



EDUCATION

Economy - Sectors

Step 1: Understanding Yesterday and Today

Metropolitan Core Jobs & Economy Land Use Plan

Highlights

- 3% of Metro Core employees work in education.
- One quarter of these jobs are in elementary and secondary schools, one quarter is in technical and trade schools and one quarter is in community colleges.
- The Metro Core has 40% of city and 10% of regional jobs in this sector. This is a lower than average share.
- 61% of Metro Core employees in this sector live in Vancouver.
- The Central Business District has a larger number of these jobs than any other Metro Core sub-area. However, Broadway West has the largest percent of its jobs in this sector.



What is included in this sector?

The education sector is comprised of private, public, and non-profit sector businesses and agencies that provide elementary, secondary, and post-secondary education, as well as specialized training in subjects such as ESL, music, and office computer skills (*Statistics Canada*).

JOBS

How many people are employed in this sector?

In 2001, close to 7,000 people were employed in the education sector in the Metro Core. This is 3% of all Metro Core employees (Table 1).

Sub-sectors	Metro Core	
Elementary/ secondary	1,780	27%
Fine arts, language, & other schools & instruction	1,750	26%
Community colleges	1,730	26%
Universities	780	12%
Technical/trade schools	250	4%
Business schools, computer & management training	205	3%
Educational support services	195	3%
Total	6,680	100%

Statistics Canada 2001 Census: Jobs by NAICS (4 digit), 2001.xls. See Note 1.

How does this compare to the rest of the city and the region?

(a) Percent of total jobs

3% of Metro Core employees work in education. This is significantly less than in the rest of the city and region where about 9% of employees work in this sector (Table 2).

	Metro Core	Rest of city	Rest of region
Total jobs	199,955	112,700	589,115
Number of people working in education	6,680	10,115	50,105
% of total jobs	3%	9%	9%

Statistics Canada 2001 Census. Jobs by NAICS (2 digit), 2001.xls

(b) Share of education jobs

The Metro Core has a lower than average share of city and regional jobs in this sector:

- 40% of the city's education jobs are in the Metro Core (vs. 66% of all city jobs).
- 10% of the region's education jobs are in the Metro Core (vs. 22% of all regional jobs).

The Metro Core's overall low share of regional education jobs is mainly due to the Metro Core's relative lack of elementary and secondary schools, and to the location of major university campuses outside the Metro Core area.

However, the Metro Core has the region's third highest concentration of education jobs, after the UBC and SFU main campuses, and plays an important role in the following types of education jobs, for which the Metro Core has a higher share of jobs than the rest of the city and region (Table 3):

- Business and computer school jobs
- Trade school jobs
- Community colleges
- Educational support service jobs (ie. vocational testing)

	Metro Core's share of city	City total	Metro Core's share of region	Region total
Business schools and computer training	85%*	240	41%*	500
Technical and trade schools	78%*	335	32%*	805
Community colleges	73%*	2,375	23%*	7,405
Educational support services	68%*	280	31%*	615
Universities	55%	1,415	6%	13,505
Other schools and instruction	54%	3,230	22%	7,915
Elementary and secondary schools	20%	8,920	5%	36,165
Education Total	40%	16,805	10%	66,910
All sectors total	64%	312,660	22%	901,775

*Statistics Canada 2001 Census: Jobs by NAICS (4 digit), 2001.xls. Note: * indicates share is greater than 64% of city jobs or 22% of regional jobs.*

How has this employment changed over time?

The analysis of economic sectors over time is limited due to changes to the industrial classification methods used by Statistics Canada over the past 25 years. In 1981, the majority of the industries within the education sector were classified in the "educational service industries" sector. From 1981 to 2001, education sector jobs in the Metro Core increased by 131%, compared to a 14% increase for all jobs (Table 4).

	1981	2001	% change
Total jobs	193,846	221,246	14%
Educational service industries sector jobs	3,937	9,101	131%

Statistics Canada 1981& 2001 Census: Jobs by SIC, 1981 to 2001.xls. See Note 2.

Who is working in this sector and what do they do?

Compared to Metro Core jobs across all sectors, education employees are more likely to be women, and are less likely to work full-time.

