

University of Southern Maine USM Digital Commons

School Improvement

Center for Education Policy, Applied Research and Evaluation (CEPARE)

2020

Educator Recruitment and Retention in Maine

Amy F. Johnson PhD

Kathryn Hawes

Sigrid Olson

Follow this and additional works at: https://digitalcommons.usm.maine.edu/cepare_improvement

Recommended Citation

Johnson, Amy F. PhD; Hawes, Kathryn; and Olson, Sigrid, "Educator Recruitment and Retention in Maine" (2020). *School Improvement*. 34.

https://digitalcommons.usm.maine.edu/cepare_improvement/34

This Study is brought to you for free and open access by the Center for Education Policy, Applied Research and Evaluation (CEPARE) at USM Digital Commons. It has been accepted for inclusion in School Improvement by an authorized administrator of USM Digital Commons. For more information, please contact jessica.c.hovey@maine.edu.



Amy Johnson, Ph.D.

Kathryn Hawes, Ph.D.

Sigrid Olson, MSIA

Maine Education Policy Research Institute
University of Southern Maine
October 2020

Table of Contents

Prologue: Covid-19 Impacts and Implications for this Report	i
Policymaker Summary	ii
Introduction	1
Background: Prior Studies of the Maine Educator Workforce	2
Study Methods	3
Purpose	3
Research Approaches & Questions	3
Survey Sample	4
Survey Respondents	5
Current Status: Teacher Demographics	6
Maine Teacher Pipeline	6
Current Teacher Workforce	7
Teacher Shortages	9
Teacher Experience and Education	11
Education Level	11
Teacher Compensation	12
Teacher Turnover & Retention	14
Teacher Survey Results	16
Recruitment Information	16
Satisfaction	22
Hours worked and Job-related Stress	23
Teacher Pay	25

School Administrators	26
Current Administrator Workforce	27
Administrator Experience	28
Administrator Turnover	29
Administrator Survey Results	30
Recruitment	30
Administrator Induction	31
Administrator Retention	32
Discussion and Policy Implications	35
Recruitment	35
Professional Preparation & Induction	37
Retention	38
General	39

Amy Johnson amyj@maine.edu

Kathryn Hawes kathryn.hawes@maine.edu Sigrid Olson sigrid.olson@maine.edu

Prologue: Covid-19 Impacts and Implications for this Report

The teacher and administrator surveys upon which much of this report was based were conducted in January 2020. The administrative and survey data analysis was completed in February and a preliminary report was compiled, on track for a planned delivery and legislative briefing in late March. However, the emergency shutdowns due to the Covid-19 pandemic interrupted that schedule, and subsequently delayed finalizing the report.

Concerns were also raised about the impact of pandemic conditions on the data since the educators participating in the survey would undoubtedly have responded quite differently if the same questions were asked after school shutdowns occurred. We explored the possibility of revisiting some of the key survey questions in the summer of 2020 to see how perspectives may have changed in the intervening months. Ultimately, it was decided that the data are valuable as collected as they represent a pre-pandemic snapshot of our workforce conditions. To increase the relevance of the report to inform policymakers' most immediate and pressing needs, the final section of the report (conclusions and policy implications) was re-written before final publication to incorporate consideration of their changed importance in the present circumstances. These hindsight perspectives were informed by consultations with selected educational leaders as well as interviews of a variety of education practitioners that were conducted by USM educational policy doctoral students in the summer of 2020.

Policymaker Summary

In response to recent anecdotal reports that Maine is experiencing heightened staff shortages, this study was designed to understand the current and future issues facing recruitment, induction, and retention of teachers and administrators in our public schools. This report includes analysis of current administrative data on teacher and administrator demographics as well as data from surveys of current and former teachers and administrators in Maine schools. The descriptive picture of current staffing patterns, compiled from state-level staffing data, was designed to provide comparisons to prior data reported in a 2001 task force report in order to determine whether the circumstances have worsened since that time. Survey questions were designed to further illuminate the potential reasons for Maine's current challenges in recruiting and retaining educators.

