# EDUCATION RESEARCH DATA CENTER

ERDC Research Brief 2011-01

**Longitudinal Studies** 

January 2011

# WHO LEAVES TEACHING AND WHERE DO THEY GO? Washington State Teachers

The Washington State Education Research & Data Center (ERDC) is charged with conducting analyses of early learning, K-12, and higher education programs and education issues across the P-20 system. ERDC focuses on longitudinal education studies, particularly those that involve transitions across education sectors. This study focuses on teacher transitions and is funded by Washington's ARRA Statewide Longitudinal Data Systems Grant.

## **P**URPOSE

This brief contributes to our understanding of teacher transitions in Washington State and addresses two of the Education Research & Data Center critical research and policy questions: *What are the common characteristics of teachers who leave the teaching workforce? What are their subsequent employment characteristics?* ERDC uses longitudinal teacher and school district data supplied by the Office of Superintendent of Public Instruction (OSPI) to examine teacher transitions and teacher and school district characteristics that are associated with teachers who continue teaching or exit the K-12 system. The capacity to link teachers to systems outside of the K-12 public education system, such as Unemployment Insurance earnings and retirement, is new and allows us to explore what happens to teachers when they leave the K-12 system.

## BACKGROUND

Effective teaching is necessary for school and student success. High turnover in teachers undermines school effectiveness and student learning. Teacher turnover can occur when teachers leave for another school, another district, or the profession entirely. Previous research indicates that about 83 percent of Washington teachers remain teaching in their school from one year to the next,<sup>1</sup> which is consistent with national findings,<sup>2</sup> with about 7 percent moving districts and 7 percent leaving the K-12 system altogether. Additionally, teachers who move within the K-12 system or who leave teaching tend to be younger and less experienced. Schools with high poverty rates and low-achieving students tend to have higher rates of teachers leaving than schools with lower poverty rates and higher achieving students.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup>Elfers, A. M., & Plecki, M. L. (2009). *Taking stock of Washington's teacher workforce: An assessment of conditions prior to the economic downturn.* Seattle, WA: University of Washington.

<sup>&</sup>lt;cstp-wa.org/sites/default/files/taking\_stock\_of\_washingtons\_teacher\_workforce\_1.pdf>

<sup>&</sup>lt;sup>2</sup> Marvel, J, Lyter, D.M., Peltola, P., Strizek, G.A., Morton, B.A., & Rowland, R. (2007). *Teacher Attrition and Mobility: Results from the 2004-05 Teacher Follow-up Survey*. U.S. Department of Education. <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2010353>

<sup>&</sup>lt;sup>3</sup> Goldhaber, D., Gross, B., & Player, D. (2007). "Are Public Schools Really Losing Their "Best"? Assessing the Career Transitions of Teachers and Their Implications for the Quality of the Teacher Workforce. Seattle, WA: University of Washington. <a href="http://www.crpe.org/cs/crpe/print/csr\_docs/pubs.htm?topic=3">http://www.crpe.org/cs/crpe/print/csr\_docs/pubs.htm?topic=3</a>

# **METHOD AND DATA SOURCES**

Multiple administrative data sources were used to create this report. First, two cohorts of teachers were created from OSPI's K-12 personnel database (see Appendix A for a full description).

- **2006 cohort** consists of all teachers with a teaching assignment at the beginning of the academic year (October 1, 2006). This cohort provides a 3-year follow up period through 2009-2010.
- **2008 cohort** consists of all teachers with a teaching assignment at the beginning of the academic year (October 1, 2008). This cohort provides a more recent picture of teacher transitions, but allows only a 1-year follow up.

This definition *does not* include substitute teachers, teachers who died during the course of the academic year or teachers who were hired after October 1st. This definition *does* include teachers who exit and re-enter the K-12 system, which is addressed in Table 9.

Teachers in each of the cohorts were followed into the next academic year and categorized according to whether they stayed ("Stayers") or left the K-12 system ("Leavers"). The Leavers were matched against three other system's administrative data to describe where they went when they left the K-12 system.

- Department of Retirement Systems (DRS) to see if they retired.
- Employment Security Department (ESD) Unemployment Insurance (UI) earnings data to see if they received earnings from an employer covered by the Unemployment Insurance Program or unemployment benefits.
- Social Security Administration (SSA) mortality file was used to remove from the cohort records for teachers who died over the course of the academic year.

Teacher and school district characteristics were also examined for the Stayers and Leavers in both cohorts. Teacher characteristics were obtained from OSPI's K-12 personnel database and the Endorsement and Certification files. School district information was obtained from OSPI's publicly-available reports found on their website. (For full descriptions of data sources and data elements please see Appendix A).

# **Teacher Transitions**

The percent of teachers in the 2006 and 2008 cohorts who continue teaching, move districts, move out of teaching assignments or leave the K-12 system from one year to the next is fairly stable and similar to what has been reported previously by Plecki et al. See Table 1.

	2006 Coho	ort	2008 Cohort			
Teacher Transition	Transitions from 2006 to 2007	%	Transitions from 2008 to 2009	%		
Total Teachers	56,662	100.0%	57,236	100.0%		
Stayed in the K-12 System (Stayers)	52,371	92.4%	53,825	94.0%		
Stayed teaching in same district	50,188	88.6%	52,868	92.4%		
Moved to non-teaching role	821	1.4%	490	0.9%		
Moved to new district	1362	2.4%	467	0.8%		
Left K-12 System (Leavers)	4,291	7.6%	3,411	6.0%		

Table 1: Comparison of Teacher Retention and Mobility - 2006 and 2008 Cohorts

Note that teachers who died before the start of the next academic year were excluded from analysis. Twenty-two teachers died during the 2006-2007 academic year and 46 died during the 2008-2009 academic year and were thus excluded from the respective cohorts.

The majority of teachers stay in the K-12 system from one year to the next (92.4 and 94.0 percent). A small percentage of teachers who remain take on non-teaching assignments (1.4 and 0.9 percent) or continue teaching but change school districts (2.4 and 0.8 percent). The 2008 cohort has a slightly higher percent of teachers remaining in the K-12 system and less movement between assignment types and school districts than the 2006 cohort.

The percentage of teachers who leave the K-12 system is 7.6 percent for the 2006 cohort and 6.0 percent for the 2008 cohort. Table 2 provides information on what happens to these Leavers by linking them to the Department of Retirement System data and the Employment Security Department UI earnings data to see if records for them appear in these systems when they leave. See Table 2.

