

Grass is Greener:

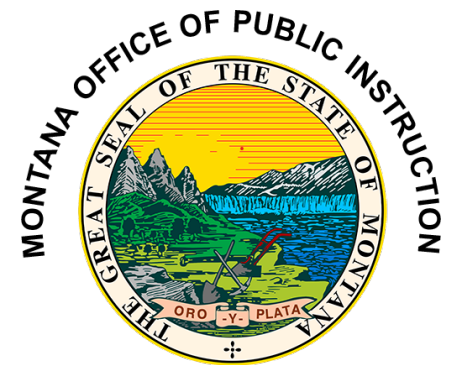
An analysis of Leavers (Educators) from the Montana education system
(Compensation and Turnover)

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National Center for Education Research ‘Using SLDS’ Grant – Principal Investigator

Montana Statewide Longitudinal Data System

Montana Office of Public Instruction



Scope of Montana SLDS Research

- **Internal Research as requested by leadership.**
 - Salary
 - Turnover
 - Professional Development
 - Assessment
- **Targeted support to research contractors:**
 - University of Montana
 - Montana State University
- **Grant supported research (Institute of Education Sciences)**
 - Montana Early Warning System
 - School level poverty measures



Early Warning Systems Provide a Tool to Identify Students at Risk of Dropping Out

- Early Identification is the first steppingstone of the model
- Focus is on relationship building, development of a data culture, tying data to intervention, tools for longitudinal analysis, and progress monitoring.
- Indicators factor in attendance, behavioral, and academic data.
- By 2013, they became popularized in Statewide Longitudinal Data Systems (funded by the National Center for Education Statistics).
- Data on the effectiveness of Early Warning Systems is sparse. It is largely limited to an analysis of algorithms and the focus on early identification. There is little research beyond 2015.



NCER 'Using SLDS' Research Procedures

- **Task 1:** We know the ability of the model to predict dropout. Hence, we investigate the propensity of the model to predict graduation to gauge the efficiency of the model.
- **Task 2:** We investigate the degree of implementation of the model in schools. Has access to EWS data inspired policy increased student supports?
- **Task 3:** We focus on how robust the student outcomes are in these schools and the impact of dropout interventions on graduation and postsecondary enrollment.

NCER Using SLDS Grant – Early Warning System

Very accurate: 1 % increase in average EWS score → 1.07% increase in actual dropout

That is the average of *all* the student scores—scores tend to go closer to dropout event

Slightly underpredicts dropping out for

- Male students (1% increase in EWS probability → 1.1% increase in actual dropout)
- White students (1% increase in EWS probability → 1.08% increase in actual dropout)
- Hispanic students (1% increase in EWS probability → 1.1% increase in actual dropout)

Very accurate for female, Native American students

School Level Poverty Measure Study - Montana

This research has three parts. It addresses the suitability, sensitivity, and consistency of alternative poverty measures using Montana's Statewide Longitudinal Data System resources.

- **State level** between eight poverty measures, 16 student and institutional outcome variables.
- **Locale level** between six poverty measures, 12 student outcome variables.
- **Proximity to school by locale** – two poverty measures, eight student outcome variables.
- **Direct Certification** – nine poverty measures, 12 student outcome variables

Research Articles: Rural Educator (2024), the Intl Journal of Ed Policy and Leadership (2024), and Policy Futures in Education (2025).

Professional Journals: Policy & Practice (2023), American School Board Journal (2025).

