



Task Title: College and University Enrolment

OALCF Cover Sheet – Practitioner Copy

Learner Name: _____

Date Started: _____

Date Completed: _____

Successful Completion: Yes ☐ No ☐

Goal Path: Employment ☐ Apprenticeship ☐

Secondary School ☐ Post Secondary ☐ Independence ☐

Task Description: The learner will use tables to find information and calculate post-secondary enrolment changes.

Main Competency/Task Group/Level Indicator:

- Find and Use Information/Interpret documents/A2.2
- Understand and Use Numbers/Manage data/C4.2

Materials Required:

- Pen/pencil and paper and/or digital device
- Calculator or digital device with calculator function

Learner Information

Governments track changes in college and university enrolment across Canada. This can help identify trends and future needs in different programs or geographical areas.

Scan the following:

"Table 1: Domestic Student Enrolments from 2015 to 2022 at Colleges and Universities in Canada, Ontario, Alberta and BC"

"Table 2: Ontario Domestic Student Enrolment from 2012 to 2021 by Credential"

"Table 3: Domestic Enrolments from 2015 to 2022 Across STEM and BHASE Fields"

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Table 1

Domestic Student Enrolments from 2015 to 2022 at Colleges and Universities in Canada, Ontario, Alberta and BC

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	% Change 2015- 2022
Universities								
Canada	1,136,721	1,140,507	1,144,005	1,146,279	1,141,998	1,174,392	1,167,507	2.7
Ontario	459,384	462,528	461,271	464,793	465,513	477,255	478,281	4.1
Alberta	114,639	117,291	119,223	122,625	123,963	129,153	126,852	10.7
BC	144,264	142,581	145,605	147,744	145,758	148,140	146,787	1.7
Colleges								
Canada	665,718	658,185	658,650	652,296	639,936	615,954	619,608	-6.7
Ontario	247,494	244,209	249,966	246,924	239,778	227,721	222,255	-10.2
Alberta	53,310	55,218	55,842	55,992	55,212	50,694	51,387	-3.6
BC	84,084	84,108	82,320	81,510	80,730	74,610	75,249	-10.5

Source: Statistics Canada (2024a)

Note: This table shows the annual domestic student fall enrolment headcount for public colleges and universities in Canada, Ontario, Alberta and BC from 2015 to 2022. It should also be noted that enrolments include full- and part-time registration and are based on program counts and not student counts. If a student is enrolled in more than one program as of the snapshot date, then all their enrolments are included in the count.

Table 2

Ontario Domestic Student Enrolment from 2012 to 2021 by Credential

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	% Change 2013- 2021
College										
Certificate	23,014	24,521	24,150	23,869	22,543	23,596	23,644	21,692	19,029	-17
Diploma	96,471	98,534	96,990	96,432	93,045	93,736	91,278	89,272	83,750	-13
Advanced Diploma	51,809	52,865	52,353	52,013	51,257	51,092	49,587	47,543	44,333	-12
Bachelor's Degree	14,719	16,187	17,421	18,561	19,524	20,425	20,816	20,897	21,399	45
Graduate Certificate	6,936	7,760	7,532	8,024	8,165	8,615	8,583	8,164	9,289	34
University										
Bachelor's Degree	331,578	334,244	334,107	335,594	339,025	339,717	341,340	341,096	347,466	5
Master's/ Doctoral Degree	41,733	42,397	42,797	43,766	44,853	45,980	47,083	47,969	49,664	19

Source: MCURES (2022)

Note: This table shows the fall full-time domestic student enrolment for different credentials in Ontario from 2012 to 2021.

