Educator Salary Differences Between Administrators and Teachers by Length of Licensure and Highest Education Obtained

Robin Clausen, PhD Statewide Longitudinal Data System Montana Office of Public Instruction

Introduction

Educator salaries in Montana are low when compared to school communities in other states. A major reason for why educator salaries are low is that there is little competition from other economic sectors in terms of better wages or higher salaries for workers with the same experience or education level. Moreover, salary decisions are a matter of local control. This condition is acute in rural, low-income, and tribal communities. This observation is pertinent when investigating the impact of position, length of service, and highest education obtained on educator salaries. Many educators with experience and who have obtained an advanced degree face difficulties finding positions with comparable wages as the public educator sector. This mutes the effect of experience and advanced training. By analyzing the 2023-2024 cohort of educators, we are able to establish differences based on position, tenure, and degree obtained under these conditions. We see that length of service (licensure) has a larger impact than advanced training on teacher salaries.

We analyze data from the Statewide Longitudinal Data System and related databases from 2022 - 2024. We obtain data on the position information of these educators, their length of service (licensure), and their highest education obtained in 2024. Salary data is from the two most recent years of data (2022 and 2023). We focus on the broad-based increase in wages between 2022 and 2023, which is partially attributable to ESSER funding. We measure how incremental change is experienced, the impact of an advanced degree on salary, and how these differ based on the educators role with the school or district.

In 2024, nearly half of all educators had a master's degree (5692). Relatively few administrators and teachers earned a doctorate or education doctorate (109). 4457 educators have less than 10 years of experience and earn on average \$45,812. 3379 educators have between 10 and 20 years of experience and earn on average \$64,758. 2960 educators have between 20 and 30 years of experience and earn on average \$73,633. 1436 educators have over 30 years of experience and earn on average \$74,601.

This study faces a limitation in the small number of educators who have a PhD or D.Ed. This made comparisons between the two populations difficult. For this reason, inferential statistics are used only with certain analyses with large n's (such as the comparison of educators with a master's degree by years of experience). This document relies on the fact that this data represents a census of administrator and educator data, and key data points can be made largely based on averages between groups.

Data & Methods

Four data points were collected within the Statewide Longitudinal Data System data warehouse. Length of service, highest education obtained, and position information were gathered from the TMT databases for 2024. Salary data was obtained from the MAIFAIRS database and collected by the School Finance unit at the OPI. Due to the limitation noted above, most comparisons are made based on averages of each group, for example, average salary of teachers and principals with less than 10 years of experience and holding a master's degree. Using a General Linear Model, we analyzed variation in educator salary and growth in educator salary (2023 compared with the prior year) by three fixed factors: educator position,

length of service, and highest degree obtained. Growth in salary allows us to compare the incremental effect of length of service and education.

Findings

Positions tracked in this study include administrative support (e.g. curriculum directors and program coordinators), superintendents and assistant superintendents, principals and assistant principals, and teachers. 9,561 general education teaching position were identified in the system. The main categories of the remaining educators include principal positions (543), superintendent (272), curriculum coordinator (150) and assistant principal positions (153).

Position	Frequency
Activities/Athletic Director	110
Assistant Administrator	11
Assistant Principal	153
Assistant Superintendent	16
Clerk and Business Manager	332
CSPD Director or Coordinator	2
Curriculum Coordinator	150
Dean of Students	29
Instructional Coach	112
Long-term Substitute Teacher	28
Principal	543
Program Coordinator	113
Special Education Cooperative Director	8
Special Education Director	81
Superintendent	272
Supervising Teacher	94
Teacher - General Education	9561
Teacher - Gifted and Talented	15
Teacher - Special Education	1129
Teacher - Title I	252
Total	13011

Reported Administrator and Teaching Positions

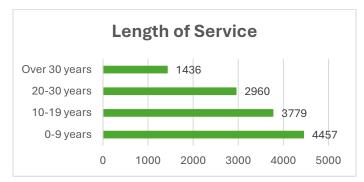
Nearly half of these positions are staffed by an educator that has at least a master's degree (5692). Only 109 of these positions are staffed by an educator with an education doctorate or a doctorate of philosophy.

