

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

Detailed Summary of Survey Results

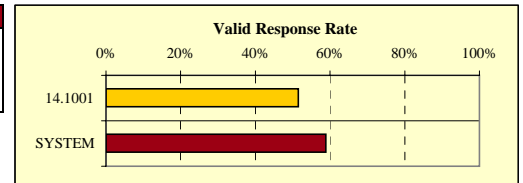
All Institutions

6 Digit CIP: 14.1001: Electrical, Electronics & Communications Engineering

SYSTEM  
14.1001

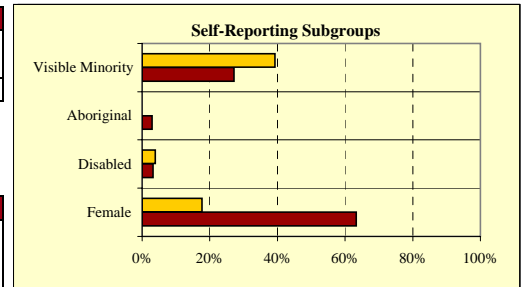
## RESPONSE RATE

1. Survey Response Rate:	14.1001	SYSTEM
2004 Baccalaureate Graduates Survey Cohort	127	15,605
Net Frame	99	13,595
Survey Respondents and Valid Response Rate	51 52%	8,009 59%



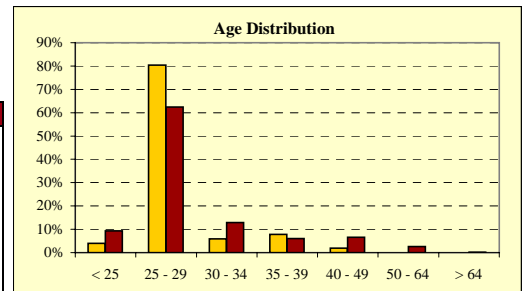
## DEMOGRAPHIC INFORMATION

2. Gender:	14.1001	SYSTEM
Male	42 82%	2,941 37%
Female	9 18%	5,067 63%
Total	51 100%	8,008 100%

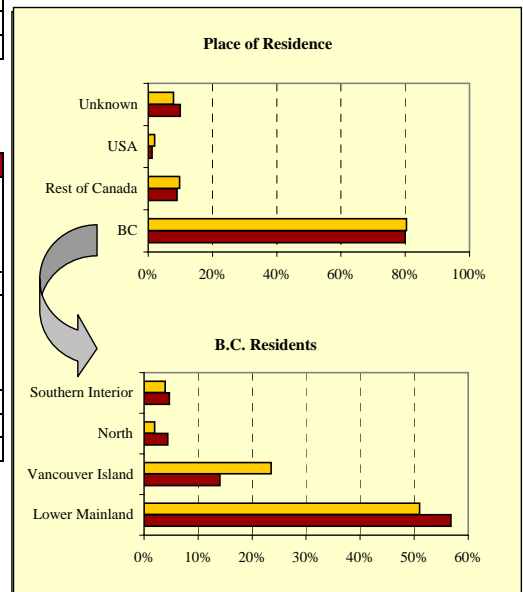


3. Self-Reporting Subgroups:	14.1001	SYSTEM
Disabled	2 4%	260 3%
Aboriginal	- 0%	232 3%
Visible Minority	20 39%	2,172 27%

4. Age (at time of survey):	14.1001	SYSTEM
< 25	2 4%	748 9%
25 to 29	41 80%	4,997 62%
30 to 34	3 6%	1,036 13%
35 to 39	4 8%	478 6%
40 to 49	1 2%	528 7%
50 to 64	- 0%	213 3%
> 64	- 0%	9 0%
Unknown	- 0%	- 0%
Total	51 100%	8,009 100%
Mean Age:	27.1	29.0