- 66% of Metro Core education workers are female (vs. 51% for all Metro Core sectors).
- 73% of Metro Core education workers are employed full-time (vs. 83% for all Metro Core sectors). (*Statistics Canada 2001 Census: Jobs by NAICS (2 digit and 4 digit) by work activity by sex.xls*).

People who work in the education sector have varying occupations. The majority teach, others do administrative work for schools, and others do supportive service work, such as teacher assistants (see Table 5 on next page).



Occupation	Number of employees	Percentage
Social science, education, etc (e.g. teachers & professors)	3,645	54%
Administrative (e.g. HR personnel, clerks, secretaries)	1,105	17%
Management (e.g. senior managers)	790	12%
Art, culture, recreation, sport (e.g. sport instructors, coaches, librarians)	410	6%
Sales and service occupations (e.g. teacher assistants, janitors)	315	5%
Natural and applied sciences and related (e.g. computer and other technicians)	215	3%
Total	6,680	100%

Statistics Canada 2001 Census: Jobs by NAICS by Occupation, 2001.xls.

Where do employees in this sector live?

61% of Metro Core education workers live in the City of Vancouver compared to 53% across all Metro Core Sectors (Table 6).

Area	Number of employees	Percentage
Vancouver *	4,075	61%
Burnaby/New West	620	9%
North Shore	595	9%
South of Fraser	460	7%
NE Sector	285	4%
Richmond	245	4%
Total	6,680	100%

Statistics Canada 2001 Census: Jobs by NAICS by POR, Metro Core, 2001.xls Note: * includes people who work at home in this sector in the Metro Core.

BUSINESSES

How many businesses are in this sector and what size are they?

There are nearly 300 business establishments in the education sector. This is 1% of all Metro Core businesses (compared to 3% of all jobs).

Statistics Canada lists many businesses as indeterminate in size (24% in this sector - see Note 3). Of those in this sector for which size is known (Table 7):

- 89% have a workforce of less than 50
- 10 businesses have over 100 employees

How do these businesses compare to the rest of the city and the region?

The Metro Core has a smaller proportion of education businesses with less than 50 employees than the rest of the city and region (Table 7).

# of employees	Metro Core		Rest of city		Rest of region	
1-4	88	40%	75	50%	344	58%
5-19	76	34%	44	29%	150	25%
20-49	33	15%	20	13%	60	10%
50-99	15	7%	4	3%	14	2%
100-499	8	4%	6	4%	11	2%
500+	2	1%	1	1%	19	3%
Total	222	100%	150	100%	598	100%

Statistics Canada: Businesses by NAICS (2-digit) by Size, 2001.xls. Note: The data in this table do not include businesses of indeterminate size.

SPACE AND LOCATION

How many people work from home in this sector?

Of those people employed by the Metro Core education sector, only 4% work from home. This is significantly less than the rest of the city and on par with the rest of the region where 11% and 5% of employees in this sector work from home (Table 8).

	Metro Core	City	Region
Total	6,680	16,805	66,910
Work at home	290	1,380	3,925
%	4%	8%	6%
% across all sectors	3%	7%	9%

Statistics Canada: Jobs by NAICS (2 digit), 2001.xls.

Where in the Metro Core is this sector located?

Half of the Metro Core's education jobs are located in the Downtown Peninsula.

The largest numbers of education jobs by Employment Area are as follows (see Figure 1 on 2nd last page):

- Central Business District— 2,000 jobs.
- Broadway West— 950 jobs.
- West End/Coal Harbour— 650 jobs.

Overall, the education sector accounts for 3% of Metro Core employment. Sub-areas where this sector comprises significantly more than 3% are:

- Broadway West (10%)
- Granville Island (7%)
- DTES West (5%) (see Table 9 on second last page).

What types of space does this sector occupy?

While specific data is not available to connect each sector with its type of space, observation suggests that other than public elementary and secondary schools, which make up about one-quarter of this sector's employees, most activities are located in retrofitted commercial space, such as SFU, UBC, and many trade, language, and business schools, as well as many fitness and related businesses.

Some large institutions occupy purpose-built space, such as BCIT, Vancouver Community College, and Emily Carr Institute of Art + Design. As shown in Table 7, education establishments are of varying sizes.

In addition to a growing number of language schools (see insert "ESL and other language schools"), new post-secondary facilities have opened downtown—SFU Harbour Centre in 1989, followed by BCIT in 1997 and UBC Robson Square in 2001.