Teacher administrative data analyzed for this report has confirmed that the demographics of our workforce have indeed changed in the past 20 years.

- Maine's teaching workforce has aged. The average Maine teacher in 2018-19 was 46 years old, compared to 42 in 1999. About 1 in 6 teachers (15.6%) was over the age of 60 compared to only 1 in 50 (2%) in 1999.
- Public school teachers averaged 15 years of teaching experience, about the same as the national average (14 years).
- About 75% of Maine's teachers are women and 93.5% are full-time. The racial
 and ethnic diversity of Maine's educators cannot be compared to 1999
 demographics because those data are not routinely collected.
- The proportion of teachers with a master's degree or higher has increased from 1999 from 33% to 44% in 2019. However, this remains below the national average of 57%.
- Teacher salaries in 2018—before recent legislation was passed to initiate increased in the minimum teacher salary—was \$51,663, ranking 32nd in the nation and the lowest in New England. After adjusting for inflation, the salaries in 1999 were 1% *higher* than in 2018.
- Teacher turnover and retention rates are on par or slightly better than the national average, yet still create challenges for some districts. Using 2015-16 as a baseline year, one-year turnover rates to 2016-17 were 7.7% for beginning teachers and 6.5% for experienced teachers. Three-year retention rates were 16.6% for beginning teachers and 16.0% for experienced teachers.
- About one in ten (9%) of Maine's special eduction teachers is conditionally certified, meaning they are missing one or more requirements for the full initial credential. These rates varied by region, with some counties (Knox, Somerset, Washington) facing greater shortages than others in certain subject areas.

The data on public school administrators described similar workforce challenges as for teachers.

- The average Maine administrator (school or district level) in 2018-19 was 52 years old. Over 57% were aged 50 or older, compared to half (50%) in 1999. More than 1 in 10 (12%) were aged 65 or older and thus within retirement age.
- Gender patterns are different for administrators than for teachers, and also vary based on the specific type of administrator position. While only 28% of Superintendents in 2018-19 were women, 88% of Special Education Directors and Assistant Directors were women. Principals and other building administrators, at 51% and 48% respectively, are nearly evenly split between the genders. Other district administrators (Assistant Superintendents, Curriculum Coordinators, and Supervisors of Instruction) at 77% women, share a similar gender ratio to teachers. The gender balance among administrators has improved in the last 20 years. In 1999, 40% of principals and 12% of superintendents were women.
- More than half of Maine's public school administrators (56%) **had five or fewer** years of experience in their current role, and over a quarter (26%) of building administrators had **less than two years** of experience.
- The one-year retention rate for administrators (90.1%) between 2015-16 and 2016-17 was roughly similar to that of teachers (91.3%), but the rate of 2015-16 administrators who left the field of education within three years (22.6%) was 1.4 times as large as the 16.1% of teachers in the same cohort year who left. Presumably, some of this difference is due to the higher average age of administrators and thus more staff retirements.

Survey results

Survey responses yielded further insights into the areas where educators are facing challenges.

• Perhaps the most striking finding from the surveys was related to potential impending turnover. More than half of experienced teachers (55.5%) and the same overall proportion of experienced administrators (55%) had "seriously considered" leaving the profession in the prior year. Among administrators, patterns varied by role with 71% of special education administrators considering leaving compared to 40% of superintendents. Not surprisingly, these responses were related to job satisfaction; respondents who were slightly or strongly dissatisfied with their jobs were more likely to have considered leaving.

- Workload is an ongoing issue for educators, with 40% of administrators and 14% of teachers working 20 or more hours outside of the school day. For administrators, 68% of those working more than 20 hours per week beyond the school day had seriously considered leaving, compared to 41% working fewer hours. More than 1 in 4 administrators reported losing sleep due to stress caused by workload and lack of adequate resources.
- The full report contains additional contextual data and insightful comments from teachers and administrators expressing both their challenges and their suggestions for improving recruitment and retention.