5. Place of Residence (at time of survey):	14.1001	SYSTEM
BC - Lower Mainland	26 51%	4,549 57%
BC - Vancouver Island	12 24%	1,124 14%
BC - North	1 2%	353 4%
BC - Southern Interior	2 4%	376 5%
BC Subtotal	41 80%	6,402 80%
Canada - Alberta	3 6%	310 4%
Canada - Ontario	2 4%	240 3%
Canada - Other	- 0%	164 2%
U.S.A.	1 2%	94 1%
Non-BC Subtotal	6 12%	808 10%
Unknown	4 8%	799 10%
Total	51 100%	8,009 100%



Detailed Summary of Survey Results

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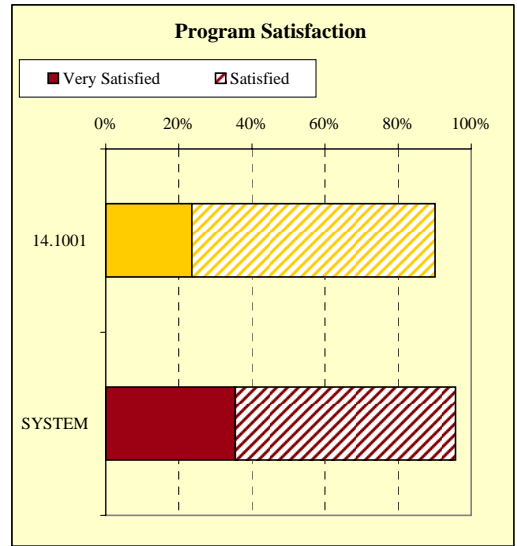
■ SYSTEM  
■ 14.1001

EDUCATION EVALUATION AND SKILL DEVELOPMENT

6. Usefulness of Knowledge, Skills, and Abilities Acquired during Program in Work:	14.1001	SYSTEM
Very Useful	11 26%	2,934 44%
Somewhat Useful	22 52%	2,942 44%
Not Very Useful	7 17%	565 8%
Not at All Useful	2 5%	247 4%

7. Usefulness of Knowledge, Skills, and Abilities Acquired during Program in Day-to-day Life:	14.1001	SYSTEM
Very Useful	5 12%	2,013 30%
Somewhat Useful	23 55%	3,611 54%
Not Very Useful	12 29%	890 13%
Not at All Useful	2 5%	179 3%

8. Program Satisfaction:	14.1001	SYSTEM
Very Satisfied	12 24%	2,832 35%
Satisfied	34 67%	4,816 60%
Dissatisfied	5 10%	288 4%
Very Dissatisfied	- 0%	51 1%
Total	51 100%	7,987 100%



9. Would you select the same program again?	14.1001	SYSTEM
Yes	33 66%	6,053 79%
No, because . . . (multiple response question)	17	1,565
. . . interests have changed	9 36%*	468 17%*
. . . courses were not practical	7 28%*	597 22%*
. . . little or no career opportunities	- 0%*	505 18%*
. . . other	9 36%*	1,197 43%*

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

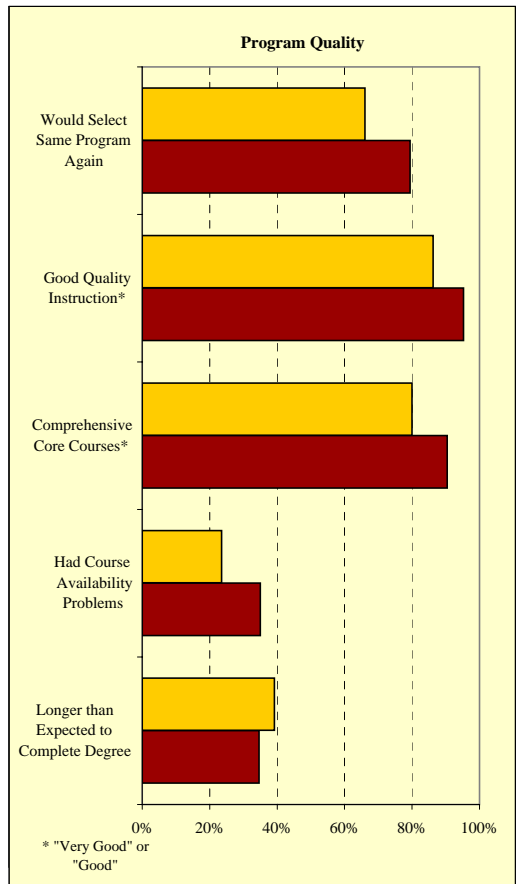
10. Quality of Instruction:	14.1001	SYSTEM
Very Good	3 6%	2,490 31%
Good	41 80%	5,096 64%
Poor	7 14%	348 4%
Very Poor	- 0%	28 0%
Total	51 100%	7,962 100%

