real world. A healthy institution must have good, and achievable,

short-term and long-term plans. To be a successful institution, the new VCC needs achievable short-term and long-term plans. It needs plans to raise morale and build up confidence for the future, and it needs plans to get out of its chronic financial mess.

### **Opportunities for the new VCC**

*Opportunities for revenue.* Opportunities for revenue exist in various government agencies at both the federal and provincial levels. Each year, government agencies hands out millions of dollars to institutions, public and private, for developing and providing training programs and services. Last year alone, there were 22 million dollars awarded to various institutions in B.C. VCC's problem for obtaining contract moneys is twofold: lack of systematic strategies and relatively high cost of service. To win contracts from funding agencies, the new VCC needs organized efforts in terms of collecting contract information, marketing its competence for delivering educational and training services, and bidding contracts. To be successful in winning contracts, the new VCC must also be competitive in terms of cost. These days, funding agencies are very cost sensitive and are looking for the lowest quote for awarding contracts. Compared with private institutions, VCC is superior in terms of instruction quality and support services. VCC's weak point is high service cost. If service cost can be brought on par with that of private institutions, VCC is in a much better position than private institutions to obtain contracts.

Other possible avenues for revenue include offering cost-recovery courses and increasing the enrolment of international students. Whenever there are job opportunities for certain fields, the demand for training to get into the fields is high. When regular funding is limited for these fields, the new VCC should consider offering certain programs whose graduates are needed in the job market on the basis of full cost recovery. The other possible avenue for revenue is to enrol more international students. VCC has good ESL programs and competent ESL instructors. There is a high demand in Asia for English training (e.g., business English upgrading, College English preparatory courses, TOEFL classes). The new VCC should explore the possibility of attracting students from overseas and offer special short-term ESL course to business people such as combining ESL training with travel (Canadian Culture and Practical English, etc.) and long-term ESL programs to young people intending to study in North American universities (Success for Studying in Canadian & U.S. Universities, etc.).

*Growth opportunities.* As the population grows, the new VCC's enrolment will grow. At some point in the future, the new VCC should consider developing new instructional sites instead of renting facilities and study the feasibility of consolidating all existing campuses into one physical location to cut down operational costs.

With the VCC-Langara separation, there are also opportunities for the new VCC to develop academic and university programs. To be a comprehensive community college, to be competitive with other urban community colleges, and to be in an advantageous

position for obtaining funding from the Ministry, the VCC should offer programs in all areas, including university-transfer programs and other academic programs.

### **Recommendation and Suggestions**

*Organization culture.* The new VCC should address the problem of low morale and lack of confidence, as revealed by the Future's Conference. The College should involve the College community in developing a healthy organization culture.

*Program profile components.* Although the traditional programs at KEC and City Centre are doing fine, the new VCC is left without university transfer and academic programs after the Langara-VCC separation. Without university transfer programs, the new VCC is no longer a truly comprehensive community college. This may place the new VCC in a disadvantageous position in terms of obtaining funding from the Ministry. Therefore, it is recommended that the new VCC begin to study the feasibility of offering university transfer programs as soon as possible. As well, the new VCC should enhance training programs that are projected to have most job openings in the 90's by Employment and Immigration Canada. Some of these programs include Asian Culinary Arts, Baking and Pastry Arts, Culinary Arts, Food and Beverage Management, Dental Assisting/Reception, Dental Hygiene, Pharmacy Technical Assistant, Practical Nursing, and Electronics Technician.

*Labour market review.* To be competitive, the new VCC should closely monitor the labour market and regularly review the employability of graduates from VCC occupational programs. Program and course contents should be regularly reviewed to ensure that they respond to the changes in the labour market.

*Source of revenue.* Given the slow recovery from recession, it is unlikely that there will be significant increase of funding from the Ministry -- VCC's regular funding source. To increase revenue, the new VCC should explore other non-traditional channels for revenue, such as federal and provincial training and service contracts and grants.

*Management information.* The old VCC has been known for lack of management information. This should not be carried into the new VCC. In the new VCC, a comprehensive management information database should be designed. Management information should be regularly collected, coded, stored, accessed, and analyzed for planning and decision making.

## REFERENCES

- B.C. Ministry of Skills, Training and Labour (1993). *Environmental Scan*. B.C. Government document.
- B.C. Ministry of Government Services. (1993-1994). *B.C. Stats: Labour force Statistics*. B.C.: Central Statistics Branch, B.C. Ministry of Skills, Training, and Labour.
- BCIT (1993). *Environmental Scan*. Burnaby: BCIT Office of Institutional Research.
- Capilano College (1994). *Student enrolment report by residence*. Vancouver: Capilano College Office of Institutional Research.
- Douglas College (1991). *Douglas College Three-Year Plan*. Vancouver: Douglas College Office of Institutional Research.
- Employment and Immigration Canada & B.C. Ministry of Advanced Education, Training and Technology (1993) *Job Futures: British Columbia*. B.C. Government document.
- Employment and Immigration Canada. (1993-1994). *Economic Review*. B.C.: Human Resource Development, B.C./Y.T. Region.
- Kwantlen College (1991). *Kwantlen College Three-Year Plan*. Survey: Kwantlen College Office of Institutional Research.
- Kwantlen College (1993). *Fall enrolment report*. Survey: : Kwantlen College Office of Institutional Research.
- Open Learning Agency (1993). *British Columbia Labour Market and Training Needs Analysis*. Open Learning Agency.
- Simon Fraser University (1993). *Fact Book*. Vancouver: Simon Fraser University Office of Institutional Research.
- Vancouver Community College (1994). *Futures Conference Participants' Input*. Unpublished document.

## APPENDIX

## Summary Student Statistics - KEC &amp; City Centre

## Age distribution

Age Range	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93
19 or younger	9.0%	9.6%	9.2%	7.5%	5.7%	5.0%	4.4%	3.9%
20-24	36.4%	30.4%	27.6%	25.8%	24.4%	21.7%	20.9%	19.1%
25-29	20.9%	22.0%	20.3%	21.0%	20.6%	18.9%	20.0%	18.4%
30-34	13.4%	14.3%	15.2%	15.6%	15.9%	17.5%	16.7%	16.9%
35-39	8.9%	9.6%	10.6%	11.3%	12.4%	13.0%	13.7%	14.7%
40-44	4.8%	5.4%	6.4%	7.3%	8.8%	10.6%	10.1%	11.3%
45-49	3.0%	3.7%	4.2%	4.3%	4.7%	5.3%	5.5%	6.1%
50-54	1.8%	2.1%	2.6%	2.5%	2.7%	3.3%	2.6%	3.1%
55 or older	1.8%	2.8%	4.0%	4.7%	4.8%	4.8%	6.1%	6.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
GVRD 18-24 age group	11.4%	11.0%	10.6%	10.6%	10.1%	9.9%	9.6%	9.4%