

B.C. University Student Outcomes 2006 Survey of 2004 Baccalaureate Graduates

Detailed Summary of Survey Results

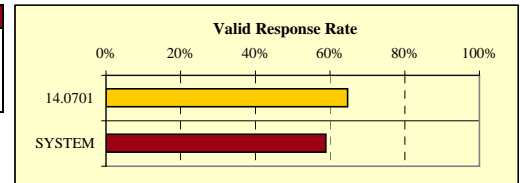
All Institutions

6 Digit CIP: 14.0701: Chemical Engineering

SYSTEM
14.0701

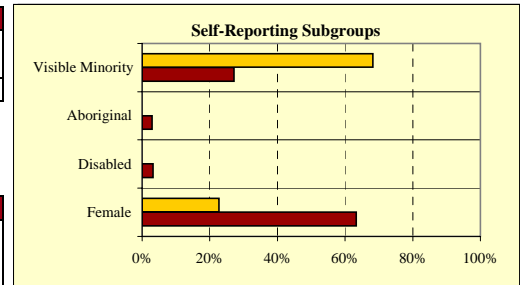
RESPONSE RATE

1. Survey Response Rate:	14.0701	SYSTEM
2004 Baccalaureate Graduates Survey Cohort	41	15,605
Net Frame	34	13,595
Survey Respondents and Valid Response Rate	22 65%	8,009 59%

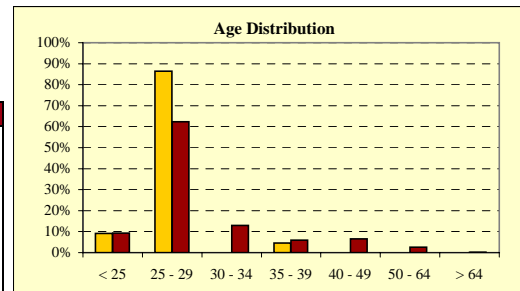


DEMOGRAPHIC INFORMATION

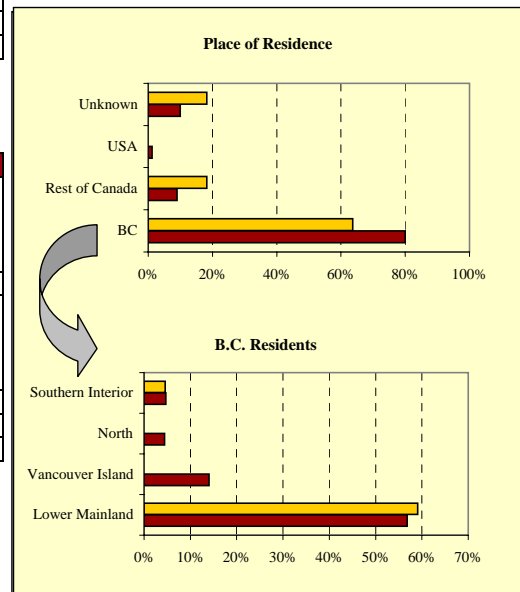
2. Gender:	14.0701	SYSTEM
Male	17 77%	2,941 37%
Female	5 23%	5,067 63%
Total	22 100%	8,008 100%



3. Self-Reporting Subgroups:	14.0701	SYSTEM
Disabled	- 0%	260 3%
Aboriginal	- 0%	232 3%
Visible Minority	15 68%	2,172 27%



4. Age (at time of survey):	14.0701	SYSTEM
< 25	2 9%	748 9%
25 to 29	19 86%	4,997 62%
30 to 34	- 0%	1,036 13%
35 to 39	1 5%	478 6%
40 to 49	- 0%	528 7%
50 to 64	- 0%	213 3%
> 64	- 0%	9 0%
Unknown	- 0%	- 0%
Total	22 100%	8,009 100%
Mean Age:	26.4	29.0



5. Place of Residence (at time of survey):	14.0701	SYSTEM
BC - Lower Mainland	13 59%	4,549 57%
BC - Vancouver Island	- 0%	1,124 14%
BC - North	- 0%	353 4%
BC - Southern Interior	1 5%	376 5%
BC Subtotal	14 64%	6,402 80%
Canada - Alberta	3 14%	310 4%
Canada - Ontario	1 5%	240 3%
Canada - Other	- 0%	164 2%
U.S.A.	- 0%	94 1%
Non-BC Subtotal	4 18%	808 10%
Unknown	4 18%	799 10%
Total	22 100%	8,009 100%