11. Comprehensiveness of Core Courses:	14.1001	SYSTEM
Very Good	5 10%	2,045 26%
Good	35 70%	5,069 64%
Poor	9 18%	704 9%
Very Poor	1 2%	53 1%
Total	50 100%	7,871 100%

12. Course Availability:	14.1001	SYSTEM
Encountered course availability problems	12 24%	2,753 35%

13. Degree Completion:	14.1001	SYSTEM
Took longer than expected to complete degree	20 39%	2,770 35%
<b>Top 4 reasons for prolonged degree completion (multiple response question):</b>		
Personal or family reasons	1 3%*	401 8%*
Financial reasons / work	1 3%*	468 9%*
Change of major/program/specialization	2 6%*	403 8%*
Involvement in co-op program extended completion time	8 26%*	451 9%*
Other reason(s)	19 61%*	3,253 65%*

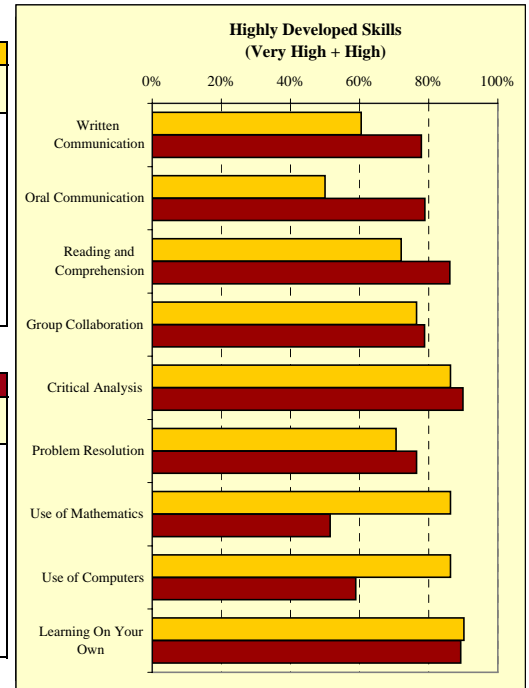
\* Percent of total responses, among those who took longer than expected to complete degree



SKILL DEVELOPMENT

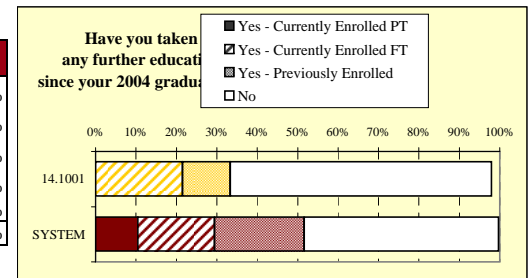
14a. To what degree did program help you develop the following skills?	14.1001					# Resp.
	Very High	High	Low	Very Low		
	Written Communication	6%	54%	31%	8%	
Oral Communication	0%	50%	38%	13%	48	
Reading and Comprehension	16%	56%	20%	8%	50	
Group Collaboration	33%	43%	24%	0%	51	
Critical Analysis	37%	49%	12%	2%	51	
Problem Resolution	16%	55%	27%	2%	51	
Use of Mathematics Appropriate to Field	41%	45%	12%	2%	51	
Use of Computers Appropriate to Field	35%	51%	12%	2%	51	
Learning On Your Own	45%	45%	10%	0%	51	