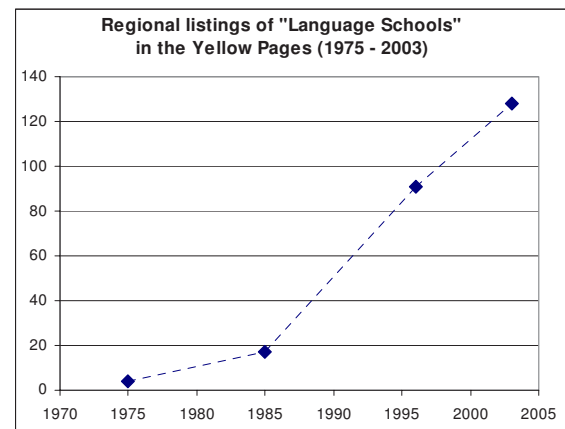
Significant new facilities have been built and proposed outside of central downtown but within the Metro Core:

- Emily Carr Institute of Art + Design (ECIAD) expanded its campus on Granville Island in 1994.
- ECIAD, BCIT, SFU, and UBC are jointly developing the Great Northern Way Campus on the former Finning site on the False Creek Flats. By 2020, the campus will accommodate 4,000 full-time equivalent students in 400,000 sq. ft. of academic space (*Strategic Academic Plan, Great Northern Way Campus, June 2004*).
- The SFU School for the Contemporary Arts will relocate from Burnaby to the Woodward's complex in 2008, and will occupy 150,000 sq. ft.

ESL and other language schools

The Private Post-Secondary Education Commission, which registers all private language institutions teaching persons over 17 years of age, lists 83 institutions teaching ESL in the city. Of these, 71 are located in the Metro Core (*PPSEC*). These figures are meant to give a general indication of this sub-sector— numbers differ from source to source, and definitive statistics are difficult to determine.

Looking at change over time, the Greater Vancouver Yellow Pages give some indication of how this sub-sector has grown in the region. However, because the city has only issued a specific ESL business licence since 2001, solid time-series data is not available for the city alone.



WHAT ELSE DO WE KNOW ABOUT THE ECONOMIC ROLE OF THIS SECTOR?

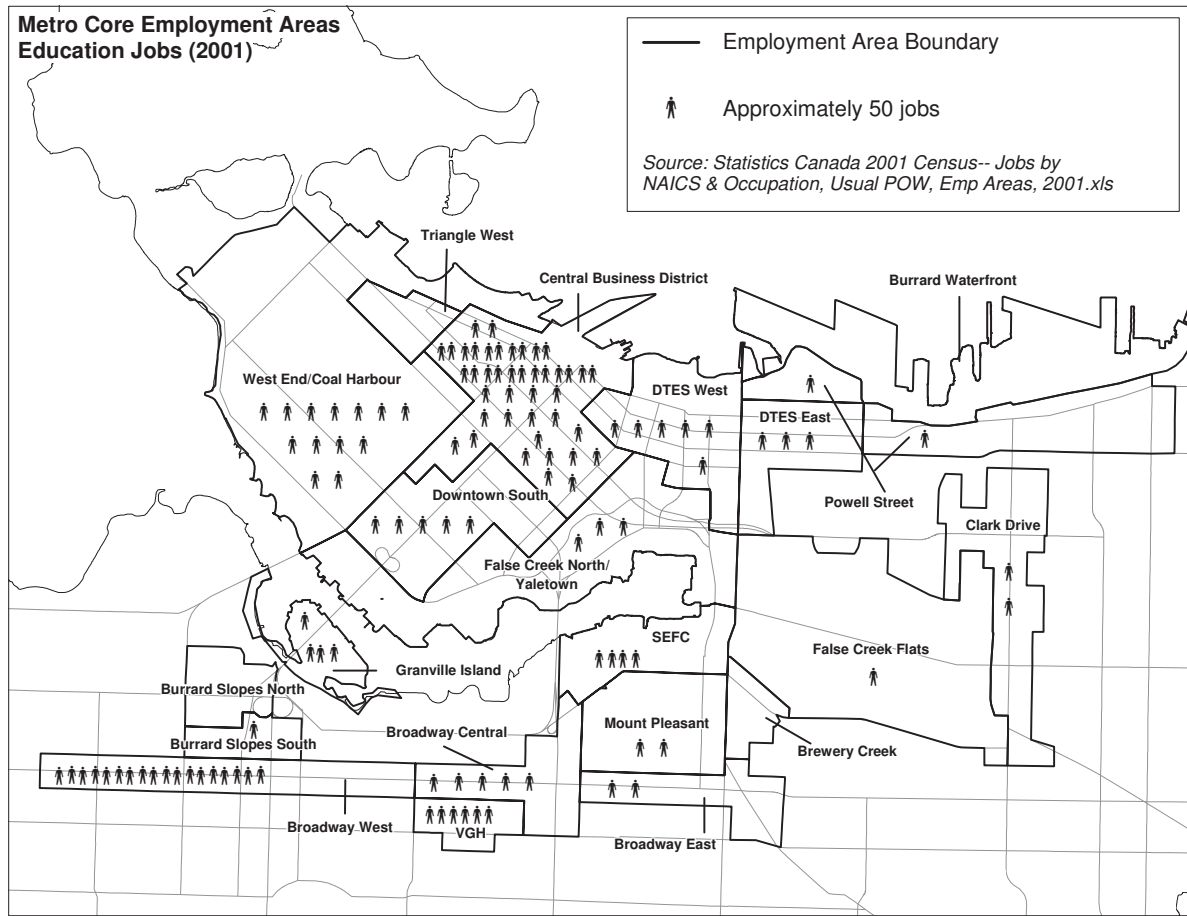
The education sector typically generates 6% of British Columbia's Gross Domestic Product and accounts for 7% of employees in BC. This is significantly higher than in the Metro Core where only 3% of all employees work in this sector (*BC Stats-- BC GDP by Industry and BC Employment by Industry*).