Technical Papers: <https://opi.mt.gov/Leadership/Data-Reporting/Data-and-Research>



SLPM Process

This study began with the requirements testing of the Spatially Interpolated Demographic Estimates (SIDE). **SIDE combines neighborhood characteristics (American Community Survey) as orientated around a geolocated point/address.**

The study looks to six different areas:

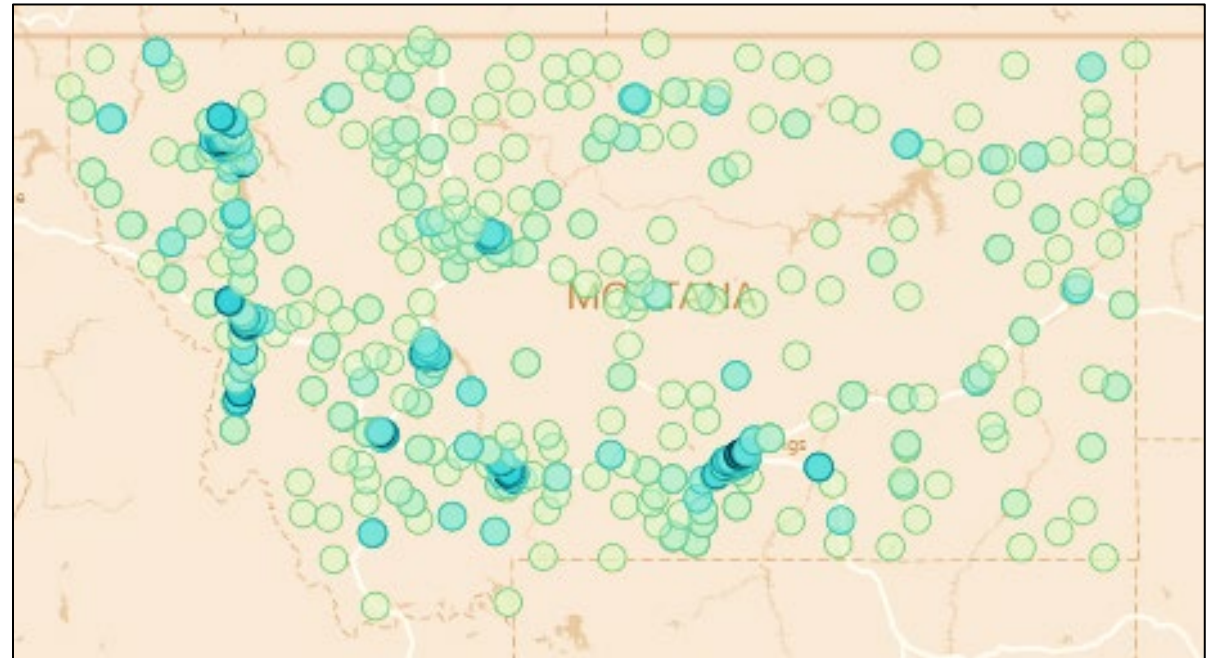
The study looks at the state data, across locales (City, Town, Rural) and explores the effect of rurality (communities more/less than 25 miles from an urban center).

The goal is to gauge variation in rural communities.

There are differences between rural fringe/distant and remote locales.

Indicators in rural communities are relatively homogenous (race/ethnicity).

Often, people in rural communities speak of differences based on 'in town' and 'out of town.'



Use of the Research (Salary Data)

- Salary data analysis of the FY 2023 educator dataset (teachers, principals, and superintendents) was requested by leadership.
- This occurred in reaction to commissioning of a report from the Department of Labor & Industry (DLI) regarding wage and compensation data by the Joint Interim Budget Committee (February)
- Goal was to collaboratively work with DLI and verify methods and findings
- There were three stages to the research: starting salary, highest education obtained and longevity, and turnover.
- OPI Superintendent referenced findings in the Interim Budget Committee meetings, submitted reports as testimonials, and distributed findings to stakeholder audiences.
- DLI referenced the degree SLDS data and findings verified their data.



TEACH ACT

- HB 143 (2023) addresses the goal of fixing low starting teacher pay. The legislative goal is for all new teachers to make \$35,660 or ten times the incentive payment provided to quality educators.
- The TEACH Act was drafted in reaction to description of starting salary by the NEA. These calculations are based on teacher salary schedules and bands of those school represented by the Montana Federation of Public Employees.
- The point of this research is to crawl behind the numbers and identify trends based on actual educator salaries.
- The Department of Labor & Industry (DLI) and the Montana SLDS collaborated on studies of educator salaries and turnover.

