

Labor Outcomes

Public Baccalaureate Institution Graduates, 2006-07 and 2010-11

The National Center for Higher Education Management Systems (NCHEMS), on behalf of National Governors Association (NGA), requested labor outcomes information for two cohorts of degree recipients from public baccalaureate higher education institutions in Washington.

For the 2006-07 degree recipients, follow-up information both one year and five years out was requested. For the 2010-11 degree recipients, a one-year follow-up was requested.

The framework specified by NCHEMS, presented here with data from Washington state public baccalaureate institutions, provides a convenient first look at employment outcomes for recipients of degrees at all levels.

ERDC has compiled the requested information using data from the following sources:

- Degree data from the Public Centralized Higher Education Enrollment System (PCHEES), Washington State Office of Financial Management
- Unemployment Insurance (UI) wage data from Employment Security Department
- National Student Clearinghouse enrollment and degree data
- Education Research & Data Center (ERDC) cross-sector linking resource

The full NCHEMS/NGA specification for this compilation is provided in Appendix A.

Selected Findings

Highlights of the outcomes tables for bachelor's and master's degree recipients are summarized in Table 1. Complete outcomes tables in the format specified by NGA/NCHEMS are provided in Tables 3 through 8.

- As expected, median earnings for the 2006-07 graduates increased between the one-year follow-up and the five-year follow-up for graduates in all fields of study.

The Washington State Education Research & Data Center (ERDC) in the Washington Office of Financial Management is charged with conducting analyses of early learning, K-12, higher education programs and career and education issues and development of a P-20/Workforce data system to support these studies. ERDC focuses on longitudinal education studies, particularly those that involve transitions across education sectors and those that involve workforce-education connections.

- Median earnings for the 2006-07 bachelor's and master's graduates one year after graduation were higher than those for the 2010-11 graduates with one exception – master's degrees in health fields.

Table 1: Labor outcomes highlights for Washington resident graduates

Degree and Field of Study	2006-07 Graduates		2010-11 Graduates
	Median Maximum Quarter Wage in 2008 (one-year follow-up)	Median Maximum Quarter Wage in 2012 (five-year follow-up)	Median Maximum Quarter Wage in 2012 (one-year follow-up)
Bachelor's Degrees			
Arts and Humanities	\$ 8,200	\$ 10,800	\$ 7,000
Social and Behavioral Sciences	\$ 8,800	\$ 11,500	\$ 7,800
Business and Communication	\$ 11,200	\$ 15,300	\$ 10,300
Science, Technology, Engineering, Math (STEM)	\$ 12,700	\$ 17,600	\$ 10,600
Education	\$ 10,500	\$ 11,600	\$ 9,200
Health	\$ 16,400	\$ 18,100	\$ 15,900
Trades (Legal Studies, Aviation, Criminal Justice)	\$ 10,600	\$ 13,600	\$ 8,500
Master's Degrees			
Arts and Humanities	\$ 11,400	\$ 13,800	\$ 10,400
Social and Behavioral Sciences	\$ 13,100	\$ 14,000	\$ 11,500
Business and Communication	\$ 26,700	\$ 32,000	\$ 22,300
Science, Technology, Engineering, Math (STEM)	\$ 17,700	\$ 21,800	\$ 17,400
Education	\$ 14,000	\$ 15,000	\$ 13,300
Health	\$ 18,300	\$ 21,600	\$ 19,400
Trades (Legal Studies, Criminal Justice)	*	*	*

* in cell indicates suppressed data (cell size less than 40 for median wage calculations)

Median wage values for 2008 have been inflation-adjusted to 2012 dollars using the Chain-Weight Implicit Price Deflator (IPD) for Personal Consumption Expenditures. Median wages are rounded to nearest hundred dollars.

- Shares of employment by industry shifted between 2008 and 2012 for the 2006-07 baccalaureate graduates, as shown in Table 2. There were also noteworthy differences between the industry employment shares for the one-year follow-up of 2006-07 and 2010-11 graduates.