Teacher status one year after they leave the K-12 System		Cohort vers	2008 Cohort Leavers		
, , , ,	Count	%	Count	%	
Total Leavers <sup>1</sup>	4,291	100.0%	3,411	100.0%	
Retired	1,421	33.1%	989	29.0%	
Retired after the academic year ended	1,167	27.2%	708	20.8%	
Left, but had retired prior to the end of the academic year	254	5.9%	281	8.2%	
Employed (UI Earnings) <sup>2</sup>	2,256	52.6%	1,919	56.3%	
UI Earnings outside public education only	669	15.6%	388	11.4%	
UI Earnings in public education only	1,343	31.3%	1,313	38.5%	
UI Earnings in both public and non-public education	244	5.7%	218	6.4%	
Received Unemployment Benefits	19	0.4%	68	2.0%	
Not located in retirement or unemployment insurance earning records <sup>3</sup>	1,035	24.1%	899	26.4%	

#### Table 2: Where do teachers go when they leave the K-12 system?

<sup>1</sup>The main categories of retired, employed, and receiving unemployment benefits are not mutually exclusive. A teacher could appear in all three categories; however the subcategories under retired and employed are mutually exclusive (unduplicated).

<sup>2</sup>Based on four quarters of Unemployment Insurance earnings data, including October 2007 through September 2008 for 2006 cohort and October 2009 through September 2010 for 2008 cohort. UI earnings outside this fourquarter period were not included in this analysis.

<sup>3</sup>This row represents teachers who left the K-12 system and who were not located in the retirement, UI earnings, or UI unemployment claims data.

Table 2 provides information on the K-12 Leavers for both the cohorts. There are some notable differences between the two cohorts. In the time period after they left the K-12 system, fewer of the 2008 Leavers retired (29.0 versus 33.1 percent) and fewer received UI earnings outside public education (11.4 versus 15.6 percent). In both cohorts, a very small percentage received unemployment benefits.

In both cohorts, a greater percentage of Leavers subsequently received UI earnings in public education (31.3 and 38.5 percent) compared to UI earnings from outside public education (15.6 and 11.4 percent). A small percentage also received UI earnings from both public and non-public education (5.8 and 6.4 percent). This finding brings up the question of whether the teachers who left the K-12 system (according to OSPI's K-12 personnel database) and subsequently received UI earnings from public education have actually left the K-12 system. This issue is further examined in Table 10 by looking at the movement of the 2006 cohort across 3 years in conjunction with the UI earnings data.

# Wages and Type of Employment for Leavers who Receive UI Earnings

Table 3 examines in greater detail the UI earnings of Leavers by looking at the number of quarters they received UI earnings, the amount of UI earnings received, and the industry type. UI earnings are aggregated across a three-month period and reported quarterly. For the 2006 cohort, the quarters cover October 2007 through September 2008. For the 2008 cohort, the quarters cover October 2009 through September 2010. The quarterly aggregation of the earnings data does not allow us to isolate earnings received solely over the summer or academic year, which would be useful in understanding the UI earnings for teachers, especially in the public education industry.

Characteristics of UI Earnings <sup>1</sup>	2006 Cohort Lea	avers (n=4,291)	2008 Cohort Leavers (n=3,411)			
Characteristics of Of Earnings	Count	%	Count	%		
Total Leavers with UI earnings <sup>1</sup> records	2,256	100.0%	1,919	100.09		
Number of quarters received UI earnings						
1	447	19.8%	341	17.89		
2	252	11.2%	238	12.49		
3	396	17.6%	426	22.29		
4	1,161	51.5%	1,256	65.5		
Total UI earnings received across 4 quarters						
up to \$30,000	1,816	80.5%	1,606	83.7		
\$30,000-\$49,999	297	13.2%	212	11.0		
\$50,000-\$75,000	123	5.5%	83	4.3		
Above \$75,000	20	0.9%	19	1.0		
Industry						
Public Elementary and Secondary School	1,474	65.3%	1,435	74.8		
Other Education	237	10.5%	149	7.8		
Health Care & Social Services	77	3.4%	66	3.4		
Public Administration	99	4.4%	69	3.6		
Professional & Technical	97	4.3%	45	2.3		
Entertainment, Recreation, & Arts	49	2.2%	35	1.8		
Service Industry	149	6.6%	105	5.5		
Construction & Manufacturing	68	3.0%	19	1.0		

#### Table 3: Employment tenure, UI earnings<sup>1</sup>, and industry for 2006 and 2008 Leavers

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Table 3 shows that for 2006 and 2008 Leavers with UI earnings, 65.3 and 74.8 percent received UI earnings in public elementary and secondary school. The other education category, which includes vocational technical schools, private elementary and secondary schools, private and local education support services and local and private junior colleges, had the next highest percentage at 10.5 and 7.8 percent followed by the service industry at 6.6 and 5.5 percent.

The majority of Leavers (80.5% and 83.7%) who received UI earnings received less than \$30,000 across the four-quarter period. The average UI earnings for those receiving less than \$30,000 for the 2006 cohort was \$10,424 (median=\$7,752) for those working outside public education, \$7,220 (median=\$5,014) for those in public education, and \$12,339 (median=\$10,594) for those working in both education and non-education sectors. The average UI earnings for those receiving \$30,000-\$49,999 was \$38,819 (median=\$38,175) for those outside public education, \$39,251 (median=\$39,770) for those inside public education, and \$38,773 (median=\$39,283) for those in both education and non education sectors. The 2008 cohort had similar averages and medians. Additional tables examining UI earnings are provided in Appendix B.

Table 4 examines the retirement status of Leavers who have any type of UI earnings. For both the 2006 and 2008 cohort, a higher percentage of not-retired leavers (35.6 and 42.6 percent) received UI earnings compared to retired leavers (17.0 and 13.6 percent).

	2006 (	Cohort Lea	avers (n=4,2	91)	2008 Cohort Leavers (n=3,411)					
Retired Status	UI		No UI		UI		No UI			
Relifeu Status	Earnings <sup>1</sup>	%	Earnings	%	Earnings <sup>1</sup>	%	Earnings	%		
Total	2,256	52.6%	2,035	47.4%	1,917	56.2%	1,494	43.8%		
Retired	730	17.0%	691	16.1%	465	13.6%	524	15.4%		
After June 1	575	13.4%	592	13.8%	281	8.2%	427	12.5%		
On or Before June 1	155	3.6%	99	2.3%	184	5.4%	97	2.8%		
Not retired	1,526	35.6%	1,344	31.3%	1,452	42.6%	970	28.4%		
<sup>1</sup> Based on four quarters of 2008 for 2006 cohort and			-		-	r 2007 thro	ough Septem	ber		

Table 4: What proportion of Leavers continue to receive UI earnings, by retirement status?

The demographic and professional characteristics of retired Leavers and Leavers who received UI earnings are displayed in Table 4a found in Appendix B. The only notable pattern found is that it becomes easier to locate Leavers as they get older, which is probably associated with their retirement status.

Table 5 displays the demographic and professional characteristics of 2006 Leavers who continue to receive UI earnings in public education and also outside of public education as reported in the Unemployment Insurance data. Details on how certificate and endorsement categories were created are available in Appendix A. Some notable differences in professional and assignment characteristics were found for Leavers who worked outside of public education:

- A higher percentage of males than females worked outside of public education (21.2 compared to 13.4 percent).
- Higher percentages of younger Leavers worked outside of public education (20.6 percent of 21-30 year olds compared to 12.9 percent of 51-60 year olds), and the same pattern holds for experience level Leavers with less experience work outside of public education at higher percentages.
- A slightly higher percentage of Leavers with math/science endorsements (18.6 percent) worked outside of public education compared to Leavers with other endorsements (17.0 percent), but a higher percentage of Leavers with UI earnings and math/science endorsements worked inside public education (45.0 percent) than outside public education (35.5 percent).