These findings from administrative data and from survey responses point to several potential changes that may make public school employment more attractive for teachers and administrators.

Policy Implications: Recruitment

- **Centralized job listings**. Teachers at all experience levels rely heavily on job search services to locate openings, as do beginning administrators. The recently-implemented Maine Educator Information System (MEIS) contains an optional job matching feature that could be adopted into Maine's certification system for no additional ongoing cost. However, that service would require initial costs to tailor the built-in function to meet Maine's needs. More importantly, if the certification office is to expand its scope to also support job placement, it would require additional ongoing staff capacity to oversee and provide advising for both employers and applicants. We strongly recommend a feasibility assessment to determine the costs and needs for activating this built-in feature of the MEIS system in order to maximize support for districts to locate and recruit eligible applicants. Potential resources to support this work include Title II funds and federal discretionary grants. Resources for this work may also be available by reprioritizing the use of funds from Maine's state longitudinal data system grant. The need for an efficient system to match applicants to position openings is more critical than ever in the face of the heightened staff shortages caused by the Covid-19 pandemic.
- Streamlined certification requirements. Maine is poised to consider a major overhaul of state regulations regarding initial certification requirements; work is already underway to gain stakeholder input that will frame the rulemaking process.
 Prospective teachers responding to the survey seek more flexible ways to demonstrate their knowledge and skills, including:
 - o expanded reciprocity with other states for an initial certificate
 - o more options for demonstrating content knowledge through a combination of coursework, assessments, and/or professional experience
 - o performance-based assessment of demonstrated pedagogical knowledge and skills instead of reliance on course credits

- ensuring that all preparation pathways align to Maine's initial teaching standards and thus to the professional expectations (PE/PG systems) that are used to assess in-service teachers
- **Compensation**. As noted in the report, Maine has already taken recent legislative action to increase the minimum teacher salary to \$40,000. This is an important step that has not yet reached full implementation, and thus had not yet had the chance to vield results for improving teacher recruitment. This policy should receive continued support and commitment for full implementation. This may prove challenging in the face of impending state budget shortfalls. It may also be advisable to require periodic adjustment of the minimum salary on a pre-set cycle so that the minimum can keep pace with inflation. Future analyses can also be conducted to assess whether Maine's minimum salary is helping to close the salary gap between teachers and other professions requiring similar education and training. Secondly, policymakers should revisit and consider a recommendation from the 2001 study that was not implemented: allowing career-changers to collect the social security amount to which they are otherwise entitled in retirement based on their prior contributions, in all or in part, as well as their earned state pensions. The current state policy of reducing state retirement payments to adjust for social security continues to be a barrier for individuals to consider public school teaching in Maine, and hinders recruitment from other states and professions.

Policy Implications: Professional Preparation & Induction

- Survey feedback also provided insights into the need for better models for preparing
 and supporting beginning teachers and administrators. Residency models—in which
 teacher candidates receive income through school employment or fellowships to ease
 the financial strain of pursuing a teacher education program—are needed now more
 than ever. Schools are in dire need of additional staff to support in-person and remote
 instruction due to reduced class sizes and a shrinking pool of teachers. Results of this
 survey suggest that such residency models should include a year-long internship to
 bolster the graduates' level of preparedness. Analogous recommendations can be made
 for administrator preparation to be more flexible and include adaptive on-the-job
 learning.
- Increased mentoring supports are also needed for both teachers and administrators. We recommend continued attention to developing regional approaches to coaching of beginning teachers and administrators. Regional models are more efficient than district-level supports as they allow a greater economy of scale, particularly for administrators. Moreover, a regional network allows some separation from the Professional Evaluation Professional Growth (PE/PG) systems that are in place in each school, which creates more opportunities for formative feedback and candor.