Table 2: Distribution of employment by industry for Washington resident bachelor's degree graduates

Degree and Field of Study	2006-07 Graduates		2010-11 Graduates
	Industry of Maximum Quarter Wage in 2008 (one-year follow-up)	Industry of Maximum Quarter Wage in 2012 (five-year follow-up)	Industry of Maximum Quarter Wage in 2012 (one-year follow-up)
Bachelor's Degrees			
Construction	3.2%	2.5%	2.3%
Manufacturing	6.3%	7.4%	7.5%
Trade, transportation, utilities	15.2%	13.9%	18.4%
Information	4.7%	4.9%	4.0%
Financial activities	8.9%	7.7%	7.2%
Professional and business services	18.2%	18.2%	18.5%
Educational services	12.6%	15.3%	10.7%
Health care and social assistance	12.2%	14.2%	12.8%
Leisure and hospitality	8.6%	5.9%	11.1%
Other services	6.6%	7.0%	3.7%
Public administration	3.5%	3.2%	3.6%
Other	3.2%	2.5%	2.3%

Cohort Definition and Characteristics

For each of the cohorts (2006-07 and 2010-11), graduates were classified according to the level of the degree awarded (Bachelor's, Master's, Doctor's, and Professional). Professional degrees awarded by Washington public baccalaureate institutions include doctorates in Medicine, Veterinary Medicine, Dentistry, Pharmacy, Physical Therapy, and Law.

Within each degree level, seven subgroups based on field of study were identified:

- Arts and Humanities
- Social and Behavioral Sciences
- Business and Communication
- Science, Technology, Engineering, and Mathematics (STEM)
- Education
- Health
- Trades (Legal Studies, Criminal Justice and Aviation fall into this category.)

These fields of study were each associated with a set of Classification of Instructional Programs (CIP) categories, which are shown in Appendix B.

Degree recipients were also classified as Washington residents or non-residents.

Since the purpose of the study is to analyze employment outcomes, graduates for whom the social security number was not available (866 individuals out of over 56,000 – 1.5 percent) were excluded from the analysis.

Employment Outcomes, Subsequent Enrollment and Completions

Employment status and wages were assessed at one and at five years after degree receipt for the 2006-07 graduates and at one year after degree receipt for the 2010-11 graduates. UI wage data for calendar year 2008 were used for the one-year follow-up for the 2006-07 graduates. UI wage data for calendar year 2012 were used for the five-year follow-up for the 2006-07 graduates and the one-year follow-up for the 2010-11 graduates. An individual was counted as being employed if there were earnings in any quarter of the appropriate calendar year. For each year of wage data, the quarter with the highest total wages (from all employers combined) was used to determine median quarterly wage for each cohort subgroup.

Graduates who were enrolled in higher education in the academic year following the receipt of their degree were excluded from the calculation of median wage for their subgroup and were not included in the count of those employed. Determination of enrollment in higher education in the year after degree receipt was based on data from PCHEES and from the National Student Clearinghouse.

PCHEES data and National Student Clearinghouse data were used to determine how many 2006-07 graduates earned additional degrees by the year 2011-12.

Results by Subgroup

In the tables that follow, information in cells representing fewer than 10 individuals is suppressed. In addition, median quarterly wage is suppressed when based on wage data for fewer than 40 individuals. Median quarterly wage values are rounded to the nearest hundred dollars.

Table 3: 2006-07 Washington resident graduates, one-year follow-up

Award Level and Field of Study	2006-07 Graduating Cohort One Year Following Completion			
	Completers in 2006-07	Continued Enrollment in 2007-08	Employed in 2008	Median Quarterly Wage in 2008
Bachelor's Degrees				
Arts and Humanities	4,525	1,110	2,606	\$ 8,200
Social and Behavioral Sciences	4,610	968	2,932	\$ 8,800
Business and Communication	4,020	456	2,959	\$ 11,200
Science, Technology, Engineering, Math (STEM)	3,355	814	1,955	\$ 12,700
Education	1,001	164	768	\$ 10,500
Health	904	185	601	\$ 16,400
Trades	404	72	268	\$ 10,600
Master's Degrees				
Arts and Humanities	312	64	171	\$ 11,400
Social and Behavioral Sciences	920	147	636	\$ 13,100
Business and Communication	516	16	405	\$ 26,700
Science, Technology, Engineering, Math (STEM)	696	123	415	\$ 17,700
Education	745	98	553	\$ 14,000
Health	376	23	282	\$ 18,300
Trades	33	*	20	*
Doctoral Degrees				
Arts and Humanities	54	*	34	*
Social and Behavioral Sciences	73	*	31	*
Business and Communication	20	*	*	*
Science, Technology, Engineering, Math (STEM)	218	11	80	\$ 12,300
Education	55	*	42	\$ 19,500
Health	48	*	28	*
Trades	*	*	*	*
Professional Degrees				
Health	455	*	292	\$ 26,500
Trades	147	*	83	\$ 21,200

* in cell indicates suppressed data.