To better understand the UI earnings of Leavers, we examined the median UI earnings of Leavers with different endorsement types by inside/outside public education earnings.

Among Leavers with UI earnings outside public education, those with math/science endorsements had median earnings of 31,561 (n=64) compared to a median of 25,264 for Leavers with other endorsements (n=437).

Among Leavers with UI earnings inside public education, those with math/science endorsements had median earnings of 6,066 (n=81) compared to a median of 5,761 (n=771) for Leavers with other endorsements.

A difference in median income is most notable when comparing those who have UI earnings inside public education (median earnings \$5,761 for other and \$6,066 for math/science) to those with earnings outside of public education (median earnings of \$25,264 for other and \$31,561 for math/science). The number of quarterly hours worked by those outside public education and inside public education help explain these differences in earnings. Those with earnings outside public education.

The quarterly median hours for those working outside public education with a math/science endorsement ranged from around 400 hours to 480 hours. For those with a non-math/science endorsement the quarterly median hours were somewhat smaller and ranged from 297 hours to 379 hours.

The quarterly median hours for those working inside public education with any type of endorsement ranged from 14 hours to 68 hours. Math/science and other endorsed are not reported separately because the median wages are similar for both groups when earning wages inside public education.

This suggests that many of the Leavers are continuing in public education but in a reduced capacity, possibly as substitute teachers or in other temporary roles. This might be especially true for assignments that begin after October 1, when the personnel database snapshot is established.

					ort Leavers			
Teacher Characteristics	Total	Employed	UI Ear Outside Educatio	Public	UI Earni Public Ed On	ucation	UI Earnings i Education a Public Edu	nd Non-
	Count	Count	Count	%	Count	%	Count	%
Total	4,291	2,256	669	15.6%	1,343	31.3%	244	5.7%
Race								
White	3,975	2,092	614	15.4%	1,249	31.4%	229	5.89
Non-White	316	164	55	17.4%	94	29.7%	15	4.79
Gender	1							
Female	3,100	1,580	416	13.4%	1,017	32.8%	147	4.79
Male	1,191	676	253	21.2%	326	27.4%	97	8.1
Age	, -							
21-30 years	824	418	170	20.6%	202	24.5%	46	5.69
31-40 years	913	480	173	18.9%	262	28.7%	45	4.9
41-50 years	498	293	90	18.1%	174	34.9%	29	5.8
51-60 years	1,338	720	172	12.9%	459	34.3%	89	6.7
61+ years	718	345	64	8.9%	246	34.3%	35	4.9
Hours Worked in K-12 Po	1	0.0	0.1	0.070		0 11070		
FTE 0.95-1 (full-time)	3,377	1,742	526	15.6%	1,028	30.4%	188	5.6
FTE 0.75 - 0.94	152	86	30	19.7%	46	30.3%	10	6.6
FTE 0.5 to 0.74	506	275	73	14.4%	176	34.8%	26	5.1
Less than 0.5	256	153	40	15.6%	93	36.3%	20	7.8
Salary	250	100	10	13.070	33	30.370		7.0
\$0-\$30,000	711	399	114	16.0%	243	34.2%	42	5.9
\$30,000-\$50,000	1,936	1,022	366	18.9%	545	28.2%	111	5.7
\$50,000+	1,644	835	189	11.5%	555	33.8%	91	5.5
Certificate Type	1,044	000	105	11.570	555	55.070	51	5.5
Professional Teacher	1,244	617	160	12.9%	391	31.4%	66	5.3
Residency Teacher	1,435	772	292	20.3%	400	27.9%	80	5.6
Standard Teacher	1,393	750	162	11.6%	506	36.3%	82	5.9
Other/Unknown	219	117	55	25.1%	46	21.0%	16	7.3
Experience	215	11/	55	23.170	-10	21.070	10	7.5
0-1 Years	444	275	115	25.9%	126	28.4%	34	7.7
2-3 Years	447	243	92	20.6%	131	29.3%	20	4.5
4-5 Years	435	243	75	17.2%	123	28.3%	25	5.7
6-10 Years	775	390	130	16.8%	216	27.9%	44	5.7
+ 10 Years	2,190	1,125	257	11.7%	747	34.1%	121	5.5
Highest Degree	2,150	1,123	237	11.773	, , ,	5	161	5.5
Bachelors Degree	1,840	962	269	14.6%	594	32.3%	99	5.4
Advanced Degrees	2,403	1,260	378	15.7%	739	30.8%	143	6.0
Other Degree	48	34	22	45.8%	10	20.8%	2	4.2
Endorsement Type <sup>1</sup>	10	57			10	_0.070	-	
Math/Science (1+)	344	180	64	18.6%	81	23.5%	35	10.2
Other (1+)	2,578	1,343	437	17.0%	771	29.9%	135	5.29

# What are the Characteristics of Leavers and Stayers?

Table 6a examines demographic characteristics for Leavers and Stayers in the 2006 and 2008 cohorts.

Teacher or			2006					2008					
Professional	Total	Lea	vers	Sta	yers	Total	Leav	vers	Sta	yers			
Characteristics	Count	Count	%	Count	%	Count	Count	%	Count	%			
Total	56,685	4,291	100.0%	52,371	100.0%	57,282	3,411	100.0%	53,825	100.0%			
Race													
White	52,514	3,975	92.6%	48,539	92.7%	52,868	3,138	92.0%	49,730	92.4%			
Non-White	4,122	315	7.3%	3,807	7.3%	4,368	273	8.0%	4,095	7.6%			
Gender													
Male	16,316	1,191	27.8%	15,125	28.9%	16,218	928	27.2%	15,290	28.4%			
Female	40,345	3,100	72.2%	37,245	71.1%	41,018	2,483	72.8%	38,535	71.6%			
Age										<u>.</u>			
21-30 years	8,244	824	19.2%	7,420	14.2%	7,927	753	22.1%	7,174	13.3%			
31-40 years	13,951	913	21.3%	13,038	24.9%	14,557	713	20.9%	13,844	25.7%			
41-50 years	14,265	498	11.6%	13,767	26.3%	14,270	434	12.7%	13,836	25.7%			
51-60 years	17,151	1,338	31.2%	15,813	30.2%	16,261	792	23.2%	15,469	28.7%			
61+ years	3,051	718	16.7%	2,333	4.5%	4,220	719	21.1%	3,501	6.5%			

Table 6a can be used to compare the cohorts: the Leaver and Stayer demographic profiles are similar for the 2006 and 2008 cohorts. For example, the percentage of Leavers who were white in 2006 (92.6 percent) is similar to the percentage of Leavers who were white in 2008 (92.0 percent).