Highest Degree Earned

	Frequency	Percent
	20	0.15
Associate's Degree	8	0.06

Bachelor's Degree	6528	50.17
Doctoral Degree	77	0.59
Education Specialist Degree	32	0.25
Juris Doctorate	10	0.08
Master's Degree	5692	43.75
NULL	640	4.92
Other/Non Degree	4	0.03
Total	13011	100.00

The largest group of education positions is staffed by an educator with less than 10 years of experience (4457). The remaining groups of educators have between 10 and 20 years of experience (3779 positions) or between 20 and 30 years of experience (2960 positions). Fewer education positions are staff by people with more than 30 years of experience (1436). This distribution shows that after ten years of experience, there is evidence of strong educator retention in the workforce. Nonetheless, this also signifies an aging workforce. Turnover is acute among the less than 10 years of licensure group, most apparently within the first three years.



Doctoral Degrees

Advanced degrees, including PhD and D. Ed, receive low compensation and this rate does not differ significantly from the educator of those who hold a master's degree.

School administrators earn the most among these individuals with an advanced degree. There are twentytwo superintendents who have an advanced degree and earn on average \$104,678. Teachers with a general education position who hold either of these degrees (40) earn \$62,544 on average. This speaks to the relatively small length of licensure of these teachers and that many of these educators experience mobility into and out of public schools. The incremental effect on salary of a doctorate is less than a master's degree or additional years of experience.

Compensation by advanced degree and position

Position	Mean	Ν	Std. Deviation
Principal	\$104,606.20	16	32289.3793
Superintendent	\$104,678.69	22	58172.199
Teacher - General Education	\$62,544.59	40	23344.3283
Teacher - Special Education	\$55,126.12	7	12075.3559

Teacher - Title I	\$75,688.90	1	
Total	\$109,377.38	109	252270.194

In terms of compensation, there are few differences between educators that have a master's degree versus those that have a doctoral degree, with those holding a master's degree earned approximately \$1,100 less than their peers with a doctoral degree in 2023.

Master's Degree

Among the superintendent, principal, and teacher subgroups educators earn in 2023 on average more than they did in 2022. When the mean difference of salaries for master's degree holders is calculated for these groups between 2022 and 2023, we see that the increases in compensation rates is dependent on position. Superintendents (\$4340) have higher raises across all years of service when compared to principals (\$3379) and general education teachers (\$3014). The large statistically significant differences with superintendents and principals with the same level of education (masters) are due to the fact that many of these principals were newly hired into their positions and often had a lower paying teacher role prior to assuming an administrator role.

Difference of salaries between 2023 and 2022 by years of experience for educators with a masters degree

Position	Tenure Grouping	Mean	Ν	Std. Deviation
Principal	0-9 years	\$3,192.69	28	2084.138
	10-19 years	\$3,336.88	83	2264.377
	20-30 years	\$3,534.73	102	2303.453
	Over 30 years	\$3,214.12	43	1939.596
	Total	\$3,379.32	256	2201.949
Superintendent	0-9 years	\$3,734.23	3	2826.770
	10-19 years	\$3,942.22	20	2880.478
	20-30 years	\$4,717.98	20	3195.493
	Over 30 years	\$4,489.49	15	2883.060
	Total	\$4,340.50	58	2936.360
Supervising Teacher	0-9 years	\$2,326.93	3	2763.068
	10-19 years	\$2,094.11	3	1199.363
	20-30 years	\$3,967.62	6	3448.388
	Over 30 years	\$1,662.89	3	906.640
	Total	\$2,803.83	15	2583.906
Teacher - General Education	0-9 years	\$3,620.77	456	2055.058
	10-19 years	\$3,374.41	857	1916.201
	20-30 years	\$2,493.21	777	1788.112
	Over 30 years	\$2,431.82	309	1808.327
	Total	\$3,014.42	2399	1953.127