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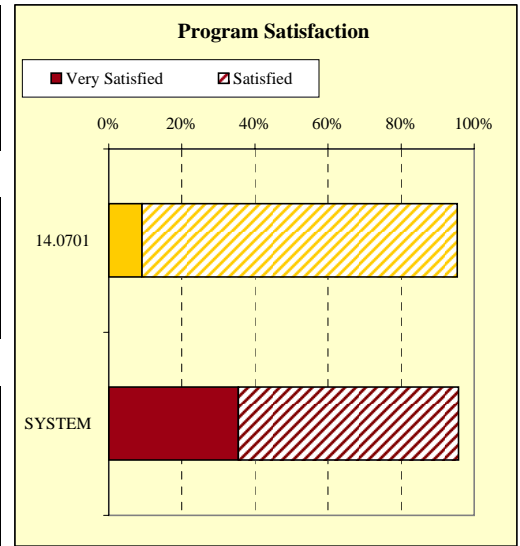
■ SYSTEM
■ 14.0701

EDUCATION EVALUATION AND SKILL DEVELOPMENT

6. Usefulness of Knowledge, Skills, and Abilities Acquired during Program in Work:	14.0701	SYSTEM
Very Useful	5 38%	2,934 44%
Somewhat Useful	6 46%	2,942 44%
Not Very Useful	2 15%	565 8%
Not at All Useful	- 0%	247 4%

7. Usefulness of Knowledge, Skills, and Abilities Acquired during Program in Day-to-day Life:	14.0701	SYSTEM
Very Useful	3 23%	2,013 30%
Somewhat Useful	5 38%	3,611 54%
Not Very Useful	4 31%	890 13%
Not at All Useful	1 8%	179 3%

8. Program Satisfaction:	14.0701	SYSTEM
Very Satisfied	2 9%	2,832 35%
Satisfied	19 86%	4,816 60%
Dissatisfied	1 5%	288 4%
Very Dissatisfied	- 0%	51 1%
Total	22 100%	7,987 100%



9. Would you select the same program again?	14.0701	SYSTEM
Yes	13 59%	6,053 79%
No, because . . . (multiple response question)	9	1,565
. . . interests have changed	5 24%*	468 17%*
. . . courses were not practical	4 19%*	597 22%*
. . . little or no career opportunities	6 29%*	505 18%*
. . . other	6 29%*	1,197 43%*

* Percent of total responses, among those who would not take program again

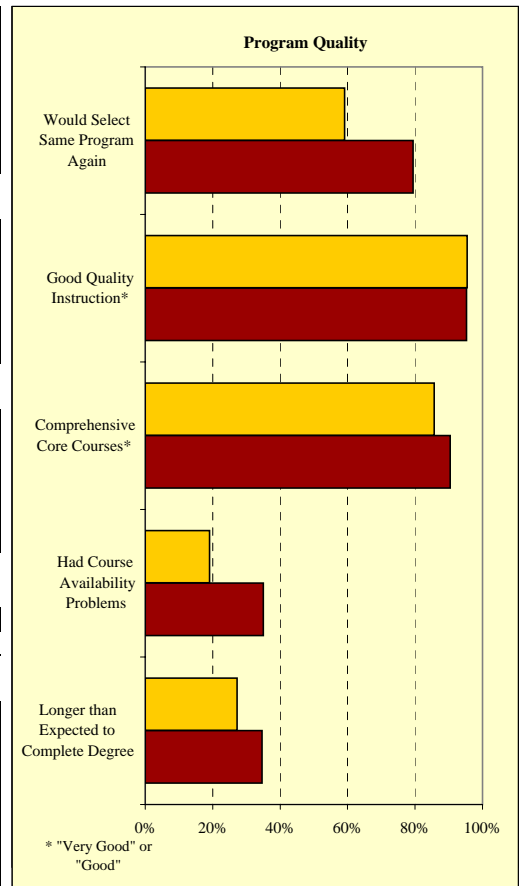
10. Quality of Instruction:	14.0701	SYSTEM
Very Good	1 5%	2,490 31%
Good	20 91%	5,096 64%
Poor	1 5%	348 4%
Very Poor	- 0%	28 0%
Total	22 100%	7,962 100%