Policy Implications: Retention

The survey feedback points to a continued need to take stock of key challenges that are often cited as reasons why educators choose to leave the profession (either to change careers or to retire). Higher compensation was cited by both teacher and beginning

administrators as an enticement to remain in their roles. In addition, both groups identified prevalent job conditions that detract from their work. For teachers the most often cited job challenges were 1) a need for more resources (staff, programs, leadership) to support the increasing intensity of students' social and emotional needs; and 2) reduced administrative responsibilities and paperwork (especially in special education). Administrators identified their biggest work condition challenges as overall workload (and specifically a work schedule that is not family-friendly), the burden of supervising and evaluating staff, and state reporting requirements. Each of these issues have been frequently cited and discussed in recent policy conversations, accompanied by recommendations for addressing these challenges through increased resources and professional development.

General

As a final recommendation, we encourage reconsideration of the MDOE's current practice of not collecting data on race and ethnicity of school staff. There is mounting evidence that having an education workforce that reflects the social and cultural diversity of our student body has a positive overall impact on student success. As Maine's population continues to become less homogenous it is imperative that we increase our efforts to recruit teachers and administrators of color. We must resume collecting basic demographic information about our workforce if we are to assess the effectiveness of such efforts.

Amy Johnson amyj@maine.edu

Kathryn Hawes kathryn.hawes@maine.edu Sigrid Olson sigrid.olson@maine.edu

Introduction

Worsening teacher and administrator shortages are a widely documented national concern. According to a recent summary of federal Title II reporting data (Center for American Progress, 2019)¹, our nation has seen a third fewer candidates enrolling in teacher preparation programs since 2010, and of that number 28% fewer aspiring teachers are completing teacher preparation programs. Maine had the third highest decline in the nation with 53% fewer teachers completing teacher preparation programs since 2010.

The situation is at least as dire for school administrators. According to the National Association of Secondary School Principals (NASSP), one in five principals working in schools during the 2011-12 school year left by the 2012-13 school year; half of all new principals are not retained beyond the third year. NASSP estimates a 6 percent increase in the demand for elementary, middle, and secondary principals by 2022, due to population increases (NASSP, 2018.)

Within this context, the 129th Legislature commissioned this study to understand the current and future issues facing recruitment, induction, and retention of teachers and administrators in our public schools. This report includes analysis of current administrative data on teacher and administrator demographics as well as survey data from current and former teachers and administrators in Maine schools. Policy implications are provided.

¹ https://www.americanprogress.org/issues/education-k-12/reports/2019/12/03/477311/make-declining-enrollment-teacher-preparation-programs/

Background: Prior Studies of the Maine Educator Workforce

The current concern about the supply of well-qualified teachers and administrators in Maine is not new; several studies have been conducted to investigate the issue. Between 1998-2001, Maine School Management Association (MSMA), the Maine Education Policy Research Institute (MEPRI), and an appointed Legislative Commission studied the then-current decline in teachers and administrators working in Maine schools. A 2016 follow-up study on challenges in preparing administrators was conducted by a Task Force of the 127th Legislature, calling the lack of school leadership candidates in Maine a "crisis". Each of these bodies recommended several policy changes, some of which were implemented and have helped to mitigate the impact on Maine schools. Because the current study builds directly on these prior findings, some highlights from each are summarized in this section.

In the spring of 1999 MEPRI conducted a study of teacher shortages as perceived by principals. At the time 74% of principals statewide reported no shortage of elementary classroom teacher candidates, though only 59% of principals in the northeast part of the state reported no shortages. Conversely, shortages were highlighted in the areas of special education at all levels, math, science, visual and performing arts, world languages, guidance counselors, and librarians. Additionally, in subjects without current shortages, about 40% of teachers were over 50 years of age. At around the same time data from a 1998 Maine School Management Association survey indicated that most superintendents had trouble filling principal and special education director vacancies. Further, of the nearly 100 superintendent openings in Maine between 1995-1998, most searches yielded between five to thirty applicants.