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	

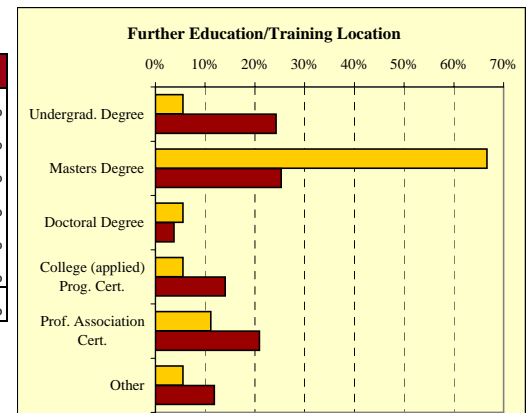


FURTHER EDUCATION

15. Took further education since 2004 graduation	14.1001	SYSTEM		
Yes:	18	35%	4,158	52%
Not currently enrolled	6	12%	1,779	22%
Currently enrolled full-time	11	22%	1,520	19%
Currently enrolled part-time	-	0%	838	10%
No	33	65%	3,851	48%
Total	51	100%	8,009	100%



16. Type of Formal Post-Secondary Education	14.1001	SYSTEM		
Undergraduate Degree	1	6%	995	24%
Masters Degree	12	67%	1,036	25%
Doctoral Degree	1	6%	152	4%
College (applied) Program Certification	1	6%	575	14%
Professional Association Certification	2	11%	858	21%
Other	1	6%	485	12%
Total Respondents	18	100%	4,101	100%



Detailed Summary of Survey Results

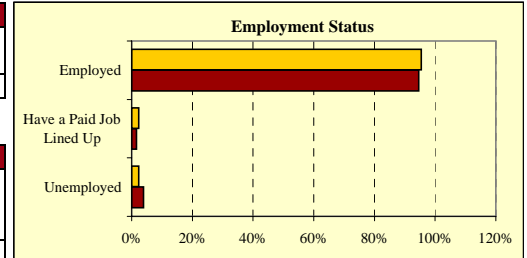
All Institutions

6 Digit CIP: 14.1001: Electrical, Electronics & Communications Engineering

■ SYSTEM  
■ 14.1001

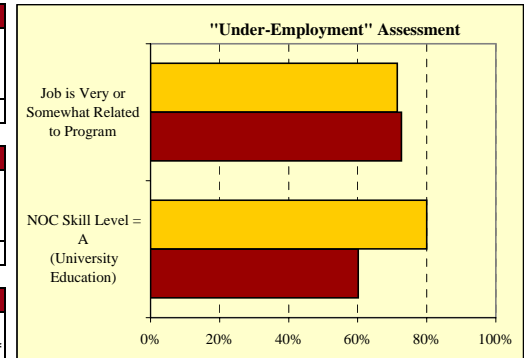
EMPLOYMENT

17. Labour Force Status:	14.1001	SYSTEM
In Labour Force (working or seeking work)	44 86%	7,092 89%
Not in Labour Force	7 14%	905 11%
Grand Total	51 100%	7,997 100%



18. Employment Status of those IN Labour Force:	14.1001	SYSTEM
Employed	42 95%	6,707 95%
Have a Paid Job Lined Up	1 2%	109 2%
Unemployed	1 2%	276 4%
Total Labour Force	44 100%	7,092 100%

19. Status of Graduates NOT in Labour Force:	14.1001	SYSTEM
Attending School FT	5 71%	677 75%
Attending School PT	- 0%	32 4%
Other	2 29%	196 22%
Total NOT in Labour Force	7 100%	905 100%