11. Comprehensiveness of Core Courses:	14.0701	SYSTEM
Very Good	1 5%	2,045 26%
Good	17 81%	5,069 64%
Poor	3 14%	704 9%
Very Poor	- 0%	53 1%
Total	21 100%	7,871 100%

12. Course Availability:	14.0701	SYSTEM
Encountered course availability problems	4 19%	2,753 35%

13. Degree Completion:	14.0701	SYSTEM
Took longer than expected to complete degree	6 27%	2,770 35%
Top 4 reasons for prolonged degree completion (multiple response question):		
Personal or family reasons	1 13%*	401 8%*
Financial reasons / work	- 0%*	468 9%*
Change of major/program/specialization	- 0%*	403 8%*
Involvement in co-op program extended completion time	1 13%*	451 9%*
Other reason(s)	6 75%*	3,253 65%*

* Percent of total responses, among those who took longer than expected to complete degree



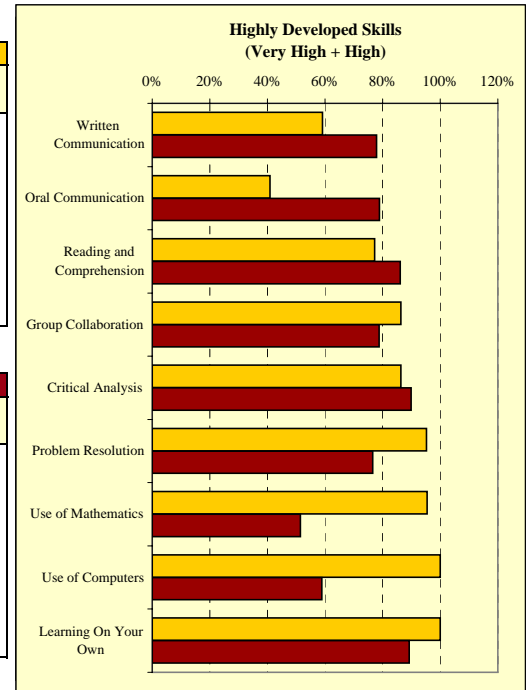
Detailed Summary of Survey Results
All Institutions
6 Digit CIP: 14.0701: Chemical Engineering

■ SYSTEM
 ■ 14.0701

SKILL DEVELOPMENT

14a.

To what degree did program help you develop the following skills?	14.0701					# Resp.
	Very High	High	Low	Very Low		
	Written Communication	18%	41%	32%	9%	
Oral Communication	14%	27%	55%	5%	22	
Reading and Comprehension	27%	50%	23%	0%	22	
Group Collaboration	36%	50%	14%	0%	22	
Critical Analysis	55%	32%	14%	0%	22	
Problem Resolution	38%	57%	5%	0%	21	
Use of Mathematics Appropriate to Field	73%	23%	5%	0%	22	
Use of Computers Appropriate to Field	55%	45%	0%	0%	22	
Learning On Your Own	45%	55%	0%	0%	22	



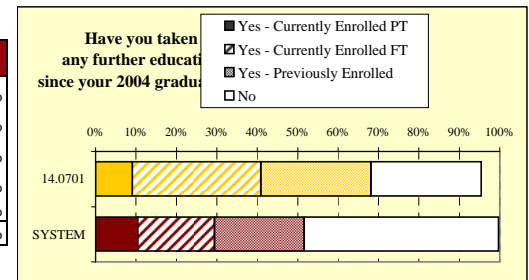
14b.