In 2001, recognizing the existing and potential decline in the educator workforce at that time, the second session of the 119th Legislature appointed a 23-member Commission to study Educator Recruitment and Retention in Maine. The work of the Commission focused upon four main areas:

- Teacher and Administrator supply and demand
- Retention of Teachers and Administrators
- Recruitment of Teachers and Administrators

• Strategies used or considered in other states (to mitigate the national decline in the educator workforce.)

The recommendations that emerged were focused into six groups:

- Educator Compensation, including base salaries to \$25,000 by 2002 and studying the Retirement System
- Educator Recruitment, including scholarships and alternative routes to certification
- Educator Induction, including paid mentors and for teachers and administrators and additional weight in the funding formula for new teachers
- Educator Retention, including support for National Board Certification for teachers, the creation of leadership networks, and a commission to examine the governance structure of school boards and school systems
- Raising the Status of the Education Profession, including the establishment of a positive marketing campaign
- Congressional Delegation Work, including an examination of the social security system to eliminate the general pension and spousal offsets and a revision of immigration requirements to allow foreign nationals to teach in Maine

Several of these recommendations were successfully implemented twenty years ago including raising the minimum teacher salary, creating alternative pathways to certification, local mentoring programs for new teachers, and support for National Board Certification. Some have been revisited over time; as a result of recent legislation the base full-time teacher salary will be raised to \$40,000 by 2022, and stipends for National Board Certified teachers have increased. Other recommendations have gained less traction in the intervening years.

Study Methods

Purpose

The goal of this study was to generally replicate the study that was conducted in 2001 to describe and understand the declining teacher and administrator workforce in Maine and to consider policy implications and options. In addition, detailed longitudinal staffing data were used to calculate teacher and administrator retention rates.

Research Approaches & Questions

The study used two parallel approaches to describe the current supply and demand for educators and the challenges that leaders face in filling open positions. First,

administrative data obtained from the Maine Department of Education about public school staff in the 2018-19 school year was used to characterize the current teacher and administrator workforce (demographics, education level, and years experience). These data were also matched to two prior years of staffing information (2015-16 and 2016-17) to calculate 1 and 3-year retention rates for new professionals hired in 2015-16.

Next, surveys were conducted to ask Maine public school administrators and teachers questions about their preparation, recruitment, and induction in order to compile answers to these questions:

- What kinds of induction and preparation were perceived to be most helpful?
- What are the most common and impactful recruitment efforts?
- What are the most prevalent mentoring and induction processes? Are some local practices perceived to be working well?
- What conditions promote retention of teachers and administrators?

Survey Sample

Contact information for Maine preK-12 public school administrators and teachers were obtained via the Maine Department of Education public distribution lists. In addition, the Maine School Superintendents Association and Maine Principals Association sent an announcement to their memberships to encourage participation. All individuals holding Maine certification for administration or teaching were included in the sample pool, and a sample of 777 administrators and 1,911 teachers with a valid email address were invited to participate. Survey administration allowed for a two-week window (including one reminder). Participation in the survey averaged under 10 minutes. Email addresses of survey respondents were tracked to facilitate reminders, but not linked to the responses. All analysis was conducted with unidentifiable data.

For this report, we included the following positions as teachers: Classroom Teacher, Literacy Specialist, Long-term Substitute Teacher, Special Education Teacher, English Language Learner Teacher, Title I Teacher, and Gifted and Talented Teacher. Administrator positions included: Assistant Dean, Assistant Director of Career and Technical Education, Assistant Director of Special Education, Assistant Principal, Assistant Superintendent of Schools, Career and Technical Education Director, Curriculum Coordinator, Dean, Principal,

Special Education Director, Superintendent of Schools, and Supervisor of Instruction. Teachers and administrators with an 0.9 or more Full-Time Equivalent (FTE) position were considered to work full-time. Public schools also include charter schools and Career and Technical (CTE) schools. For the purposes of this study staff in Bureau of Indian Education, unorganized territories, and state-run schools were excluded.