Table 6b also examines the demographic characteristics, but the percentages show the likelihood of being a Leaver or Stayer:

- The same percentage of whites as non-whites are Leavers (7.6 percent in 2006).
- Males and females are about as likely to be Leavers (7.3 percent of males compared to 7.7 percent of females in 2006)..
- Younger teachers (age 21-30) are more likely to be Leavers (10%), as are teachers older than 60 (23.5%), compared to the middle age groups (3.5 to 7.8 percent).
- These patterns hold for the 2008 cohort, although, the percentage of Leavers is smaller overall (7.6 percent in 2006 and 6.0 percent in 2008).

Teacher or			2006			2008							
Professional	Total	Lea	vers	Stay	ers	Total	Leav	ers	rs Stayers				
Characteristics	Count	Count	%	Count	%	Count	Count	%	Count	%			
Total	56,685	4,291	7.6%	52,371	92.4%	57,282	3,411	6.0%	53,825	94.0%			
Race													
White	52,514	3,975	7.6%	48,539	92.4%	52,868	3,138	5.9%	49,730	94.1%			
Non-White	4,122	315	7.6%	3,807	92.4%	4,368	273	6.3%	4,095	93.8%			
Gender													
Male	16,316	1,191	7.3%	15,125	92.7%	16,218	928	5.7%	15,290	94.3%			
Female	40,345	3,100	7.7%	37,245	92.3%	41,018	2,483	6.1%	38,535	93.9%			
Age		·						·					
21-30 years	8,244	824	10.0%	7,420	90.0%	7,927	753	9.5%	7,174	90.5%			
31-40 years	13,951	913	6.5%	13,038	93.5%	14,557	713	4.9%	13,844	95.1%			
41-50 years	14,265	498	3.5%	13,767	96.5%	14,270	434	3.0%	13,836	97.0%			
51-60 years	17,151	1,338	7.8%	15,813	92.2%	16,261	792	4.9%	15,469	95.1%			
61+ years	3,051	718	23.5%	2,333	76.5%	4,220	719	17.0%	3,501	83.0%			

Table 6b: Percentage Distribution of Leavers and Stayers by Teacher Characteristics

Table 7a and 7b examine professional characteristics for Leavers and Stayers in the 2006 and 2008 cohorts. Table 7a allows comparison across the cohorts and shows that the Leaver and Stayer professional profiles are similar for the 2006 and 2008 cohorts. For example, among 2006 Leavers, 51 percent had 10 or more years of experience compared to 44.6 percent of 2008 Leavers.

Table 7b also examines the professional characteristics for Leavers and Stayers: for teachers with a given characteristic, what percent are left teaching? In 2006, 6.3 percent (344/5,478) of math/science and 6.3 percent (2,578/40,905) of other endorsed teachers left. In 2008, 4.4 percent (236/5,412) of math science and 5.0 percent (2,195/43,763) of other endorsed teachers left. This suggests that teachers with math/science endorsements do not leave at higher rates than teachers with other endorsements.

Overall, Leavers are more likely to be younger teachers, those who earn smaller salaries (up to \$30,000), and those with less than a full-time assignment. This pattern holds for both 2006 and 2008.

Professional and			2006					2008		
Assignment	Total	Leav	vers	Stay	ers	Total	Lea	vers	Stay	ers
Characteristics	Count	Count	%	Count	%	Count	Count	%	Count	%
Total	56,685	4,291	100%	52,371	100%	57,282	3,411	100%	53,825	100%
Experience										
0-1 years	4,006	444	10.3%	3,562	6.8%	3,671	570	16.7%	3,101	5.80%
2-3 years	5,140	447	10.4%	4,693	9.0%	5,335	468	13.7%	4,867	9.009
4-5 years	5,053	435	10.1%	4,618	8.8%	5,199	327	9.6%	4,872	9.109
6-10 years	11,971	775	18.1%	11,196	21.4%	11,971	523	15.3%	11,448	21.39
10+ years	30,492	2,190	51.0%	28,302	54.0%	31,060	1,523	44.6%	29,537	54.99
Highest Degree	-									
BA/BA+135 credits	20,852	1,625	37.9%	19,227	36.7%	20,242	1,532	44.9%	18,710	34.89
Masters & Ph.D.	34,983	2,363	55.1%	32,620	62.3%	36,414	1,844	54.1%	34,570	64.29
Other (S, V, H)	559	45	1.0%	514	1.0%	571	34	1.0%	537	1.09
Hours Worked	1	1					1	I		
FTE 0.95 - 1	50,901	3,377	78.7%	47,524	90.7%	51,380	2,458	72.1%	48,922	90.99
FTE 0.75 - 0.94	1,352	152	3.5%	1,200	2.3%	1,486	185	5.4%	1,301	2.40
FTE 0.5 to 0.74	3,483	506	11.8%	2,977	5.7%	3,415	444	13.0%	2,971	5.50
Less than 0.5	926	256	6.0%	670	1.3%	955	324	9.5%	631	1.209
Salary	-									
up to \$30,000	4,096	711	16.6%	3,385	6.5%	3,373	624	18.3%	2,749	5.19
\$30,000-\$50,000	27,940	1,936	45.1%	26,004	49.7%	23,816	1,602	47.0%	22,214	41.39
\$50,00 or above	24,626	1,644	38.3%	22,982	43.9%	30,047	1,185	34.7%	28,862	53.69
Certificate Type <sup>1</sup>		· · · · · ·					1	1		
Professional	26,822	1,244	29.0%	25,578	48.8%	29,278	821	24.1%	28,457	52.9
Residency	16,122	1,435	33.4%	14,687	28.0%	16,192	1,427	41.8%	14,765	27.4
Standard	12,168	1,393	32.5%	10,775	20.6%	9,986	958	28.1%	9,028	16.89
Other	212	38	0.9%	174	0.3%	273	42	1.2%	231	0.49
Endorsement Type <sup>2</sup>		· /								
Math/Science	5,478	344	8.0%	5,134	9.8%	5,412	236	6.9%	5,176	9.6
Other	40,905	2,578	60.1%	38,327	73.2%	43,763	2,195	64.4%	41,568	77.29

#### Table 7a: Comparison of Professional and Assignment Characteristics of Leavers and Stayers

<sup>1</sup>Please see Appendix A for a description of how certificate type was defined.

<sup>2</sup>The endorsement categories will not sum to the total. A teacher may not have an endorsement or they could have more than one.