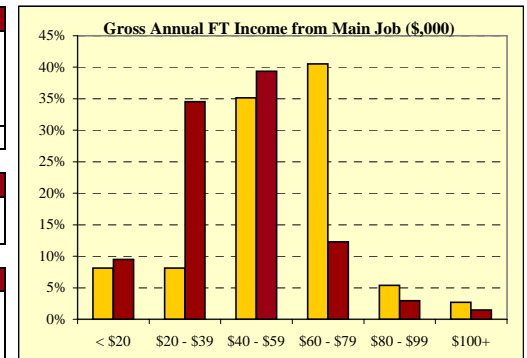


20. Employment Type:	14.1001	SYSTEM
Paid worker	40 95%	6,048 90%
Self-employed	2 5%	356 5%
Both a paid worker and self-employed	- 0%	300 4%
Total Employed	42 100%	6,707 100%

21. Job Characteristics:	14.1001	SYSTEM
I hold more than one job	4 10%*	1,333 20%
My main job is full-time (>= 30 hours per week)	39 93%**	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?	14.1001	SYSTEM
Very Related	20 48%	3,006 45%
Somewhat Related	10 24%	1,865 28%
Not Very Related	11 26%	810 12%
Not At All Related	1 2%	1,020 15%
Total	42 100%	6,701 100%



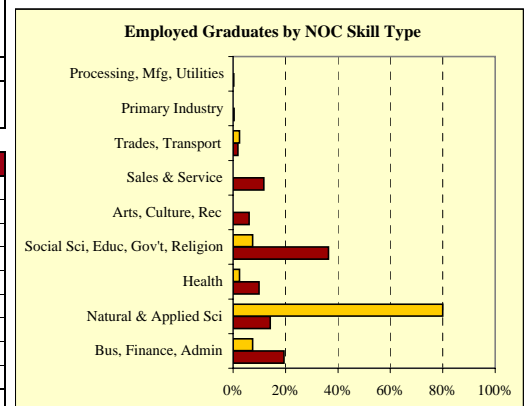
23. "Under-employment" Assessment:	14.1001	SYSTEM
Job is very or somewhat related to program	30 71%	4,871 73%
NOC Skill Level = A (University Education)	32 80%	3,972 60%

\* of total valid responses

24. Gross Annual Income from Main Job:*	14.1001	SYSTEM
Less than \$20,000	3 8%	552 9%
\$20,000 to \$39,999	3 8%	2,009 35%
\$40,000 to \$59,999	13 35%	2,290 39%
\$60,000 to \$79,999	15 41%	714 12%
\$80,000 to \$99,999	2 5%	171 3%
\$100,000 and Above	1 3%	85 1%
Total	37 100%	5,821 100%
Median Annual Income (full-time)	\$60,000	\$43,000
Average Annual Income (full-time)	\$58,869	\$46,444

\* where data provided

25. NOC Skill Type of Main Job:	14.1001	SYSTEM
Business, Finance and Administration	3 8%	1,274 19%
Natural and Applied Sciences and Related	32 80%	927 14%
Health	1 3%	650 10%
Social Sciences, Educ., Gov't Services, Religion	3 8%	2,389 36%
Arts, Culture, Recreation and Sport	- 0%	404 6%
Sales and Service	- 0%	772 12%
Trades, Transport and Equip. Operators and Related	1 3%	117 2%
Unique to the Primary Industry	- 0%	21 0%
Unique to Processing, Manufacturing and Utilities	- 0%	18 0%
Total	40 100%	6,572 100%