Teacher - Gifted and Talented	10-19 years	\$3,329.42	1	
	20-30 years	\$2 <i>,</i> 563.89	4	1704.635
	Over 30 years	\$2 <i>,</i> 590.61	2	306.891
	Total	\$2 <i>,</i> 680.89	7	1245.202
Teacher - Special Education	0-9 years	\$4,167.18	91	2140.535
	10-19 years	\$3,791.54	80	1873.865
	20-30 years	\$2 <i>,</i> 960.76	84	2056.561
	Over 30 years	\$3,281.08	26	2812.031
	Total	\$3,617.61	281	2161.011
Teacher - Title I	0-9 years	\$4,387.57	12	2881.486
	10-19 years	\$2,797.78	18	1218.547
	20-30 years	\$2,989.22	18	2597.808
	Over 30 years	\$2,211.36	11	1500.854
	Total	\$3,070.20	59	2213.672

The average raise that teachers with a master's degree received less than the increase in compensation received by superintendents. For example, teachers and superintendents with a master's degree that had over thirty years of experience had a raise of \$2431 and \$4489 respectively.

Length of Service

Length of service is defined in this study by years of licensure in Montana for the following groups: less than ten years, between 10 and 20 years, 20 to 30 years, and more than 30 years. By identifying change in wages between 2022 and 2023 we can identify which position types experienced the most growth.

Special education positions tend to pay more than other administrative or teaching roles. For example, Special Education Director positions paid on average \$4537 more in 2023 than in 2022. Superintendents earned \$4240 more in 2023 than in 2022. Special Education teacher positions (\$3576) paid more in 2023 than in 2022 compared to General Education teachers (\$3029).

Mean difference between 2023 and 2022 for all reported administrator and teaching positions.

Position	Mean	N	Std. Deviation
Activities/Athletic Director	\$3,682.42	38	2024.349
Assistant Administrator	\$3,030.56	5	2303.607
Assistant Principal	\$3,676.30	82	2065.435
Assistant Superintendent	\$2,037.10	2	0.000
Clerk and Business Manager	\$3,569.70	90	2538.101
CSPD Director or Coordinator	\$1,675.00	1	
Curriculum Coordinator	\$3,608.76	59	2775.306
Dean of Students	\$3,267.38	14	2283.553
Instructional Coach	\$3,443.95	62	2216.973

Long-term Substitute Teacher	\$1,329.75	2	498.581
Principal	\$3,353.86	271	2208.006
Program Coordinator	\$3,790.88	44	2521.334
Special Education Cooperative Director	\$4,789.93	5	2990.696
Special Education Director	\$4,537.35	21	2549.459
Superintendent	\$4,240.35	65	3074.001
Supervising Teacher	\$3,314.48	53	2016.907
Teacher - General Education	\$3,021.10	5787	2047.142
Teacher - Gifted and Talented	\$3,028.53	11	1659.479
Teacher - Special Education	\$3,576.37	601	2237.114
Teacher - Title I	\$3,080.03	142	2211.937
Total	\$3,128.19	7355	2114.789

Supervising teachers tend to have the lowest salary of all administrative and teaching positions. These roles are often rural in schools with low enrollments. Supervising teachers did have an increase in average salaries between 2023 and 2022 (\$3314) that was higher than the average for General Education teachers (\$3021). Principal salaries increases were about the same (\$3354) as with supervising teachers, but less than superintendents and other administrators. This is surprising since in many rural areas, the same educators adopt the role of both superintendent and principal. This provides evidence that there may be differences based on rural, town, and city locales by education obtained and length of service.

There are differences by years licensed in the amount educators are paid. For example, superintendents with less than 9 years of licensure earn less than \$88,263. Superintendents that have between 10 and 20 years of experience earn \$113,194. However, superintendents that have more than 30 years of experience earn less (\$108,336). For principals, the same trend does not occur and the difference between years licensed is less (less than 10 years of experience earn on average only \$833 more than their peers that have ten less years of experience. The effect of number of years licensed on salary increases diminishes for those with more than 30 years of experience.