<b>Professional and</b>			2006		2008					
Assignment	Total	Lea	vers	Stay	ers	Total	Leav	vers	Stayers	
Characteristics	Count	Count	%	Count	%	Count	Count	%	Count	%
Total	56,685	4,291	7.6%	52,371	92.4%	57,282	3,411	6.0%	53,825	94.0%
Experience										
0-1 years	4,006	444	11.1%	3,562	88.9%	3,671	570	15.5%	3,101	84.5%
2-3 years	5,140	447	8.7%	4,693	91.3%	5,335	468	8.8%	4,867	91.2%
4-5 years	5,053	435	8.6%	4,618	91.4%	5,199	327	6.3%	4,872	93.7%
6-10 years	11,971	775	6.5%	11,196	93.5%	11,971	523	4.4%	11,448	95.6%
+ 10 years	30,492	2,190	7.2%	28,302	92.8%	31,060	1,523	4.9%	29,537	95.1%
Highest Degree										
BA/BA +135 crs	20,852	1,625	7.8%	19,227	92.2%	20,242	1,532	7.6%	18,710	92.4%
Masters & Ph.D.	34,983	2,363	6.8%	32,620	93.2%	36,414	1,844	5.1%	34,570	94.9%
Other (S, V, H)	559	45	8.1%	514	91.9%	571	34	6.0%	537	94.0%
Hours Worked										
FTE 0.95 - 1	50,901	3,377	6.6%	47,524	93.4%	51,380	2,458	4.8%	48,922	95.29
FTE 0.75 - 0.94	1,352	152	11.2%	1,200	88.8%	1,486	185	12.4%	1,301	87.69
FTE 0.5 to 0.74	3,483	506	14.5%	2,977	85.5%	3,415	444	13.0%	2,971	87.09
Less than 0.5	926	256	27.6%	670	72.4%	955	324	33.9%	631	66.19
Salary										
up to \$30,000	4,096	711	17.4%	3,385	82.6%	3,373	624	18.5%	2,749	81.59
\$30,000-\$50,000	27,940	1,936	6.9%	26,004	93.1%	23,816	1,602	6.7%	22,214	93.39
\$50,00 or above	24,626	1,644	6.7%	22,982	93.3%	30,047	1,185	3.9%	28,862	96.19
Certificate Type <sup>1</sup>										
Professional	26,822	1,244	4.6%	25,578	95.4%	29,278	821	2.8%	28,457	97.29
Residency	16,122	1,435	8.9%	14,687	91.1%	16,192	1,427	8.8%	14,765	91.29
Standard	12,168	1,393	11.4%	10,775	88.6%	9,986	958	9.6%	9,028	90.49
Other	212	38	17.9%	174	82.1%	273	42	15.4%	231	84.69
Endorsement Type <sup>2</sup>										
Math/Science	5,478	344	6.3%	5,134	93.7%	5,412	236	4.4%	5,176	95.69
Other	40,905	2,578	6.3%	38,327	93.7%	43,763	2,195	5.0%	41,568	95.0%

# Table 7b: Percentage Distribution of Leavers and Stayers by Professional and Assignment Characteristics

<sup>1</sup>Please see Appendix A for a description of how certificate type was defined.

<sup>2</sup>The endorsement categories will not sum to the total. A teacher may not have an endorsement or they may have more than one.

# What are the School District Characteristics for Leavers and Stayers?

School District			2006					2008		
Characteristic	Total	Lea	vers	Stay	ers	Total	Leav	vers	Stay	ers
Characteristic	Count	Count	%	Count	%	Count	Count	%	Count	%
Total	56,685	4,291	100%	52,371	100%	57,282	3,411	100%	53,825	100%
District Size (# of Stu	dents)									
999 and under	3,327	239	5.6%	3,088	5.9%	3,367	214	6.3%	3,153	5.9%
1,000-4,999	11,411	836	19.5%	10,575	20.2%	11,305	706	20.7%	10,599	19.7%
5,000-9,999	10,602	815	19.0%	9,787	18.7%	10,933	619	18.1%	10,314	19.2%
10,000-19,999	15,047	1,061	24.7%	13,986	26.7%	16,440	959	28.1%	15,481	28.8%
20,000+	16,148	1,324	30.9%	14,824	28.3%	15,079	904	26.5%	14,175	26.3%
Dropout Rate										
Less than 4%	21,223	1,550	36.1%	19,673	37.6%	24,626	1,458	42.7%	23,168	43.0%
4-8%	30,828	2,403	56.0%	28,425	54.3%	30,713	1,834	53.8%	28,879	53.7%
9-13%	3,570	252	5.9%	3,318	6.3%	1,226	77	2.3%	1,149	2.1%
14-17.9%	332	30	0.7%	302	0.6%	61	3	0.1%	58	0.1%
18% or greater	58	0	0.0%	58	0.1%	19	0	0.0%	19	0.09
Free and Reduced Pr	ice Meals E	ligible Stu	udents							
less than 27%	16,099	1,249	29.1%	14,850	28.4%	11,147	735	21.5%	10,412	19.3%
27-41%	20,275	1,510	35.2%	18,765	35.8%	17,397	971	28.5%	16,426	30.5%
42% or more	20,179	1,516	35.3%	18,663	35.6%	28,582	1,696	49.7%	26,886	50.0%
Average Number of S	Students Pe	r Teache	r							
10 or less	537	51	1.2%	486	0.9%	5,210	301	8.8%	4,909	9.1%
11-19	51,987	3,960	92.3%	48,027	91.7%	49,245	2,962	86.8%	46,283	86.0%
19-24	3,698	233	5.4%	3,465	6.6%	2,194	117	3.4%	2,077	3.9%
more than 25	223	21	0.5%	202	0.4%	477	22	0.6%	455	0.89
Average Years of Tea	icher Experi	ence								
1-5 years	8	0	0.0%	8	0.0%	245	13	0.4%	232	0.4%
6-10 years	1,508	137	3.2%	1,371	2.6%	2,501	142	4.2%	2,359	4.4%
10-25 years	55,036	4,138	96.4%	50,898	97.2%	53,977	3,227	94.6%	50,750	94.3%
25+	1	0	0.0%	1	0.0%	403	20	0.6%	383	0.7%
Percent Black/Africa	n American,	, Hispanio	c or Amer	ican India	n Studen	ts in Distri	ct			
less than 33.3%	43,778	3,281	76.5%	40,497	77.3%	42,348	2,509	73.6%	39,839	74.0%
33.3-66.7%	9,506	769	17.9%	8,737	16.7%	11,276	698	20.5%	10,578	19.7%
more than 66.7%	3,378	241	5.6%	3,137	6.0%	3,612	204	5.6%	3,408	6.3%

#### Table 8: Comparison of School District Characteristics for Stayers and Leavers

Aggregate school-level characteristics for all schools in a district were used to create school-district level characteristics. The race/ethnic composition of the school district was limited to Black/African American, Hispanic or American Indian students because of the achievement gap associated with these populations. There were no notable differences in school-district characteristics for Leavers compared to Stayers and this holds for both the 2006 and 2008 cohorts. The method of aggregating school-level characteristics to the district-level may obscure the differences that exist between individual schools, especially in large or diverse districts and extreme values tend to skew the distributions. The school environment would be a better predictor of the teacher's experience than district level characteristics, but time constraints prevented exploration of school-level characteristics.

# **Examination of the 2006 Cohort Across Three Years**

Table 9 shows the status of the 2006 teacher cohort at three time periods. After three years, 82.1 percent of teachers were still in the K-12 system. The percentage of Stayers who changed districts from one year to the next remained fairly consistent across the three years (2.4, 2.2 and 2.0 percent) as did the percentage of Stayers who moved to non-teaching roles (1.4, 1.3 and 1.1 percent).