Detailed Summary of Survey Results

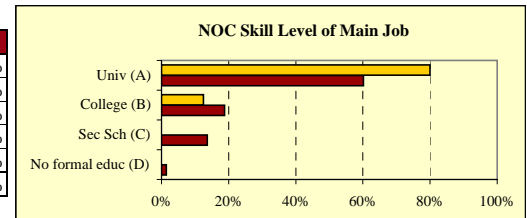
All Institutions

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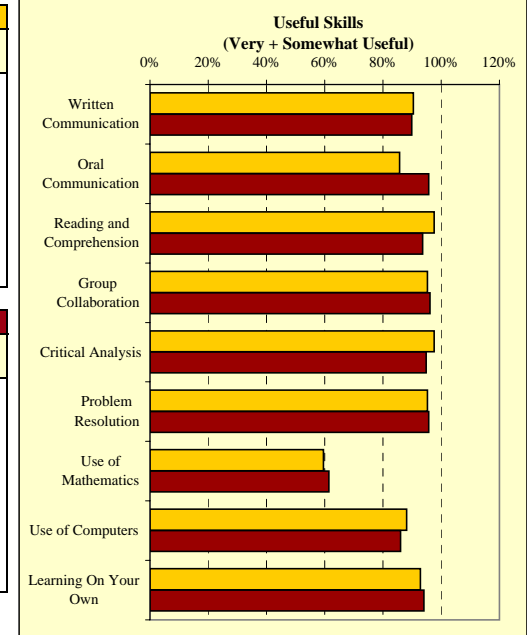
SYSTEM  
14.1001

EMPLOYMENT, continued

26. NOC Skill Level of Main Job:		14.1001		SYSTEM	
A. University education		32	80%	3,972	60%
B. College education/trade apprenticeship		5	13%	1,240	19%
C. Secondary school + job-specific training		-	0%	899	14%
D. No formal education		-	0%	92	1%
No skill level assigned (management)		3	8%	397	6%
Total		40	100%	6,600	100%



27a. How useful are the following skills and abilities in doing your main job?	14.1001					# Resp.
	Very Useful	Somewhat Useful	Not Very Useful	Not at all Useful		
Written Communication	57%	33%	10%	0%		42
Oral Communication	67%	19%	14%	0%		42
Reading and Comprehension	64%	33%	2%	0%		42
Group Collaboration	64%	31%	2%	2%		42
Critical Analysis	83%	14%	2%	0%		42
Problem Resolution	76%	19%	5%	0%		42
Use of Mathematics Appropriate to Field	19%	40%	36%	5%		42
Use of Computers Appropriate to Field	60%	29%	12%	0%		42
Learning On Your Own	64%	29%	7%	0%		42



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 14.1001 Graduates:			14.1001	
NOC	NOC Skill Level Description		% Employed FT in this Occ.**	Median FT Salary
2133	A Electrical & Electronics Engineers		36%	\$60,000
2173	A Software Engineers		17%	\$51,000
2147	A Computer Engineers		5%	\$61,300
2241	B Electrical Engineering Technicians		5%	\$60,000
*				
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\*data not displayed where n < 2

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

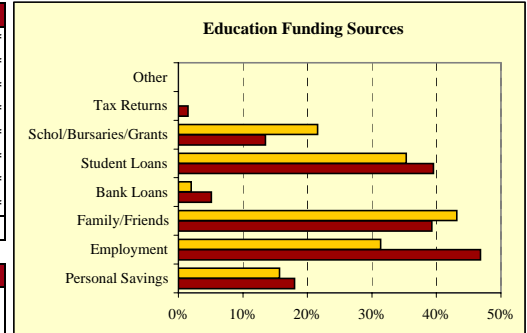
28b. Top 10 Full-time Occupations of Graduates from All Institutions:			SYSTEM	
NOC	NOC Skill Level Description		% Employed FT in this Occ.**	Median FT Salary
4141	A Secondary School Teachers		8%	\$42,000
4142	A Elem & Kindergarten Teacher		7%	\$40,000
3152	A Registered Nurses		5%	\$56,330
1111	A Financial 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