AVERAGE TEACHER STARTING SALARY

\$34,476 ⁱ

#51

in the nation

TEACHER PAY GAP

79¢ ⁱ

AVERAGE TEACHER SALARY

\$55,909 ⁱ

#42

in the nation

MINIMUM LIVING WAGE

\$62,189 ⁱ

* National Education Association, 2025

Problems of NEA Analysis

- NEA focused on negotiated salary schedules of schools that were represented.
- Approximately, a third of the state's schools do not have union representation.
- Because these schools are primarily small and rural, we expected the amount of the starting average salary would actually be less than the NEA.
- There are two source for actual educator salary: data collected by the Montana Office of Public Instruction (OPI) and Unemployment Compensation from the DLI.



Rural Schools Salary Schedule

23-2024 APPENDIX A

STEP	BA	BA + 1	BA + 2	BA + 3	BA + 4	BA + 5	MA	MA + 1
1	30473.00	30973.00	31473.00	31973.00	32473.00	32973.00	33973.00	34473.00
2	31473.00	31973.00	33473.00	32973.00	33473.00	33973.00	34973.00	35473.00
3	32473.00	32973.00	33473.00	33973.00	34473.00	34973.00	35973.00	36473.00
4	33473.00	33973.00	34473.00	34973.00	35473.00	35973.00	36973.00	37473.00
5	34473.00	34973.00	35473.00	35973.00	36473.00	36973.00	37973.00	38473.00
6	35473.00	35973.00	36473.00	36973.00	37473.00	37973.00	38973.00	39473.00
7	36473.00	36973.00	37473.00	37973.00	38473.00	38973.00	39973.00	40473.00
8	37473.00	37973.00	38473.00	38973.00	39473.00	39973.00	40973.00	41473.00
9	38473.00	38973.00	39473.00	39973.00	40473.00	40973.00	41973.00	42473.00
10	39473.00	39973.00	40473.00	40973.00	41473.00	41973.00	42973.00	43473.00
11	40473.00	40973.00	41473.00	41973.00	42473.00	42973.00	43973.00	44473.00
12	41473.00	41973.00	42473.00	42973.00	43473.00	43973.00	44973.00	45473.00
13	42473.00	42973.00	43473.00	43973.00	44473.00	44973.00	45973.00	46473.00
14	43473.00	43973.00	44473.00	44973.00	45473.00	45973.00	46973.00	47473.00
15	44473.00	44973.00	45473.00	45973.00	46473.00	46973.00	47973.00	48473.00
16	45473.00	45973.00	46473.00	46973.00	47473.00	47973.00	48973.00	49473.00
17	46473.00	46973.00	47473.00	47973.00	48473.00	48973.00	49973.00	50473.00
18	47473.00	47973.00	48473.00	48973.00	49473.00	49973.00	50973.00	51473.00
19	48473.00	48973.00	49473.00	49973.00	50473.00	50973.00	51973.00	52473.00
20	49473.00	49973.00	50473.00	50973.00	51473.00	51973.00	52973.00	53473.00
21	50473.00	50973.00	51473.00	51973.00	52473.00	52973.00	53973.00	54473.00
22	51473.00	51973.00	52473.00	52973.00	53473.00	53973.00	54973.00	55473.00
23	52473.00	52973.00	53473.00	53973.00	54473.00	54973.00	55973.00	56473.00

- Pay dependent on Longevity and Highest Education Obtained
- By adjusting starting salary, how would the other steps and lanes be adjusted?
- The additional QE payment under the TEACH Act does not go directly to early career teachers, it supplements the districts' general fund budgets for those first three years as an incentive/reward for reaching the legislative goal.

Montana SLDS Findings

Teachers with Low Pay

552 teachers earn under \$35,660.