After three years, 15.3 percent of teachers had left the K-12 system, according to OSPI's K-12 personnel database, which is twice the rate found at one year. The number of teachers who returned to the K-12 system was 1.1 percent after one year and 0.3 percent after two years.

Teacher status	Status in 2007	%	Status in 2008	%	Status in 2009	%
Total Teachers	56,662	-	56,089	-	55,332	-
Stayed in the K-12 system	52,371	92.4%	48,639	85.8%	46,532	82.1%
Stayed teaching in same district	50,188	88.6%	46,696	82.4%	44,757	79.0%
Moved to non-teaching role	821	1.4%	715	1.3%	622	1.1%
Moved to new district	1,362	2.4%	1,228	2.2%	1,153	2.0%
Left K-12 system*	4,291	7.6%	6,891	12.2%	8,641	15.3%
Returned to K-12 system after 1 to 2 years away	-	-	559	1.0%	180	0.3%
Returned to teaching	-	-	529	0.9%	159	0.3%
Returned to non-teaching role	-	-	30	0.1%	21	0.0%

#### Table 9: Snapshot of 2006 cohort at three time points

The count in 2008 and 2009 is not a count of teachers who are leaving or starting in this year. This count includes people who left in 2007 and were still gone in 2008. It also removes people from the count who left in 2007, but returned in 2008.

Table 10 examines the 2006 cohort for different patterns of leaving across three time periods in conjunction with UI earnings, which provides a more complete picture of how teachers leave and return over time.

2006 Teachers	s Leaver Pattern	Count of	eachers with no % of total UI earnings				
Returned in 2008? <sup>3</sup>	Returned in 2009? <sup>3</sup>	teachers with no UI earnings after leaving K-12			% of total leavers	Total	
Total		2,320	54.1%	1,988	43.7%	4,291	
No	No	2,315	54.0%	1,277	29.8%	3,592	
Yes	Yes	2	0.0%	446	10.4%	448	
No	Yes	3	0.1%	154	3.6%	157	
Yes	No	0	-	111	2.6%	111	

#### Table 10: 2006 Cohort movement patterns, UI earnings, and how to identify a true leaver

<sup>1</sup>Teachers are counted as receiving UI earnings in public education if they received UI earnings from public education or public education and other industries.

<sup>2</sup> Leaving is based on the teachers' status in OSPI's K-12 personnel database.

<sup>3</sup> When a teacher returns it can either be in a teaching or non teaching role. However, most teachers return in a teaching role.

The patterns of leaving and returning in combination with the UI earning records in public education result in two interesting findings:

- 54 percent of Leavers (2,315) apparently left the K-12 system in Washington State because they did not return to the K-12 system in 2008 or 2009 and they also did not have any UI earning records in public education. They may have been employed outside of Washington State in public education or another industry.
- 43.7 percent of Leavers (1,988) had UI earning records in public education in at least 1 quarter in the subsequent 3 years.

The finding that 43.7 percent of the Leavers had UI earning records in public education suggests that they did not leave the K-12 system entirely. Possible explanations for this finding are found in how OSPI's K-12 personnel data is collected:

It is a snapshot of all K-12 classified and certificated personnel who meet specific requirements on October 1 of the academic year. It does not get updated with teachers who enter or leave the system after October 1.

## **Summary**

The rates of leaving and movement in the K-12 system presented in this report are consistent with what has been previously reported in Washington State and nationally. However, the capacity to link teachers with the retirement systems data and the Employment Security Department Unemployment Insurance earnings data provides an opportunity to explore where teachers go when they leave the K-12 system.

We found that a significant percentage of the Leavers subsequently receive earnings from public education, according to UI earnings records. This suggests that their role may have changed to one

not captured in the K-12 personnel database (such as a substitute or consultant), or that the timing of the hire was after October 1 in a given year.

Although we were not able to locate all of the teachers who left the K-12 system, we were able to account for about 75 percent of the Leavers in either the retirement system or the UI earnings data. Additional data sources to help find the remaining 25 percent of Leavers and to provide a more complete picture of teacher activities when they leave the K-12 system include higher education enrollment data and Unemployment Insurance earnings data from other states, such as Oregon and Idaho. Additional questions could also be pursued around salaries for K-12 Leavers by different demographic and professional characteristics, teacher movement between schools and the different school-level characteristics that are related to teacher retention and attrition, and whether teachers move to different geographical locations. This research brief provides a foundation for these types of questions.

# APPENDIX A: FULL DESCRIPTION OF METHODS, DATA SOURCES, AND DATA ELEMENTS

# **Data Sources**

Data for this study came from the following sources:

**OSPI's K-12 personnel database** is the **S-275 administrative data**, which is based on an electronic personnel reporting process that provides a current year record of certificated and classified employees of the school districts and educational service districts (ESD) of the state of Washington. This report provides a snapshot of all school district and ESD personnel employed as of October 1 of each school year. The only fields in the S-275 that are updated after October 1 are the actual salary and benefit information. This report, along with the student enrollment reporting, determines the amount of funding that goes from the state to the school districts (allocation of state funds to the school district).

Retirement status for teachers is determined by using a file supplied by **the Department of Retirement Services (DRS)** based on teacher identifiers that were supplied by ERDC to DRS. The retirement file provided a current status field which indicated whether the person was retired as well as the retirement date. The retirement status and associated dates were used to determine if the teacher retired after they left the K-12 system (retirement date after June 2007 for the 2006 cohort and after June 2009 for the 2008 cohort) or prior to leaving.

**Unemployment Insurance (UI) earning data** was supplied by the Employment Security Department, which reports quarterly wages earned by individuals for specific industries and employers.

**Unemployment Insurance (UI) claims data** was supplied by the Employment Security Department (ESD) and was used to identify teachers who left the K-12 system and had one or more unemployment claims.

**Social Security Administration (SSA) Mortality File** was used to remove from the cohort records for teachers who had died over the course of the academic year.

**Department of Retirement Systems (DRS)** supplied retirement status and associated dates for the teachers identified in the two cohorts.

**School District-Level Data** was obtained from several publicly available reports located on the OSPI website. The following reports were used:

- District Size and Annual Dropout Rates '2006-2007AppendixBDistrictLevelGraduationDropoutData.xls.' for the 2006 cohort and 'AppendixB2008-09.xls' for the 2008 cohort.
- List of counties and district numbers associated with school districts 'Coudis.xls'

 Aggregate student demographic and Teacher Characteristic information, including Free and Reduced Price Lunch Student Eligibility, Average Years of Experience, and Average Number of Students Per Teacher – *DemographicInformationbyDistrict.xls' and* 'Oct06DistrictP105.xls' for the 2006 cohort and 'DemographicInformationByDistrict.xls' and 'Oct08DIstLevEnrollment.xls' for the 2008 cohort.