Table 3

Domestic Enrolments from 2015 to 2022 Across STEM and BHASE Fields

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	% Change 2015- 2022
STEM								
Canada	388,512	397,149	403,767	406,425	410,487	423,618	429,963	11
Ontario	172,206	178,449	184,566	185,877	187,362	191,844	192,636	12
Alberta	33,819	34,455	34,845	35,352	35,484	36,327	37,164	10
BC	43,599	43,755	44,328	44,922	45,219	47,055	48,288	11
BHASE								
Canada	1,343,604	1,338,222	1,331,838	1,324,635	1,309,944	1,313,256	1,297,281	-3
Ontario	494,022	493,800	488,430	485,805	479,973	479,703	468,486	-5
Alberta	134,127	138,054	140,217	143,262	143,694	143,523	141,075	5
BC	177,450	175,080	175,923	176,163	173,955	170,802	168,723	-5

Source: Statistics Canada (2024c)

Note: This table shows the number of students enrolled in STEM and BHASE programs in Canada, Ontario, Alberta and BC from 2011 to 2021.

STEM: Science, Technology, Engineering and Mathematics

BHASE: Business, Humanities, Health, Arts, Social Science and Education
[Non-STEM fields of study]

Work Sheet

Task 1: Using Table 1, calculate how many more students enrolled in universities in Ontario in 2021-22 compared to 2020-21.

Answer:

Task 2: Using Table 2, calculate the total number of Ontario students enrolled in all college programs in 2020-21.

Answer:

Task 3a) Using Table 3, calculate the total number of Ontario students enrolled in STEM and BHASE programs in 2021-22.

Answer:

Task 3b) Calculate the percentage of Ontario students enrolled in STEM programs in 2021-22.

Answer:

Task 4: Using Table 3, complete the following chart to estimate 2022-2023 enrolment based on the average annual change.

Answer:

Change from 2019-20 to 2020-21 in Canada STEM enrolment	
Change from 2020-21 to 2021-22 in Canada STEM enrolment	
Average Change in Canada STEM enrolment between 2019 and 2022	
Estimated Canada STEM enrolment for 2022-23	

Answers

Task 1: Using Table 1, calculate how many more students enrolled in universities in Ontario in 2021-22 compared to 2020-21.

Answer:

$$478,281 - 477,255 = 1,026 \text{ students}$$

Task 2: Using Table 2, calculate the total number of Ontario students enrolled in all college programs in 2020-21.

Answer:

$$\begin{aligned} &19,029 \text{ (Certificate)} + 83,750 \text{ (Diploma)} + 44,333 \text{ (Advanced Diploma)} + \\ &21,399 \text{ (Bachelor's Degree)} + 9,289 \text{ (Graduate Certificate)} \\ &= 177,800 \text{ students total} \end{aligned}$$

Task 3a) Using Table 3, calculate the total number of Ontario students enrolled in STEM and BHASE programs in 2021-22.

Answer:

$$192,636 \text{ (STEM)} + 468,486 \text{ (BHASE)} = 661,122 \text{ Total}$$

Task 3b) Calculate the percentage of Ontario students enrolled in STEM programs in 2021-22.

Answer:

$$192,636 \text{ (STEM)} / 661,122 \text{ (TOTAL)} = 29\%$$

Task 4: Using Table 3, complete the following chart to estimate 2022-2023 enrolment based on the average annual change.

Answer:

Change from 2019-20 to 2020-21 in Canada STEM enrolment	$423,618 - 410,487 = 13,131$
Change from 2020-21 to 2021-2022 in Canada STEM enrolment	$429,963 - 423,618 = 6,345$
Average Change in Canada STEM enrolment from 2019-20 to 2021-22	$13,131 + 6,345 = 19,476 / 2 = 9,738$ average change
Estimated Canada STEM enrolment for 2022-23	$429,963 + 9,738 = 439,701$ estimated enrolment

Performance Descriptors

Levels	Performance Descriptors	Needs Work	Completes task with support from practitioner	Completes task independently
A2.2	extracts information from tables and forms			
C4.2	calculates using numbers expressed as whole numbers, fractions, decimals, percentages and integers			
	calculates averages (mean) and percentages			
	chooses and performs required operation(s); may make inferences to identify required operation(s)			
	selects appropriate steps to solutions			
	recognizes patterns and begins to identify trends in data (e.g. population, crime, demographic, inventory, injury)			
	uses strategies to check accuracy (e.g. estimating, using a calculator, repeating a calculation, using the reverse operation)			

This task: Was successfully completed ☐ Needs to be tried again ☐

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Learner Comments:

Instructor (print):

Learner (print):