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

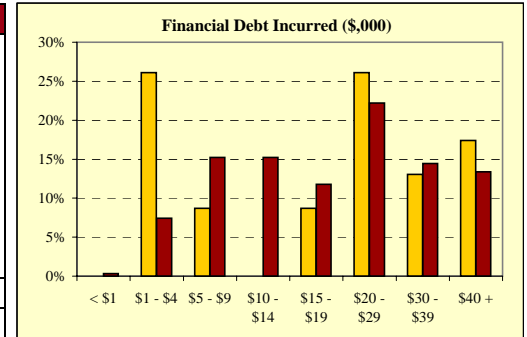
EDUCATION FINANCING

29. Education Funding Sources (2 sources per respondent):	14.1001	SYSTEM
Personal Savings	8 16%*	1,444 18%*
Employment	16 31%*	3,752 47%*
Family/Friends	22 43%*	3,146 39%*
Bank Loans	1 2%*	409 5%*
Student Loans	18 35%*	3,168 40%*
Scholarships/Bursaries/Grants	11 22%*	1,082 14%*
Tax Returns	- 0%*	120 1%*
Other	- 0%*	- 0%*
Total Respondents	51	8,009

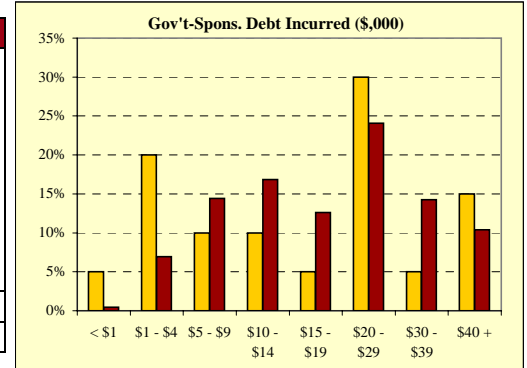


30. Financial Debt Incurred to Finance Univ. Education:	14.1001	SYSTEM
Incurred any form of financial debt	23 45%*	3,818 48%
Incurred government-sponsored student loan debt	20 39%*	3,190 40%

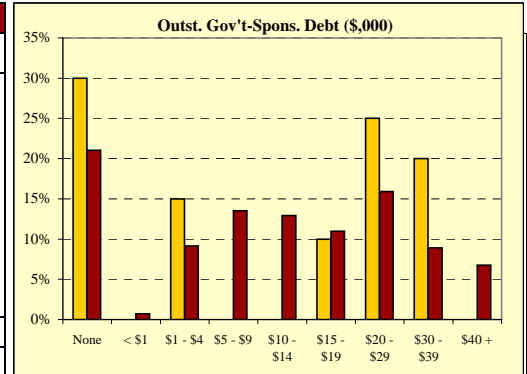
31. Financial Debt Amount:*	14.1001	SYSTEM
< \$1,000	- 0%	12 0%
\$1,000 to \$4,999	6 26%	284 7%
\$5,000 to \$9,999	2 9%	582 15%
\$10,000 to \$14,999	- 0%	581 15%
\$15,000 to \$19,999	2 9%	449 12%
\$20,000 to \$29,999	6 26%	847 22%
\$30,000 to \$39,999	3 13%	552 14%
\$40,000 or More	4 17%	511 13%
Total	23 100%	3,818 100%
Median Financial Debt	\$22,000	\$20,000



32. Government-Sponsored Student Loan Debt Amount:*	14.1001	SYSTEM
< \$1,000	1 5%	14 0%
\$1,000 to \$4,999	4 20%	222 7%
\$5,000 to \$9,999	2 10%	460 14%
\$10,000 to \$14,999	2 10%	537 17%
\$15,000 to \$19,999	1 5%	402 13%
\$20,000 to \$29,999	6 30%	768 24%
\$30,000 to \$39,999	1 5%	455 14%
\$40,000 or More	3 15%	332 10%
Total	20 100%	3,190 100%
Median Gov't-Sponsored Student Loan Debt	\$18,500	\$18,000



33. Outstanding Gov't-Sponsored Loan Debt Amount:*	14.1001	SYSTEM
None - Loan repaid in full	6 30%	644 21%
< \$1,000	- 0%	22 1%
\$1,000 to \$4,999	3 15%	280 9%
\$5,000 to \$9,999	- 0%	414 14%
\$10,000 to \$14,999	- 0%	395 13%
\$15,000 to \$19,999	2 10%	336 11%
\$20,000 to \$29,999	5 25%	487 16%
\$30,000 to \$39,999	4 20%	273 9%
\$40,000 or More	- 0%	207 7%
Total	20 100%	3,058 100%
Median Gov't-Sponsored Loan Debt Outstanding	\$15,500	\$11,000



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All Institutions

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SYSTEM  
14.1001

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?