# Definitions

# **T**EACHERS

A **teacher** is defined by using OSPI's S-275 data. For this report, a teacher has a duty root of 31 (elementary teacher), 32 (secondary teacher), or 33 (other teacher), a full-time equivalency (FTE) greater than 0, and a salary greater than 0. This definition of teacher does not include substitute teachers (duty root =52) or contractor teachers (duty root=630) and it does not include teachers who were present in the S-275, but died over the course of the academic year.

The teacher cohort is defined by the S-275 data file in which they are reported. The 2006 cohort is reported in the S-275 file that represents an October 1, 2006, snapshot of all certificated school personnel. The 2008 cohort is reported in the S-275 file that represents an October 1, 2008, snapshot of all certificated school personnel. For the most part these files contain all of the teachers for that academic year, but there can be instances where a teacher leaves or joins the staff after October 1<sup>st</sup> and does not get reported in the file. A person could also be counted in both the 2006 and the 2008 cohorts if they are classified as a teacher in both the 2006 and 2008 S-275.

# **Teacher Transitions**

- **'Leaver'** A teacher is identified as leaving the K-12 system when they do not appear in the next year's S-275 data.
- **'New Assignment'** If a teacher is in the next year's S-275 data, but not as a teacher (duty root 31,32, or 33), they are identified as still in the K-12 system, but in a non-teaching 'New'assignment.

If the school district that a teacher is assigned to in the S-275 is different in the next year, they are counted as **changing school districts**. School district changes are reported only for teachers who are still teaching in the next year. They are not reported for teachers who change into a non-teaching assignment.

Most **teacher characteristics** were derived from the S-275 data. The S-275 teacher data elements that were used for this report include:

- **Birth date** was converted to age as of June 1 of the cohort year. For example, June 1, 2007 is used as the basis for the age calculation for the 2006 cohort.
- Years of experience teaching was used as reported in the S-275

- Ethnicity was used to create a White (Caucasian) and Non-White (all other ethnicities, including Hispanic race) race category
- Gender was used as reported in the S-275
- **Final Salary** (the original S-275 salary) was converted into a salary range based on the frequency distribution and categories used in other reports.
- **FTE status** (the original S-275 FTE values) was converted into an FTE range based on the frequency distribution and categories used in other reports.
- Highest degree indicates the highest academic degree obtained by the teacher. For certificated employees with college degrees, degree type is reported as:
  - **B** Persons holding a **bachelor's** degree as the highest degree that are not reported with degree type **G** or **H**.
  - H Persons who obtain a bachelor's degree while employed in the state of Washington as a non-degreed vocational instructor. (H means "hold harmless," or that persons are not penalized for obtaining a bachelor's degree.) G Persons holding a bachelor's degree as the highest degree and whose total eligible credits reported on the S-275 report before January 1, 1992, were 135 or more (RCW 28A.150.410). These persons are grandfathered at the BA + 135 column.
  - **M** Persons holding a **master's** degree or any other degree between the master's and doctorate as the highest degree.
  - **D** Persons holding a **doctorate** degree as the highest degree.

For certificated employees without college degrees or with degrees earned prior to the issue of the initial vocational certificate that are determined to be "incidental or not related" to the vocational certificate pursuant to WAC 392-121-250(3), report as degree type:

- **V Vocational** instructors holding valid vocational certificates as provided for in chapter 180-77 WAC.
- **S** Persons who are in **special** circumstances.

To derive the categories for **Highest Degree** the above categories were rolled up to create 3 categories: Bachelors (B, G), Advanced (M, D) and Other (H, V, S).

**Teacher Endorsement and Certification** were determined by using the OSPI endorsement and certification data. The certification and endorsement issue and end dates were used to determine which one(s) to include for each teacher in each cohort. If a certification or endorsement was not valid during the time periods represented in this report, it was not used.

Washington State uses a two-tier teacher certificate system. New teachers obtain first tier certificates and experienced teachers, once they meet the necessary requirements, obtain second tier certificates. In September of 1987, the certificate names were changed.

For the purposes of this brief,

The <u>residency certificate type</u> applies to any valid first-tier teaching certificate, including the initial certificate.

The <u>professional certificate type</u> refers to any second-tier teaching certificate issued on or after September 1, 1987, including the continuing certificate.

The <u>standard certificate type</u> refers the second-tier certificate that was issued before September 1, 1987. It is reported separately from the professional certificate because the standard certificate is unendorsed and valid for life, enabling teachers to serve in any subject matter, preschool through twelfth grade.

# **TEACHER STATUS**

A teacher was identified as **receiving UI earnings** by matching them to the Employment Security Department's Unemployment Insurance data. For both the 2006 and 2008 cohorts, UI earning data starting in 4<sup>th</sup> quarter of cohort year and ending the 3<sup>rd</sup> quarter of the following year (Oct 2007 or 2008 – July 2008 or 2009). The UI earnings received by teachers were identified as either coming from a public sector education setting or from outside public sector education.

A teacher was identified as **retired** if they had a '**R**' status in the DRS records. The retirement date was as also examined to determine if they retired before leaving the K-12 system or after.

# School Districts

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School districts were matched to the teachers by the School District Number. A teacher's school district was determined by the district assignment listed in the S-275. If the teacher moved school districts the initial school district was used for examining the teacher's school district characteristics. The following school-district level variables were used:

- **Percent students in District Black/African American or Hispanic** was calculated by adding the number of Black and Hispanic students and dividing by the total enrolled population for that district to arrive at a percentage.
- **District Size** is based on student enrollment. Categories were created to match previous reports (for comparison purposes) and based on frequency distributions.
- Annual Dropout Rate as it was reported by OSPI report was used. Districts without high schools or fewer than 10 students did not have values for this element.
- Free and Reduced Price Meals Student Eligibility was reported as a percentage of all of those enrolled in the district.
- Average Years of Experience Teaching was reported using an average across all schools in the district.

# **APPENDIX B: ADDITIONAL TABLES**

Employment Tenure & UI Earnings Received after September		2006 Cohort Leavers (n=4291) (2,262 with UI earning records)								
		ved after September Public Education Only earnings		% Leavers with UI earnings	Both Outside and Inside	% Leavers with UI earning				
Total		669	-	1,343	-	244				
Number of	1	100	4.4%	347	15.3%	0				
Quarters	2	67	3.0%	164	7.3%	21	0.9%			
Received UI	3	77	3.4%	275	12.2%	44	1.9%			
earnings	4	425	18.8%	557	24.6%	179	7.9%			
Total UI earnings	up to \$30,000	419	18.5%	1191	52.7%	206	9.19			
	\$30,000-\$49,999	151	6.7%	117	5.2%	29	1.39			
Received across 4	\$50,000-\$75,000	80	3.5%	35	1.5%	8	0.49			
quarters	above \$75,000	19	0.8%	0	0.0%	1	0.09			
	Public Elementary and Secondary School	0	-	1343	59.4%	131	5.89			
	Other Education	204	9.0%	0	-	33	1.5			
	Health Care & Social Services	69	3.1%	0	-	8	0.49			
	Public Administration	83	3.7%	0	-	16	0.7			
Industry	Professional & Technical	87	3.8%	0	-	10	0.4			
	Entertainment, Recreation, & Arts	33	1.5%	0	-	16	0.7			
	Service Industry	125	5.5%	0	-	24	1.1			
	Construction & Manufacturing	62	2.7%	0	-	6	0.3			

and type of industry.