Survey Respondents

A total of 295 administrators (37%) and 752 teachers (39%) provided survey responses that were sufficiently complete for analysis.

Gender: 81% of the teacher survey respondents were women and 19% were men; this is a modest yet statistically significant difference from the population of current teachers, which was 76% female in the most recent school year. Less than 1% of teacher respondents identified as non-binary, a category not found in the NEO database.

Women also responded to the administrator survey at a greater rate than men. Fifty-six percent of Maine's public school administrators are women, but they represented 66% of survey respondents. This is a statistically significant difference (chi-square, p<0.05). Less than 1% of administrator respondents identified as non-binary, a category not found in the NEO database.

Race: Ninety percent of teacher survey respondents identified as white, not Hispanic; 5% identified as white/Latinx; 5% chose not to answer. Less than one percent of respondents identified as Asian, American Indian or Alaska Native, or African-American. Of the administrators, 88% identified themselves as white, not Hispanic with an additional 6% identifying as white and Hispanic; 6% of respondents chose not to answer. Together, these represent over 99% of survey respondents. As the NEO data collection system does not collect information on the race of Maine's teachers or administrators by state policy, we cannot determine if this reflects a representative sample.

Experience: The experience of survey respondents who were current teachers shows no statistically significant difference to Maine's overall teacher pool (chi-square, p<.05). Thus, the experience of survey respondents is reflective of the public school teacher population in Maine.

However, while 56% of Maine's administrators have 5 or fewer years of experience, just under a quarter of the survey respondents were in this category. Only 10% of Maine's public school administrators have more than 21 years of experience, but they represented 16% of the survey respondents. These are statistically significant (chi-square, p<.05).

Overall, these results were deemed sufficiently representative of the current teacher and workforce in Maine, though slightly less representative of male teachers. The representativeness of the administrator respondent pool is less certain; respondents were slightly more likely to be female and had substantially more experience than Maine's overall administrator pool. Accordingly, these results should be interpreted with caution.

Current Status: Teacher Demographics

Maine Teacher Pipeline

Maine's enrollment of pre-service teacher candidates has declined substantially in recent years. The pattern mirrors the national average, with 35% fewer students in 2018 than in 2010. However, Maine has realized the third largest decline in teachers *completing* teacher preparation programs in the nation at 53% (Center for American Progress, 2019)². This was surpassed only by Oklahoma and Michigan at a 54% decline. The decrease was seen in both alternative pathways and traditional teacher preparation programs. The decline was equal across genders, and remains most acute in science, technology, engineering, and math (STEM), world languages, and in special education (ibid, 2019). Interestingly, Maine is one of only 13 states to have seen an increase in the proportion of Black or African American teacher preparation candidates and ranked 2nd only to Utah in the increased number of Latinx candidates; however, the overall proportion of Maine teachers of color remains small. Detailed figures are unavailable as the Maine Department of Education does not currently collect data on the race or ethnicity of teachers.

 $^{^2\} https://www.american$ progress.org/issues/education-k-12/reports/2019/12/03/477311/make-declining-enrollment-teacher-preparation-programs/

Current Teacher Workforce

A total of 14,993 teachers were employed in Maine Public Schools during the 2018-19 school year, including charter schools, Centers for Technology Education (CTEs), Bureau of Indian Education schools, Unorganized Territories and other Maine DOE-administered schools. This was 1,786 fewer teachers than were employed in 1999, or a 10% decrease³. 14,019 (94%) of Maine's public school teachers teach full-time. Of the 974 school employees who teach part-time, over 70% are part-time employees and the remaining 254 part-time teachers combine the role with a non-teaching position for overall full-time employment. The majority (76%) of Maine's public school teachers are women, which is comparable to 77% nationally. This is a slight increase from the 72% in 1999.⁴