36 have been licensed for over 20 years

Schools of all sizes have teachers that earned under \$35,660 in 2023. 51 of these teachers work in large urban districts

Teach Act Impact

- Only 146 teachers have been licensed in the past year (\$32,513).
- 103 of these teachers are under the age of 35.
- Relatively few of these schools are highly impoverished. Only 11 teachers are in on-reservation schools.

Comparisons



New teachers earn on average \$41,639. After four years, this average increases \$3,457.



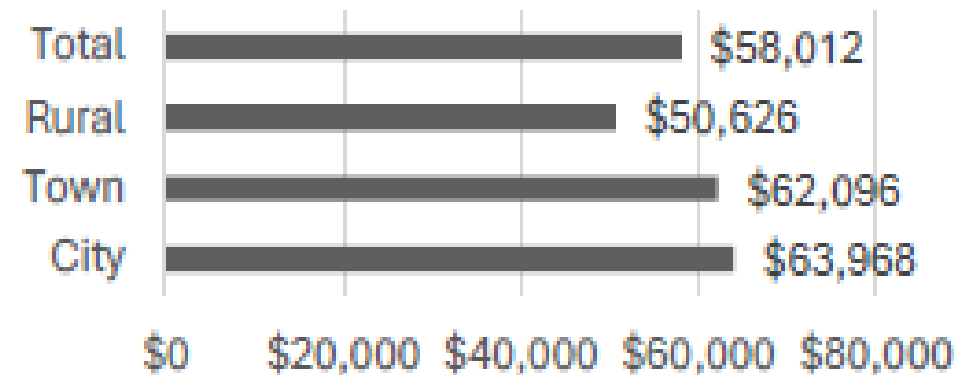
New teachers earn on average \$15,267 in non-employee compensation/benefits. Teachers with more than 25 years of experience earn \$26,507.



Rural teachers earn on average \$13,342 less than teachers in a Montana city

Salaries differ by position type with supervising teachers earning \$46,619, special education teachers (\$57,455), Title 1 teachers (\$55,739), general education (\$58,272), and gifted and talented (\$67,448).

All Salaries (10,167)



Steps and Lanes

Highest Education

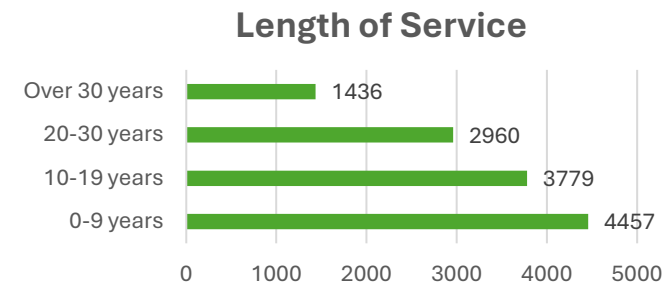
43.75% of teachers and administrators have a Master's degree showing the importance of advanced education. Yet, in 2023 salary did not increase for educators with a Master's in all positions in the same way.

	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

Longevity

Salary increases by years of licensure, but not for every position at the same rate.

Superintendents with between 10 and 19 years of service earned \$3942.22 more in 2023 than in 2022. This compares to principals (\$3,336.88), general education teachers (\$3374.41), special education teachers (\$3791.54), and Title 1 teachers (\$2797.78)



Advanced degree

- Educators with a doctorate or EdD do not experience as large an increase in wages as those holding a Master's degree
- Special education teachers with a doctorate earn less than the average teacher salary. This is dependent on where the position is located and the length of licensure .

Position	Mean	N	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	

Salary Differences by Longevity

	GROUPING	MEAN	N	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
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

Summary and Questions

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 more 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, educator salaries will likely remain low and have fewer opportunities for advancement.



Grass is greener on the other side of the fence

12,000 Foot View



The choice to leave is a complex phenomenon that included factors besides the amount of salary. Yet, salary is frequently mentioned in the literature as having a large impact on decision making.



What may be occurring is that there is a grass is greener on the other side of the fence trend. The more experience an educator has and the more senior the role, the choice to leave often entails a salary that is often a fraction of what educators earned as teachers, principals, and superintendents.