Median wages are rounded to nearest hundred dollars.

Median wage values for 2008 have been inflation-adjusted to 2012 dollars using the Chain-Weight Implicit Price Deflator (IPD) for Personal Consumption Expenditures.

Table 4: 2006-07 Washington resident graduates, five-year follow-up

Award Level and Field of Study	2006-07 Graduating Cohort Five Years Following Completion				
	Completers in 2006-07	Enrolled in 2011-12	Earned Another Credential by 2011-12	Employed in 2012	Median Quarterly Wage in 2012
Bachelor's Degrees					
Arts and Humanities	4,525	784	1,496	2,369	\$ 10,800
Social and Behavioral Sciences	4,610	829	1,732	2,629	\$ 11,500
Business and Communication	4,020	405	1,011	2,631	\$ 15,300
Science, Tech, Eng, Math (STEM)	3,355	729	1,055	1,725	\$ 17,600
Education	1,001	189	286	677	\$ 11,600
Health	904	134	325	591	\$ 18,100
Trades	404	48	123	249	\$ 13,600
Master's Degrees					
Arts and Humanities	312	58	72	157	\$ 13,800
Social and Behavioral Sciences	920	70	168	605	\$ 14,000
Business and Communication	516	14	49	357	\$ 32,000
Science, Tech, Eng, Math (STEM)	696	87	164	370	\$ 21,800
Education	745	72	284	525	\$ 15,000
Health	376	21	95	244	\$ 21,600
Trades	33	*	*	24	*
Doctoral Degrees					
Arts and Humanities	54	*	13	24	*
Social and Behavioral Sciences	73	*	25	21	*
Business and Communication	20	*	*	*	*
Science, Tech, Eng, Math (STEM)	218	*	61	61	\$ 22,800
Education	55	*	*	40	\$ 22,400
Health	48	*	17	27	*
Trades	*	*	*	*	*
Professional Degrees					
Health	455	19	13	268	\$ 30,600
Trades	147	*	*	70	\$ 26,300

* in cell indicates suppressed data.

Median wages are rounded to nearest hundred dollars.

Table 5: 2010-11 Washington resident graduates, one-year follow-up

Award Level and Field of Study	2010-11 Graduating Cohort One Year Following Completion			
	Completers in 2010-11	Continued Enrollment in 2011-12	Employed in 2012	Median Quarterly Wage in 2012
Bachelor's Degrees				
Arts and Humanities	4,647	992	2,718	\$ 7,000
Social and Behavioral Sciences	4,813	1,029	2,950	\$ 7,800
Business and Communication	4,250	485	3,062	\$ 10,300
Science, Technology, Engineering, Math (STEM)	3,986	913	2,303	\$ 10,600
Education	932	139	713	\$ 9,200
Health	1,198	246	810	\$ 15,900
Trades	377	58	257	\$ 8,500
Master's Degrees				
Arts and Humanities	343	56	194	\$ 10,400
Social and Behavioral Sciences	858	106	581	\$ 11,500
Business and Communication	640	14	526	\$ 22,300
Science, Technology, Engineering, Math (STEM)	720	120	429	\$ 17,400
Education	883	87	677	\$ 13,300
Health	524	49	380	\$ 19,400
Trades	39	*	24	*
Doctoral Degrees				
Arts and Humanities	64	*	31	*
Social and Behavioral Sciences	61	*	26	*
Business and Communication	14	*	*	*
Science, Technology, Engineering, Math (STEM)	228	17	96	\$ 13,000
Education	53	*	31	*
Health	99	*	72	\$ 18,400
Trades	*	*	*	*
Professional Degrees				
Health	417	15	243	\$ 25,700
Trades	122	*	78	\$ 15,200

* in cell indicates suppressed data.

Median wages are rounded to nearest hundred dollars.