To what degree did program help you develop the following skills?	SYSTEM					# Resp.
	Very High	High	Low	Very Low		
	Written Communication	24%	54%	19%	3%	
Oral Communication	23%	56%	19%	2%	7,662	
Reading and Comprehension	31%	55%	12%	2%	7,627	
Group Collaboration	32%	46%	18%	3%	7,670	
Critical Analysis	41%	49%	9%	1%	7,885	
Problem Resolution	21%	55%	21%	2%	7,577	
Use of Mathematics Appropriate to Field	17%	35%	35%	14%	5,873	
Use of Computers Appropriate to Field	20%	39%	31%	10%	6,615	
Learning On Your Own	38%	52%	9%	2%	7,713	

FURTHER EDUCATION

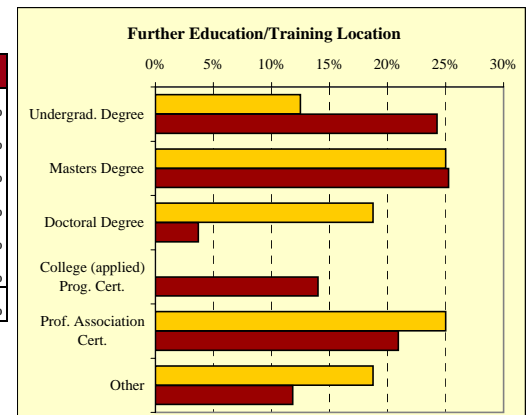
15.

Took further education since 2004 graduation	14.0701	SYSTEM
Yes:		
Not currently enrolled	16	4,158
Currently enrolled full-time	6	1,779
Currently enrolled part-time	7	1,520
No	6	3,851
Total	22	8,009



16.

Type of Formal Post-Secondary Education	14.0701	SYSTEM
Undergraduate Degree	2	995
Masters Degree	4	1,036
Doctoral Degree	3	152
College (applied) Program Certification	-	575
Professional Association Certification	4	858
Other	3	485
Total Respondents	16	4,101

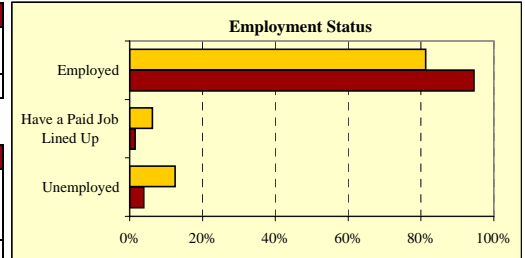


Detailed Summary of Survey Results
All Institutions
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■ SYSTEM
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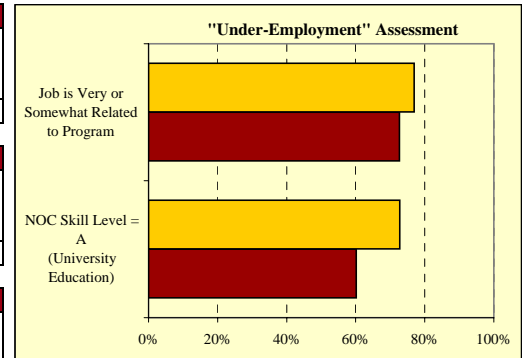
EMPLOYMENT

17. Labour Force Status:	14.0701		SYSTEM	
In Labour Force (working or seeking work)	16	73%	7,092	89%
Not in Labour Force	6	27%	905	11%
Grand Total	22	100%	7,997	100%



18. Employment Status of those IN Labour Force:	14.0701		SYSTEM	
Employed	13	81%	6,707	95%
Have a Paid Job Lined Up	1	6%	109	2%
Unemployed	2	13%	276	4%
Total Labour Force	16	100%	7,092	100%

19. Status of Graduates NOT in Labour Force:	14.0701		SYSTEM	
Attending School FT	6	100%	677	75%
Attending School PT	-	0%	32	4%
Other	-	0%	196	22%
Total NOT in Labour Force	6	100%	905	100%

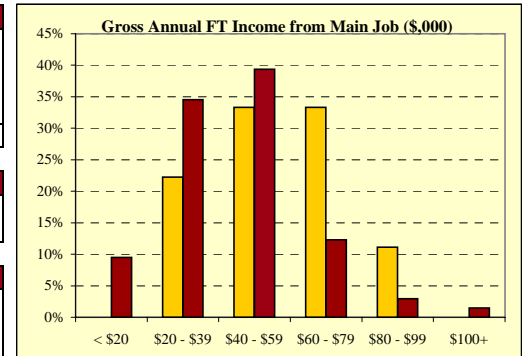


20. Employment Type:	14.0701		SYSTEM	
Paid worker	11	85%	6,048	90%
Self-employed	2	15%	356	5%
Both a paid worker and self-employed	-	0%	300	4%
Total Employed	13	100%	6,707	100%