UI Earning	UI Earning Amount		In Public Education Only	Both Outside and Inside		
	Total	419	1,191	206		
Up to \$30,000	Range	\$31 - \$29,856	\$0 - \$29,839	\$174 - \$29,839		
	Average	\$10,424	\$7,220	\$12,339		
Total		151	117	29		
\$30,000-\$49,999	Range	\$30,038 - \$49,954	\$30,186 - \$49,930	\$30,223 - \$48,521		
	Average	\$38,819	\$39,251	\$38,773		
	Total	80	35	8		
\$50,000-\$74,999	Range	\$50,176 - \$74,875	\$50,065 - \$74,772	\$51,092 - \$64,437		
	Average	\$61,090	\$58,375	\$57,563		
	Total	19	0	1		
Above \$75,000	Range	\$75,255 - \$174,141	-	\$96,796		
	Average	\$97,451	-	-		

## Table 3a.1: UI earnings amount for 2006 Leavers who have UI earning records

Employment Tenure & UI Earnings Received after September		2008 Cohort Leavers (n=3,414) (1,919 with UI earning records)							
		Outside Public Education Only	% Leavers with UI Earnings	In Public Education Only	% Leavers with UI Earnings	Both Outside and Inside	% Leavers with UI Earnings		
Total		388		1313		216			
Number of	1	68	1.6%	273	6.4%	0	-		
Quarters	2	114	2.7%	114	2.7%	10	0.2%		
Received UI	3	162	3.8%	231	5.4%	33	0.8%		
Earnings	4	388	9.0%	695	16.2%	173	4.0%		
Total	up to \$30,000	276	6.4%	1149	26.8%	181	4.2%		
Amount of UI Earnings	\$30,000-\$49,999	63	1.5%	123	2.9%	26	0.6%		
Received	\$50,000-\$75,000	41	1.0%	35	0.8%	7	0.2%		
across 4 quarters	above \$75,000	11	0.3%	6	0.1%	2	0.0%		
	Public Elementary and Secondary School	0	-	1313	30.6%	122	2.8%		
	Other Education	124	2.9%	0	-	25	0.6%		
	Health Care & Social Services	53	1.2%	0	-	13	0.3%		
	Public Administration	57	1.3%	0	-	12	0.3%		
Industry	Professional & Technical	36	0.8%	0	-	9	0.2%		
	Entertainment, Recreation, & Arts	30	0.7%	0	-	5	0.1%		
	Service Industry	81	1.9%	0	-	24	0.6%		
	Construction & Manufacturing	13	0.3%	0	-	6	0.1%		

## Table 3b: Employment tenure, UI earnings, and industry for 2008 Leavers who have UI Earning records

UI Earn	ings	Outside Public Education Only	In Public Education Only	Both Outside and Inside	
Total		276	1,149	181	
Up to \$30,000	Range	\$6 - \$29,998	\$10 -\$ 29,936	\$230 - \$29,822	
	Average	\$10,058	\$8,634	\$13,664	
	Total	63	123	26	
\$30,000-\$49,999	Range	\$30,096 - \$49,943	\$30,112 - \$49,682	\$30,062 - \$48,576	
	Average	\$39,472	\$39,011	\$35,849	
	Total	41	35	7	
\$50,000-\$74,999	Range	\$50,150 - \$74,797	\$50,294 - \$71,858	\$50,263 - \$71,608	
	Average	\$61,280	\$61,302	\$58,541	
	Total	11	6	2	
Above \$75,000	Range	\$75,793 - \$113,407	\$75,026 -\$ 85,236	\$75,719 - \$82,573	
	Average	\$88,366	\$80,615	\$79,146	

#### Table 3b.1: UI Earning amount for 2008 Leavers who have UI Earning records

## Table 4a: What are the characteristics retired and working leavers?

Teacher Characteristics	2006 Cohort Leavers	Retired and No UI Earning Record		UI Earning Record		Not Found	
	Count	Count	%	Count	%	Count	%
Total	4,291	691	16.1%	2,256	31.2%	1,338	31.2%
Race							
White	3,975	645	16.2%	2,092	52.6%	1,233	31.0%
Non-White	316	46	14.6%	164	51.9%	105	33.2%
Gender							
Female	3,100	492	15.9%	1,580	51.0%	1,023	33.0%
Male	1,191	199	16.7%	676	56.8%	315	26.4%
Age							
21-30 years	824	0	0.0%	418	50.7%	402	48.89
31-40 years	913	0	0.0%	480	52.6%	433	47.4%
41-50 years	498	6	1.2%	293	58.8%	198	39.8%
51-60 years	1,338	340	25.4%	720	53.8%	277	20.79
61+ years	718	345	48.1%	345	48.1%	28	3.99
Hours Worked							
FTE 0.95 - 1 (full-time)	3,377	599	17.7%	1742	51.6%	1,030	30.59
FTE 0.75 - 0.94	152	17	11.2%	86	56.6%	49	32.29
FTE 0.5 to 0.74	506	48	9.5%	275	54.3%	183	36.2
Less than 0.5	256	27	10.5%	153	59.8%	76	29.79
Salary							
\$0-\$30,000	711	47	6.6%	399	56.1%	265	37.39
\$30,000-\$50,000	1,936	85	4.4%	1,022	52.8%	823	42.59
\$50,000+	1,644	559	34.0%	835	50.8%	250	15.29
Certificate Type							
Professional	1,244	119	9.6%	617	49.6%	508	40.89
Residency	1,435	11	0.8%	772	53.8%	651	45.49
Standard Teacher	1,393	552	39.6%	750	53.8%	91	6.59
Other/Unknown	219	9	4.1%	117	53.4%	88	40.29
Experience							
0-1 Years	444	0	0.0%	275	61.9%	169	38.19
2-3 Years	447	1	0.2%	243	54.4%	200	44.79
4-5 Years	435	3	0.7%	223	51.3%	208	47.89
6-10 Years	775	11	1.4%	390	50.3%	372	48.09
Greater than 10 Years	2,190	676	30.9%	1,125	51.4%	389	17.89
Highest Degree							
Bachelors Degree	1,840	281	15.3%	962	52.3%	593	32.29
Advanced Degrees	2,403	407	16.9%	1,260	52.4%	734	30.59
Other Degree	48	3	6.3%	34	70.8%	11	22.99
Endorsement Type <sup>1</sup>							
Math/Science (1+)	344	25	7.3%	180	52.3%	139	40.49
Other Types(1+)	2,578	126	4.9%	1,343	52.1%	1,108	43.0%

endorsement.