Table 6: 2006-07 Non-resident graduates, one-year follow-up

Award Level and Field of Study	2006-07 Graduating Cohort One Year Following Completion			
	Completers in 2006-07	Continued Enrollment in 2007-08	Employed in 2008	Median Quarterly Wage in 2008
Bachelor's Degrees				
Arts and Humanities	457	91	143	\$ 6,000
Social and Behavioral Sciences	397	75	99	\$ 9,100
Business and Communication	366	38	114	\$ 10,000
Science, Technology, Engineering, Math (STEM)	424	109	133	\$ 11,400
Education	42	*	17	*
Health	111	35	24	*
Trades	21	*	*	*
Master's Degrees				
Arts and Humanities	151	28	56	\$ 10,100
Social and Behavioral Sciences	207	63	50	\$ 11,000
Business and Communication	184	*	49	\$ 25,100
Science, Technology, Engineering, Math (STEM)	368	134	96	\$ 17,300
Education	68	11	22	*
Health	108	10	27	*
Trades	60	*	13	*
Doctoral Degrees				
Arts and Humanities	17	*	*	*
Social and Behavioral Sciences	37	*	*	*
Business and Communication	23	*	*	*
Science, Technology, Engineering, Math (STEM)	208	*	72	\$ 16,100
Education	*	*	*	*
Health	25	*	*	*
Trades	*	*	*	*
Professional Degrees				
Health	137	*	27	*
Trades	38	*	19	*

* in cell indicates suppressed data.

Median wages are rounded to nearest hundred dollars.

Median wage values for 2008 have been inflation-adjusted to 2012 dollars using the Chain-Weight Implicit Price Deflator (IPD) for Personal Consumption Expenditures.

Table 7: 2006-07 Non-resident graduates, five-year follow-up

Award Level and Field of Study	2006-07 Graduating Cohort Five Years Following Completion				
	Completers in 2006-07	Enrolled in 2011-12	Earned Another Credential by 2011-12	Employed in 2012	Median Quarterly Wage in 2012
Bachelor's Degrees					
Arts and Humanities	457	108	143	79	\$ 9,600
Social and Behavioral Sciences	397	87	137	63	\$ 12,800
Business and Communication	366	30	110	82	\$ 13,800
Science, Tech, Eng, Math (STEM)	424	92	159	94	\$ 17,300
Education	42	*	13	17	*
Health	111	*	57	26	*
Trades	21	*	*	*	*
Master's Degrees					
Arts and Humanities	151	32	31	38	*
Social and Behavioral Sciences	207	40	54	41	\$ 13,600
Business and Communication	184	*	11	40	\$ 32,600
Science, Tech, Eng, Math (STEM)	368	48	166	98	\$ 20,700
Education	68	*	24	16	*
Health	108	*	27	18	*
Trades	60	*	*	*	*
Doctoral Degrees					
Arts and Humanities	17	*	*	*	*
Social and Behavioral Sciences	37	*	15	*	*
Business and Communication	23	*	10	*	*
Science, Tech, Eng, Math (STEM)	208	*	64	52	\$ 23,400
Education	*	*	*	*	*
Health	25	*	*	*	*
Trades	*	*	*	*	*
Professional Degrees					
Health	137	*	*	17	*
Trades	38	*	*	13	*

* in cell indicates suppressed data.

Median wages are rounded to nearest hundred dollars.

Table 8: 2010-11 Non-resident graduates, one-year follow-up

Award Level and Field of Study	2010-11 Graduating Cohort One Year Following Completion			
	Completers in 2010-11	Continued Enrollment in 2011-12	Employed in 2012	Median Quarterly Wage in 2012
Bachelor's Degrees				
Arts and Humanities	557	129	154	\$ 5,100
Social and Behavioral Sciences	368	82	129	\$ 7,700
Business and Communication	322	37	96	\$ 10,100
Science, Technology, Engineering, Math (STEM))	412	100	129	\$ 9,400
Education	25	*	*	*
Health	105	28	37	*
Trades	13	*	*	*
Master's Degrees				
Arts and Humanities	148	35	54	\$ 9,200
Social and Behavioral Sciences	214	52	68	\$ 11,500
Business and Communication	168	15	81	\$ 27,800
Science, Technology, Engineering, Math (STEM)	415	170	112	\$ 17,400
Education	87	*	35	*
Health	171	*	68	\$ 16,500
Trades	43	*	21	*
Doctoral Degrees				
Arts and Humanities	27	*	*	*
Social and Behavioral Sciences	38	*	*	*
Business and Communication	24	*	*	*
Science, Technology, Engineering, Math (STEM)	236	*	78	\$ 11,300
Education	15	*	*	*
Health	26	*	10	*
Trades	*	*	*	*
Professional Degrees				
Health	154	*	42	\$ 14,800
Trades	60	*	34	*

* in cell indicates suppressed data.