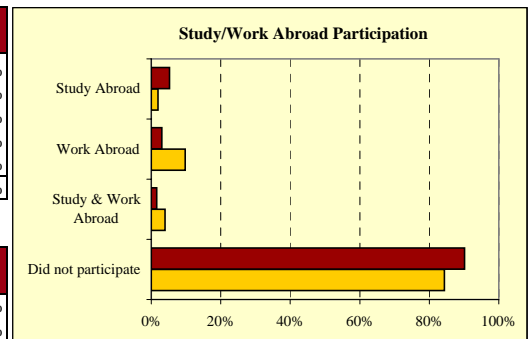
International Skill	14.1001						SYSTEM					
	Very Important	Important	Not Very Important	Not at all Important	Not Applicable	Total Resp.	Very Important	Important	Not Very Important	Not at all Important	Not Applicable	Total Resp.
Speak a second language	12%	20%	41%	27%	0%	51	20%	22%	28%	28%	2%	7966
International Business Practices	16%	22%	37%	25%	0%	51	13%	27%	32%	28%	0%	7817
Global Issues	18%	27%	37%	18%	0%	51	26%	38%	22%	14%	0%	7835
Interconnections between local and global issues	22%	41%	27%	10%	0%	51	29%	41%	18%	12%	0%	7835
Knowledge and traditions of other countries and cultures	14%	39%	29%	18%	0%	51	40%	35%	16%	10%	0%	7840

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

International Skill	14.1001						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	4%	4%	22%	29%	41%	51	5%	12%	18%	18%	48%	7985
International Business Practices	2%	14%	47%	37%	0%	51	6%	23%	34%	37%	0%	7838
Global Issues	6%	24%	53%	18%	0%	51	20%	47%	20%	13%	0%	7946
Interconnections between local and global issues	6%	33%	43%	18%	0%	51	19%	47%	22%	12%	0%	7930
Knowledge and traditions of other countries and cultures	6%	20%	39%	35%	0%	51	20%	46%	22%	11%	0%	7942

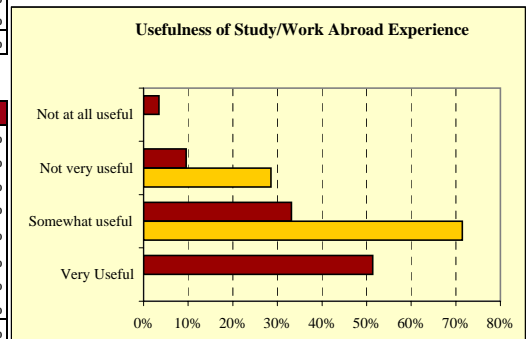
44. Did you study or work abroad during your program?

	14.1001	SYSTEM
Yes:		
Study Abroad	8	16%
Work Abroad	1	2%
Study and work abroad	5	10%
No	43	84%
Total	51	100%



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

	14.1001	SYSTEM
Very Useful	-	0%
Somewhat useful	5	71%
Not very useful	2	29%
Not at all useful	-	0%
Total	7	100%



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

	14.1001	SYSTEM
Not aware these opportunities exist	5	12%
Financial reasons	1	2%
Extended degree completion time	3	7%
Personal reasons (i.e. employment, family)	5	12%
No opportunities/Limited opportunities	12	28%
Not interested/ relevant/ required/ attractive	8	19%
Conflicts with schooling (course load too heavy)	7	16%
Other	2	5%
Total	43	100%