21. Job Characteristics:	14.0701		SYSTEM	
I hold more than one job	-	0%*	1,333	20%
My main job is full-time (>= 30 hours per week)	12	100%**	5,464	84%*

* of total employed ** of those who provided data on hours/week worked

22. How related is your main job to your program?	14.0701		SYSTEM	
Very Related	3	23%	3,006	45%
Somewhat Related	7	54%	1,865	28%
Not Very Related	2	15%	810	12%
Not At All Related	1	8%	1,020	15%
Total	13	100%	6,701	100%



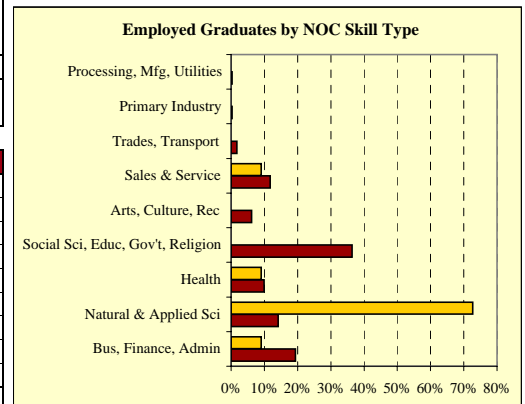
23. "Under-employment" Assessment:	14.0701		SYSTEM	
Job is very or somewhat related to program	10	77%	4,871	73%
NOC Skill Level = A (University Education)	8	73%	3,972	60%

* of total valid responses

24. Gross Annual Income from Main Job:*	14.0701		SYSTEM	
Less than \$20,000	-	0%	552	9%
\$20,000 to \$39,999	2	22%	2,009	35%
\$40,000 to \$59,999	3	33%	2,290	39%
\$60,000 to \$79,999	3	33%	714	12%
\$80,000 to \$99,999	1	11%	171	3%
\$100,000 and Above	-	0%	85	1%
Total	9	100%	5,821	100%
Median Annual Income (full-time)	\$50,000		\$43,000	
Average Annual Income (full-time)	\$52,701		\$46,444	

* where data provided

25. NOC Skill Type of Main Job:	14.0701		SYSTEM	
Business, Finance and Administration	1	9%	1,274	19%
Natural and Applied Sciences and Related	8	73%	927	14%
Health	1	9%	650	10%
Social Sciences, Educ., Gov't Services, Religion	-	0%	2,389	36%
Arts, Culture, Recreation and Sport	-	0%	404	6%
Sales and Service	1	9%	772	12%
Trades, Transport and Equip. Operators and Related	-	0%	117	2%
Unique to the Primary Industry	-	0%	21	0%
Unique to Processing, Manufacturing and Utilities	-	0%	18	0%
Total	11	100%	6,572	100%

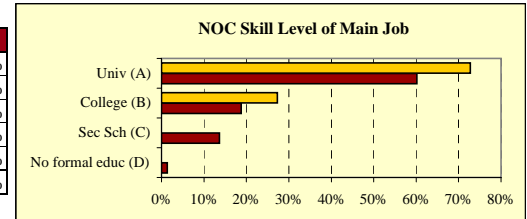


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All Institutions
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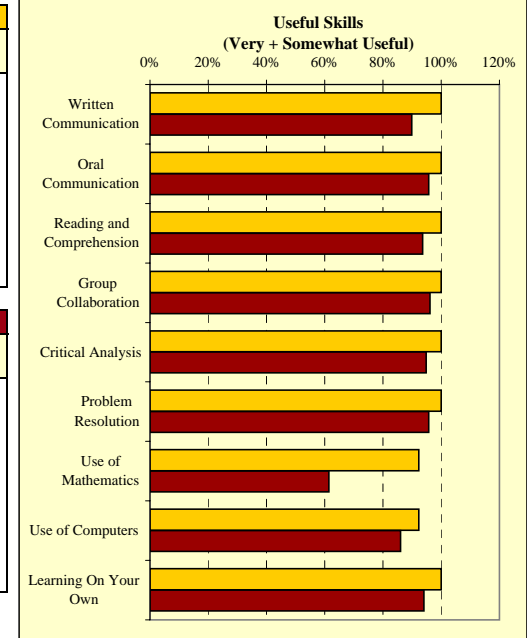
■ SYSTEM
 ■ 14.0701