Table 1: Maine Public School Teachers 2018-2019

	Elementary	Secondary ¹	Grade Unknown ²	Total	Percent
Full-Time					
Women	6,743	1,894	2,038	10,675	76%
Men	1,251	1,525	568	3,344	24%
Total Full-Time	7,994	3,419	2,606	14,019	
Part-Time ³					
Women	444	170	103	717	74%
Men	137	100	20	257	26%
Total Part-Time	581	270	123	974	

- 1. includes teachers who teach at both the Elementary and Secondary levels
- 2. 18% of teachers have no grade information
- 3. includes full-time SAU employees who teach part-time combined with a non-teaching role

As Figure 1 on the next page shows, the average age of a Maine teacher in 2018-19 was 46, which was three years older than in 1999. Both full and part-time teachers are included. About 1 in 6 teachers (15.6%) was over age 60 compared to only 2% in 1999. Ninety-two percent (92%) of teachers over age 60 and 86% of those over 65 worked full-time, but only 43% of the 21 teachers aged 75 or older worked full-time.

7

³ Comparisons with 1999 are approximate, as the types of positions counted as teachers in the prior 1999 report were not delineated and may or may not completely align to our operational definition.

⁴ NCES Fast Facts: https://nces.ed.gov/fastfacts/display.asp?id=28

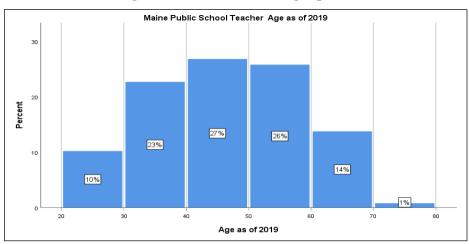
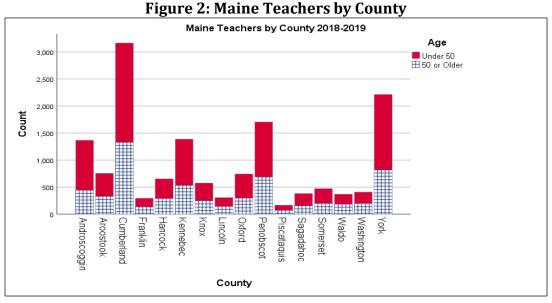


Figure 1: Teacher Demographics

As may be seen in Figure 2 below, the average age of teachers varies by county, and ranged from 43 in Androscoggin County to 49 in Lincoln, Waldo and Washington Counties. With 49% of its teachers aged 50 or older, Waldo has the oldest teachers in the state. Androscoggin's teachers are the youngest; only 33% were aged 50 or older. This is a marked change from 1999 when 33% in Piscataquis represented the high end of the range of teachers over age 50, and Oxford County with 28% of its teachers 50 or older represented the low end of the range.



Notes: 14 teachers who teach in unorganized territories were excluded. 178 (1.2%) teachers had positions in 2 or more counties and were assigned to the county where they had the most FTE, or randomly if they had equal FTE in both counties.

The age profile of teachers also varied by subject. The subjects with the highest percentage of teachers over age 45 were World Languages and Physical Education & Health, with 45%. Math, with 44%, was a close second. English, Fine and Performing Arts, Special Education and English Language Learning also had more than 40% of their teachers over age 50. Non-specific subjects (mostly Elementary and Middle School teachers) had the fewest teachers over age 50, with 35%.