Implications

- These findings may contribute not only to the turnover literature in Montana, but in regard to educator retention practices.
- It also comments about the opportunities available in Montana communities for former educators.

Procedures



We asked the following question: among educators that were seen as most likely to have left the education system, what are their workforce outcomes after they leave in terms of salary and industry? The OPI collected salary and data on position for all Superintendents and Principals for the past four years. For teachers we collected two years of data. From this analysis we created a pool of educators that most likely left the education system. Included in this group were educators that changed their role but stayed in the education system.



These lists were sent to the Department of Labor & Industry's Bureau of Data Operations. DLI accessed unemployment records from these individuals and returned data on those that remained in the education system but changed roles, those that left the education system and retired, and those that continued working outside of the education system. This collaboration produced summary data which we use to draft this presentation.

Revolving Door

Educators realize that once they leave the education system, they tend to earn the same or less as to when they worked in the education system. They return to the public education sector or other education related professions such as with contractors, vendors, or private schools.

Superintendents

Superintendents on average earn a real wage of \$129,170. This count is inflated in their final year as it includes other forms of compensation including stipends and leave payouts. In the first year that former superintendents leave the education system, the real wage declines among this leaver population to \$76,960. When superintendent leave and continue working, they tend to continue work in the education profession, whether its work as a consultant or in a private school. Approximately, 60% of these leavers (38) continue in an education related role, but not in the same school system. Over half of all leavers are either self-employed, working outside of Montana, or otherwise not working (retired).

Principals

True Leavers

48% of the matched principals are true leavers (no longer in the public school system, residing out of state, or retired). Over the five-year period many principals moved schools or changed positions and thus did not appear in the Montana SLDS data. There was also a fair amount of mobility in that the principals moved in and out of different education roles.

20% of the identified principals continued to work in the public school system but changed roles or districts as seen in the licensure data.

Wages Drop

The real wage of the principals that left was on average \$109,959. This includes their base wage/salary, stipends, and leave payouts in the year they left. Of the 52% who left and are still working, their wages outside of the education system were on average \$61,290. This represents 39% of those former principals that were matched.

Principals became employed in a variety of industries, most frequently in education areas excluding the public school system. This may have been work with an association, private school, or a vendor.

turnover rate

Teachers

Longevity a factor



Teachers with less than 10 years of experience who left tended to make a similar salary as when they were teaching. Given the relatively low salaries of these teachers, the average annualized hourly wage for these teachers was \$21.61.



Teachers with less than 10 years of experience tended to earn about the same wage in their first year outside the education system (around twenty dollars an hour). Teachers with more than 10 years of experience tended to leave teaching jobs that paid \$73,600. These leavers earned less outside of the education system when they continued working.

Where did they go?

364 former teachers began work outside the education system in a variety of industries. This included the education sector (outside of public school) (90 former teachers), travel and leisure (76), healthcare (57), trade (55), and government (53). Moving into government and manufacturing yielded the highest wages for former teachers.

Summary

- Montana starting teacher earn one of the lowest salaries in the nation
- Montana has tried to address this but there are outstanding questions as to what happens to all the other teachers with low wages
- Over 43% of teachers earn their Master's degree due to incentive pay structure. Very few educators have advanced degree (EdD, JD, PhD)
- Employees are frequently topped out with teachers with 20-30 years of experience earning the most, however teachers with more than 30 years of experience earn less
- All three groups (teachers, principals, and superintendents) earn less outside of the education system than they did as an educator



Discussion

- What other elements besides longevity and highest education obtained should schools use when making salary decisions?
- There are differences in Montana based on highest education obtained, longevity, and position type in total compensation. Should salary growth among people with same longevity and degree be roughly the same no matter what position type?
- What is the impact of employees being topped out of salary schedule and with no opportunities for advancement. Are there ways to incentive these expert educators?
- Montana has relatively low teacher salaries, but these salaries are still more than in the private sector. Are teacher salaries dependent on the competition from these private sector salaries.