EMPLOYMENT, continued

26. NOC Skill Level of Main Job:	14.0701		SYSTEM	
A. University education	8	73%	3,972	60%
B. College education/trade apprenticeship	3	27%	1,240	19%
C. Secondary school + job-specific training	-	0%	899	14%
D. No formal education	-	0%	92	1%
No skill level assigned (management)	-	0%	397	6%
Total	11	100%	6,600	100%



27a. How useful are the following skills and abilities in doing your main job?	14.0701					# Resp.
	Very Useful	Somewhat Useful	Not Very Useful	Not at all Useful		
Written Communication	62%	38%	0%	0%		13
Oral Communication	62%	38%	0%	0%		13
Reading and Comprehension	46%	54%	0%	0%		13
Group Collaboration	62%	38%	0%	0%		13
Critical Analysis	62%	38%	0%	0%		13
Problem Resolution	77%	23%	0%	0%		13
Use of Mathematics Appropriate to Field	54%	38%	8%	0%		13
Use of Computers Appropriate to Field	62%	31%	8%	0%		13
Learning On Your Own	62%	38%	0%	0%		13



27b. How useful are the following skills and abilities in doing your main job?	SYSTEM					# Resp.
	Very Useful	Somewhat Useful	Not Very Useful	Not at all Useful		
Written Communication	67%	23%	6%	4%		6,696
Oral Communication	77%	19%	3%	1%		6,696
Reading and Comprehension	70%	23%	4%	2%		6,696
Group Collaboration	79%	17%	3%	1%		6,699
Critical Analysis	74%	20%	3%	2%		6,698
Problem Resolution	75%	20%	3%	1%		6,693
Use of Mathematics Appropriate to Field	25%	36%	22%	17%		6,675
Use of Computers Appropriate to Field	56%	30%	8%	6%		6,688
Learning On Your Own	68%	26%	4%	2%		6,690

28a. Top 10 Full-time Occupations of 14.0701 Graduates:			14.0701	
NOC	NOC Skill Level Description		% Employed FT in this Occ.**	Median FT Salary
2134	A Chemical Engineers		31%	\$35,000
2145	A Petroleum Engineers		15%	\$90,805
*				
*				
*				
*				
*				
*				
*				

*data not displayed where n < 2

**percentages cited are of those for whom occupational data was provided, full-time and part-time

28b. Top 10 Full-time Occupations of Graduates from All Institutions:			SYSTEM	
NOC	NOC Skill Level Description		% Employed FT in this Occ.**	Median FT Salary
4141	A Secondary School Teachers		8%	\$42,000
4142	A Elem & Kindergarten Teacher		7%	\$40,000
3152	A Registered Nurses		5%	\$56,330
1111	A Financial Auditors & Acnts		3%	\$42,500
2174	A Computer Programmers/Interactive Media Developers		2%	\$50,000
5124	A Occhs in Public Relations & Comm		2%	\$42,000
4112	A Lawyers & Quebec Notaries		2%	\$70,000
1232	B Loan Officers		1%	\$40,000
2173	A Software Engineers		1%	\$56,000
4152	A Social Workers		1%	\$48,000

*data not displayed where n < 2

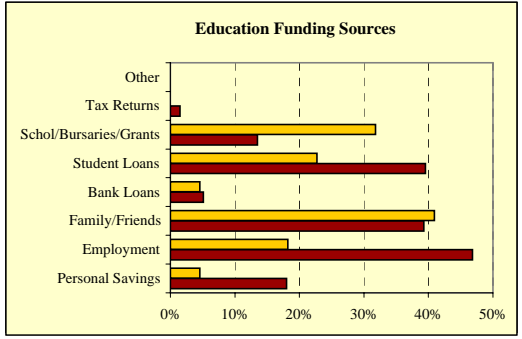
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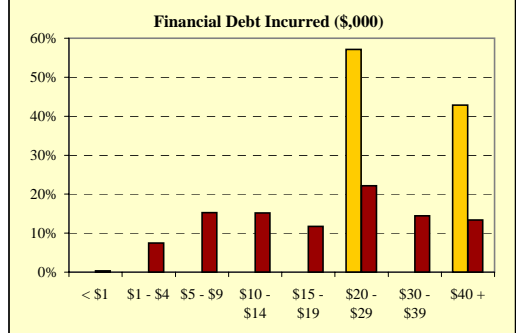
EDUCATION FINANCING