Median wages are rounded to nearest hundred dollars.

Data Discussion and Limitations

Degrees Earned

For this compilation, an individual was represented no more than once per cohort. When two degrees were earned by an individual in the same year, the higher level award was retained for analysis. For example, an individual receiving both a master's degree and a medical degree (M.D.) would be retained in the Professional category. When an individual earned two degrees at the same level in the same year, but in different areas of study, the more occupation-specific degree was

retained for analysis. For example, a person receiving two bachelor's degrees, one in Health and one in Arts and Humanities, the Health degree would be retained for analysis of outcomes.

Employment Status

It is important to note that the one-year and five-year follow-up of the 2006-07 graduates is based upon graduates who were not enrolled in the respective follow-up year and who had employment records available. The one-year follow-up groups overlap significantly, but it is possible for an individual to be represented in the five-year follow-up but not the one-year follow-up.

Employment status for the graduates involved in the follow-up is based on the existence of a related record in the UI wage file submitted by employers to the state Employment Security Department quarterly. While it is estimated that over 95 percent of employment in the state is represented in the UI wage data, certain categories of employment are not covered. Perhaps the most significant category of workers not covered by unemployment insurance is the self-employed. Many graduates earning professional degrees are traditionally self-employed, and information about their employment status and earnings is not available in UI system.

The state UI wage data does not include employment information related to federal government employment.

Additionally, the UI wage data incorporated into this compilation relates to Washington employers only. Including out-of-state employment was not part of the NCHEMS/NGA specification.

Enrollment Status and Degrees Earned

Enrollment status for the graduates and subsequent degrees earned were determined using a combination of PCHEES data, which is complete for the state's public baccalaureate institutions, and National Student Clearinghouse (NSC) data, which is based on matches on student name and birthdate.

Most, but not all, higher education institutions in the U.S. submit information to NSC. NSC estimates that over 98 percent of all students in public and private U.S. institutions are represented in NSC data. It is possible for students to block the release of data by NSC for efforts such as this compilation, however.

Employment and Enrollment

Full-time/part-time enrollment status is available from PCHEES and NSC. The specifications for this compilation exclude all individuals from employment reporting who are enrolled either full-time or part-time during the academic year following the graduation year. It might be reasonable to exclude full-time enrolled students from the employment analysis but include those who are enrolled less than full-time while employed.

Appendix A: Specifications for Labor Outcomes Metrics [edited extract]

National Governors Association

Prepared by the National Center for Higher Education Management Systems (NCHEMS)

Governors are asking four fundamental questions about the effectiveness and efficiency of investments in postsecondary educational institutions and systems in their states to develop their policy agendas. The National Governors Association Center for Best Practices has put together a paper on those questions and measures that can be used to address them. You can read the paper [www.nga.org/files/live/sites/NGA/files/pdf/2013/1309BeyondCompletionPaper.pdf]. Two of those questions are “Do our postsecondary graduates get jobs, and do those jobs pay wages and salaries that can support families?” NCHEMS has been contracted by NGA to collect available metrics associated with labor outcomes of graduates for as many states (and/or systems) as possible.

In order to collect the necessary information, it will require data matches between your student-level unit record data and the individual records housed in your state’s Unemployment Insurance database – typically maintained in the state’s department of labor (or equivalent). Employment and earnings outcomes for students graduating in the 2006-07 and 2010-11 academic years can be gathered by matching student records with state wage records in any quarter of the 2008 and 2012 calendar years, respectively. This period will provide a one-year time frame depicting the critical period of labor market entry and career start up. Data pertaining to graduates in the 2006-07 academic year should also be matched to employment databases for any quarter in the calendar year 2012 to capture longer-term labor market outcomes. These data are already publicly available according to the federal website for Local Area Unemployment Statistics.

The following are the data elements, matching, and reporting specifications that are needed.

Data Elements

The data elements shown in the figure below are from your system(s), the state’s UI Wage Record databases, the state’s longitudinal data system (SLDS) or the National Student Clearinghouse (NSC), if applicable.