While education is a small sector in terms of its percent of total employees, it generates a significant number of users in the Metro Core. E.g.:

- SFU Harbour Centre— 6,500 students.
- UBC Robson Square— 5,000 students.
- Vancouver Community College-- 3,000 students.
- BCIT Downtown-- 4,000 students.

(*City of Vancouver Survey— figures are for 2004 and represent the total number of full & part-time students at any given time*).

Figure 1: Distribution of jobs



Broadway West	10%	Broadway Central	2%	Powell Street	1%
Granville Island	7%	DTES East	2%	False Creek Flats	1%
DTES West	5%	Clark Drive	2%	False Creek North/Yaletown	1%
VGH	4%	Burrard Slopes South	2%	Burrard Waterfront	1%
West End/Coal Harbour	4%	Downtown South	2%	Burrard Slopes North	0%
Broadway East	3%	Brewery Creek	2%	Triangle West	0%
Central Business District	3%	Mount Pleasant	2%	SE False Creek	0%

Statistics Canada 2001 Census-- Jobs by NAICS (2-digit), Employment Areas, 2001.xls.

Note: Available data for the Burrard Waterfront employment area covers a geography that exceeds the boundaries of the Metro Core.

Sources / Contacts

Sources of information are recorded throughout this Information Sheet. Additional notes are provided here:

1) In this paper, NAICS refers to the 1997 North American Industrial Classification System, which was the system used by Statistics Canada in 2001 to categorize jobs and businesses by industry sector.

2) Re: Table 4 - Data in this table are categorized according to 1980 SIC (Standard Industrial Classification). SIC was the classification method used by Statistics Canada prior to the 2001 Census. The job totals in Table 4 are higher because they include an estimate of jobs with no fixed place of work. This estimate is reached by assigning to the Metro Core a share of the workers with no fixed place of work. The share is determined on a sector by sector basis and is based on the number of workers with a known place of work.

3) Re: Table 7 - Businesses in the “indeterminate” category have no employees registered on the payroll. They may have contract workers, or no workers at all. “Indeterminate” does not equate with “self-employed”. Self-employed businesses may be in either category.

This Information Sheet was published by the City of Vancouver. It is one in a series of Information Sheets produced for the Metropolitan Core Jobs and Economy Land Use Plan. The purpose of this initiative is to develop a long term land use policy plan to accommodate future economic activity and jobs in the Metro Core. For further information, please e-mail corejobs@vancouver.ca or visit the website www.vancouver.ca/corejobs