29. Education Funding Sources (2 sources per respondent):	14.0701	SYSTEM
Personal Savings	1 5%*	1,444 18%*
Employment	4 18%*	3,752 47%*
Family/Friends	9 41%*	3,146 39%*
Bank Loans	1 5%*	409 5%*
Student Loans	5 23%*	3,168 40%*
Scholarships/Bursaries/Grants	7 32%*	1,082 14%*
Tax Returns	- 0%*	120 1%*
Other	- 0%*	- 0%*
Total Respondents	22	8,009

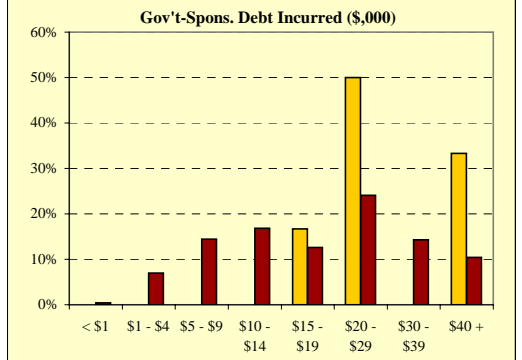


30. Financial Debt Incurred to Finance Univ. Education:	14.0701	SYSTEM
Incurred any form of financial debt	7 32%*	3,818 48%
Incurred government-sponsored student loan debt	6 27%*	3,190 40%

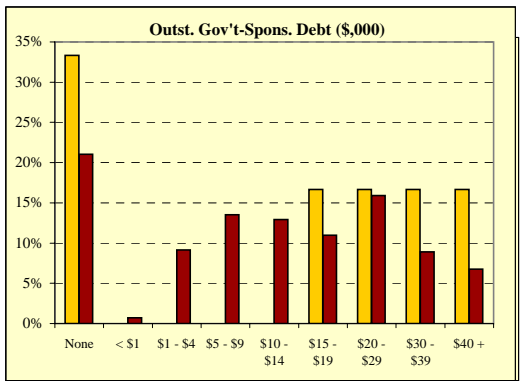
31. Financial Debt Amount:*	14.0701	SYSTEM
< \$1,000	- 0%	12 0%
\$1,000 to \$4,999	- 0%	284 7%
\$5,000 to \$9,999	- 0%	582 15%
\$10,000 to \$14,999	- 0%	581 15%
\$15,000 to \$19,999	- 0%	449 12%
\$20,000 to \$29,999	4 57%	847 22%
\$30,000 to \$39,999	- 0%	552 14%
\$40,000 or More	3 43%	511 13%
Total	7 100%	3,818 100%
Median Financial Debt	\$25,000	\$20,000



32. Government-Sponsored Student Loan Debt Amount:*	14.0701	SYSTEM
< \$1,000	- 0%	14 0%
\$1,000 to \$4,999	- 0%	222 7%
\$5,000 to \$9,999	- 0%	460 14%
\$10,000 to \$14,999	- 0%	537 17%
\$15,000 to \$19,999	1 17%	402 13%
\$20,000 to \$29,999	3 50%	768 24%
\$30,000 to \$39,999	- 0%	455 14%
\$40,000 or More	2 33%	332 10%
Total	6 100%	3,190 100%
Median Gov't-Sponsored Student Loan Debt	\$22,500	\$18,000



33. Outstanding Gov't-Sponsored Loan Debt Amount:*	14.0701	SYSTEM
None - Loan repaid in full	2 33%	644 21%
< \$1,000	- 0%	22 1%
\$1,000 to \$4,999	- 0%	280 9%
\$5,000 to \$9,999	- 0%	414 14%
\$10,000 to \$14,999	- 0%	395 13%
\$15,000 to \$19,999	1 17%	336 11%
\$20,000 to \$29,999	1 17%	487 16%
\$30,000 to \$39,999	1 17%	273 9%
\$40,000 or More	1 17%	207 7%
Total	6 100%	3,058 100%
Median Gov't-Sponsored Loan Debt Outstanding	\$20,750	\$11,000



*includes only cases where government-sponsored debt was incurred, and valid "amount remaining" was provided

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SYSTEM
14.0701

SPECIAL SECTION ON INTERNATIONAL EDUCATION

42. In your employment since graduation, how important has it been for you to understand the following international skills/issues?