Only the fields identified below are necessary for the purposes of this project. If you are working through this process in an environment where you can just submit Social Security Numbers (SSNs) to the Labor department, and the required fields from the UI database are provided for each SSN, then you could just append the required postsecondary data elements after the match takes place. There are many different ways these matches take place across states and systems.

[Higher Education] Institution	
SSN	9-digit Social Security Number
Academic Year	IPEDS Definition
6-Digit CIP Code	IPEDS Codes
Award Level	IPEDS Definitions
Residency	(1=In State, 2=Out of State)

State UI [Wage] Database	
SSN	9-digit Social Security Number
In Database	(Blank=No, 1=Yes)
Quarterly Earnings	Quarter with Highest Earnings

[ERDC = State P20W] Database [includes NSC information]	
SSN	9-digit Social Security Number
Enrolled	During any term of the assigned year (Blank=No, 1=Yes)
Earned Credential	During any term of the assigned year (Blank=No, 1=Yes)

In addition to the information on employment status and earnings from the UI wage records, we want to capture graduates who continue to pursue advanced degrees during the years identified in the specifications below. If they are still enrolled, they should be reported as “still enrolled,” as opposed to employed (with \$ _____ of quarterly earnings). This designation will override the presence of the individuals in the UI wage file because we don’t want to acknowledge their employment in these cases – since many of them are likely to be employed in jobs that are unrelated to (or impacted by) their education and training. These data come from your postsecondary institutional database (if they continue to enroll within the state’s postsecondary system), the state’s longitudinal database, or the National Student Clearinghouse (if you are a participant in its services). The state longitudinal database will only capture the continued enrollment of graduates within the state, whereas the NSC database will capture those enrollments in other states as well.

Matching Specifications

The specifications for matching the data, along with the cohort years, are as follows:

1. The graduate records of the 2006-07 academic year should be matched to all four quarters of the UI database in the calendar years of 2008 and 2012 (using the SSN). This will yield the employment status of graduates one and five years after completion.
2. An individual is considered “employed” if they appear in the UI database *in any quarter* during the calendar year. The median earnings calculated for the summary report described below should be derived from *the quarter with the highest earnings*.
3. Using your state’s database, or NSC database, if 2006-07 graduates are enrolled at any point (at any institution) in the following 2007-08 academic year they should be captured as “still enrolled” and excluded from the status of “employed,” as well as excluded from the calculation of median earnings. Finally, using the same database(s), if 2006-07 graduates from your institutions earn another credential (within your institution or at another one) by the year 2011-12, that information should be captured as well in “Earned Another Credential” as “yes” or “no” and *included* in the employed cell and in the calculation of median earnings as appropriate.
4. Repeat the matching process used for the 2006-07 graduates cohort for the 2010-11 academic year graduates cohort; use just the calendar year following completion for the UI data match and the academic year following completion for the continuing enrollment match.

Reporting Specifications

... There will be *two tables produced for each institution (or system)* – one for graduates who were state residents when they entered an institution, and another for non-state residents.

Appendix B: CIP Code Summary for NGA Project

Category Name	2 Digit CIP	CIP Category Name
Arts and Humanities	05	Area, ethnic, cultural, and gender studies
	16	Foreign languages, literatures, and linguistics
	23	English language and literature/letters
	24	Liberal arts and sciences, general studies
	30	Multi/interdisciplinary studies
	38	Philosophy and religious studies
	39	Theology and religious vocations
	50	Visual and performing arts
	54	History
Social/Behavioral Sciences	19	Family and consumer sciences/human sciences
	25	Library science
	31	Parks, recreation, leisure, and fitness studies
	42	Psychology
	44	Public administration and social service
	45	Social sciences
Business/Communication	09	Communication, journalism
	10	Communications technologies/technicians
	52	Business, management, marketing
Science, Technology, Engineering, Mathematics (STEM)	01	Agriculture, agriculture operations
	03	Natural resources and conservation
	04	Architecture and related services
	11	Computer and information sciences
	14	Engineering
	15	Engineering technologies/technicians
	26	Biological and biomedical sciences
	27	Mathematics and statistics
	29	Military technologies
	40	Physical sciences
	41	Science technologies/technicians
Education	13	Education
Health	51	Health professions and clinical sciences
Trades	12	Personal and culinary services
	22	Legal Professions and Studies
	43	Security and protective services
	46	Construction trades
	47	Mechanic and repair technologies/technicians
	48	Precision production
	49	Transportation and materials moving