	Grouping	Mean	Ν	Std. Deviation
Principal	0-9 years	\$83,357.36	79	29868.004
	10-19 years	\$86,441.54	185	22369.913
	20-30 years	\$94,495.87	207	32380.304
	Over 30 years	\$95,328.43	72	22938.821
	Total	\$90,241.64	543	28069.228
Superintendent	0-9 years	\$88,262.52	32	29686.661
	10-19 years	\$97,744.01	67	46547.344
	20-30 years	\$113,193.70	105	57723.165
	Over 30 years	\$108,336.41	66	53791.658
	Total	\$105,217.75	270	51921.706

Difference in 2023 salary	hy administrative and	teaching nositions	and length of service
Difference in 2025 salary	by auministrative and	caching positions	and length of service

Supervising Teacher	0-9 years	\$40,965.54	30	12624.976
	10-19 years	\$43,634.37	27	14793.728
	20-30 years	\$58,595.94	22	14128.074
	Over 30 years	\$39,151.04	15	19455.358
	Total	\$45,568.83	94	16360.002
Teacher - General				
Education	0-9 years	\$43,861.39	3591	16250.319
	10-19 years	\$60,571.87	2818	16861.574
	20-30 years	\$68,289.78	2102	17153.649
	Over 30 years	\$67,418.08	1017	22066.826
	Total	\$56,707.29	9528	20220.282
Teacher - Gifted and				
Talented	0-9 years	\$39,399.55	3	9496.845
	10-19 years	\$81,683.10	1	
	20-30 years	\$74,716.86	7	17002.225
	Over 30 years	\$75,617.74	4	6156.459
	Total	\$68,358.05	15	19301.618
Teacher - Special				
Education	0-9 years	\$47,506.43	485	19376.618
	10-19 years	\$61,402.49	341	19252.215
	20-30 years	\$67,403.80	210	19979.458
	Over 30 years	\$71,281.18	88	27679.582
	Total	\$57,301.08	1124	22104.770
Teacher - Title I	0-9 years	\$42,473.86	78	18118.385
	10-19 years	\$53,394.85	69	15841.424
	20-30 years	\$60,849.60	66	15875.470
	Over 30 years	\$64,569.67	38	20823.460
	Total	\$53,653.10	251	19231.953

General education teachers earn more when they have more than 10 years of experience. Teachers with less than 10 years of experience earn on average \$43,861. This increases with teachers with more than 10 and less than 20 years of experience (\$60,571). Much of this variation is attributable to more teachers earning their masters degree. Title 1 teachers earn at the same levels and salary increases are in line by years licensed as with General education teachers.

Increases to salary peak in the 10-to-20-year category following when educators often receive their master's degree and when the incentives in many salary scales begin to taper off. This is seen in the groups of educators that have between 20 and 30 years of experience. Superintendents and other district administrators at this level of experience witness higher growth in salary that for school administrators and teachers. This may signify a plateau effect after many educators receive their master's degree, the incremental increase in educator salary lessens due to length of experience, and lack of opportunities for advancement.

Conclusion

This study analyzed four data elements: position, salary, length of experience, and highest education obtained. A measure of difference between these administrators and teachers is the amount wage/salary grew from 2022 to 2023. Overall, superintendents have the largest salary growth. Principal and teachers' salaries grew at a slower pace. The teachers whose salaries grew the most were among those teachers earning the most compensation (special education). This may be due to fewer opportunities for advancement, prior possession of a master's degree, and in-depth experience required for these positions in a terminal role.

There are few educators with a PhD or D. Ed (109). Half of these educators are in a teaching role. Educators that have a D. Ed earn more than educators with a PhD or master's degree, perhaps due to the administrators positions pay more and more administrators have a D.Ed. Yet these differences are slight, signifying that there is little financial incentive to get a advanced degree and return to the education system, for example, teachers with a doctorate do not earn incrementally more.

Small salary increases are noted for the teachers with less than 10 years of experience. Often, this increase is attributable to these educators completing their master's degree. Educators with between 10 and 20 years of experience have the largest salary increases of any groups. This often occurs after educators switch positions or receive a promotion. Educators with between 20 and 30 years of experience have higher salary increases than those educators in the less than 10 year and more than 30 years categories. Salaries increases decline for the group with salaries less than 30 years. Thus, incremental increases due to longevity taper off as educator near retirement, lessening the incentive to continue working.

This muted effect of highest education obtained, and longevity occur in a context where job prospects for educators for positions that pay more and offer opportunities for advancement are few. Efforts to improve salaries occur in the context of internal and external factors. Until competition for roles outside of the education system improve, educators salaries will likely remain low and have fewer opportunities for advancement.