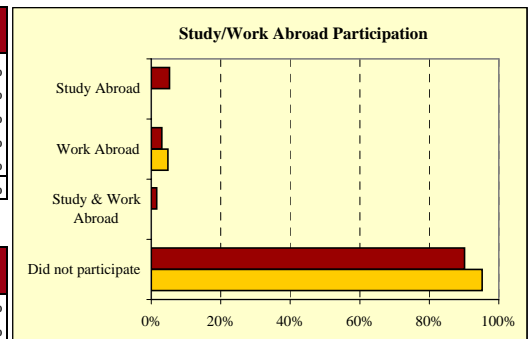
International Skill	14.0701						SYSTEM					
	Very Important	Important	Not Very Important	Not at all Important	Not Applicable	Total Resp.	Very Important	Important	Not Very Important	Not at all Important	Not Applicable	Total Resp.
Speak a second language	14%	18%	23%	41%	5%	22	20%	22%	28%	28%	2%	7966
International Business Practices	19%	29%	29%	24%	0%	21	13%	27%	32%	28%	0%	7817
Global Issues	33%	38%	10%	19%	0%	21	26%	38%	22%	14%	0%	7835
Interconnections between local and global issues	48%	38%	5%	10%	0%	21	29%	41%	18%	12%	0%	7835
Knowledge and traditions of other countries and cultures	24%	33%	29%	14%	0%	21	40%	35%	16%	10%	0%	7840

43. How helpful was the institution in preparing you with the following international skills?

International Skill	14.0701						SYSTEM					
	Very Helpful	Helpful	Not Very Helpful	Not at all Helpful	Not Applicable	Total Resp.	Very Helpful	Helpful	Not Very Helpful	Not at all Helpful	Not Applicable	Total Resp.
Speak a second language	0%	0%	9%	36%	55%	22	5%	12%	18%	18%	48%	7985
International Business Practices	0%	10%	29%	62%	0%	21	6%	23%	34%	37%	0%	7838
Global Issues	5%	38%	24%	33%	0%	21	20%	47%	20%	13%	0%	7946
Interconnections between local and global issues	5%	29%	38%	29%	0%	21	19%	47%	22%	12%	0%	7930
Knowledge and traditions of other countries and cultures	10%	19%	24%	48%	0%	21	20%	46%	22%	11%	0%	7942

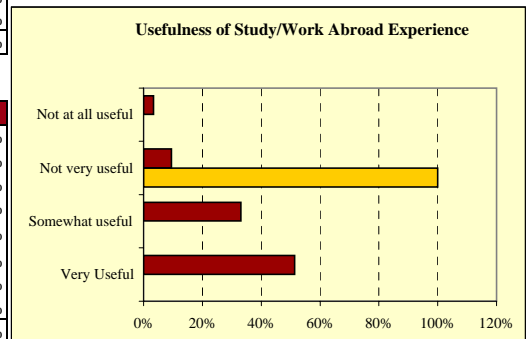
44. Did you study or work abroad during your program?

	14.0701	SYSTEM
Yes:		
Study Abroad	1	5%
Work Abroad	-	0%
Study and work abroad	1	5%
No	20	95%
Total	21	100%



45. Usefulness of study or work abroad experiences to current job:*

	14.0701	SYSTEM
Very Useful	-	0%
Somewhat useful	-	0%
Not very useful	1	100%
Not at all useful	-	0%
Total	1	100%



46. Reasons why you did not study or work abroad:

	14.0701	SYSTEM
Not aware these opportunities exist	2	11%
Financial reasons	2	11%
Extended degree completion time	2	11%
Personal reasons (i.e. employment, family)	2	11%
No opportunities/Limited opportunities	3	17%
Not interested/ relevant/ required/ attractive	4	22%
Conflicts with schooling (course load too heavy)	2	11%
Other	1	6%
Total	18	100%