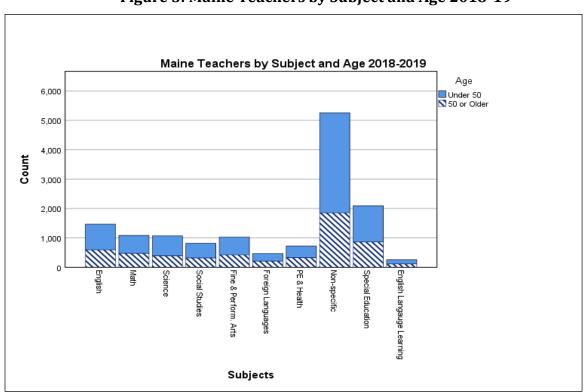


Figure 3: Maine Teachers by Subject and Age 2018-19

Teacher Shortages

Anecdotal reports about the difficulties public schools face in hiring well-qualified teachers and administrators are plentiful. However, as Maine does not have a centralized system for teacher or administrator job applications, it can be difficult to quantify shortages. A recent MEPRI report (2019), Feasibility Study of Assessing the Supply and Demand for Educators in Maine,⁵ identified shortage areas using the number of teachers

⁵ Johnson, Morris (2019). Feasibility Study of Assessing the Supply and Demand for Educators in Maine. MEPRI http://mepri/maine.edu/posts

lacking full certification for the subject they teach. Figure 4 below shows the statewide percentage of teachers with conditional certification in key shortage areas, as well as the comparable number for the county with the highest percentage in the subject area.

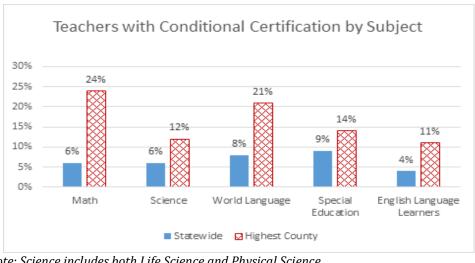


Figure 4: Conditional Certification

Note: Science includes both Life Science and Physical Science

In Mathematics, nine counties (Androscoggin, Cumberland, Hancock, Knox, Lincoln, Oxford, Penobscot, Waldo, and York) had fewer residents endorsed to teach math than teaching positions. With nearly a quarter of their math teachers conditionally certified, Piscataguis County had the highest percentage of math teachers who were not fully certified in their subject (ibid., 2019).

Waldo, with only 3% of their life and physical science teachers conditionally certified, had the highest percentage of fully-qualified science teachers. Knox, with 12% conditionally certified, had the lowest percentage of fully-qualified science teachers.

The distribution of world language teachers across counties was quite uneven, leaving students in some counties with limited access to world language instruction. Cumberland and York have 46% of Maine's language teachers, despite having only 37% of Maine's students. Sagadahoc and Washington counties each employed fewer than 10 language teachers, and only 5 world language teachers were employed in Piscataquis and Somerset (ibid., 2019). Somerset and Washington Counties also had the highest percentage of conditionally-certified world language teachers, with 21% and 20% respectively.

Specialist teachers also showed regional disparities. Piscataquis (18%) had three times as many conditionally-certified Special Education teachers as Aroostook County (6%). Forty-three percent of Maine's 207 English Language Learning teachers live in Cumberland County, where 4% of eligible ELL teachers have conditional certifications. The counties with the highest (11%) percentage of conditionally certified ELL teacher residents were Androscoggin and Waldo. Note: because teachers do not necessarily live in the same county where they work, the resident profiles are only an approximate match to the actual credentials of teachers by county. (For example, the schools in Waldo County employ only one ELL teacher, but there were nine Waldo county residents holding an ELL teacher credential.)

Teacher Experience and Education

The experience of Maine's public school teachers is similar to the national average. In the 2019 school year, Maine's teachers had an average of 15 years of experience. The same was true in 2016, when the national average was 14 years of experience.

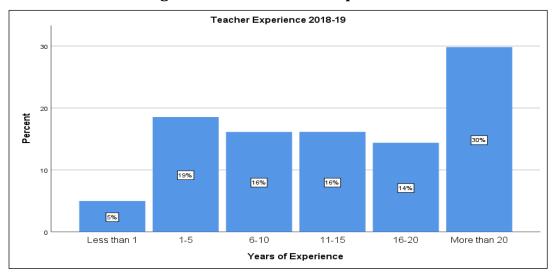


Figure 5: Maine Teacher Experience

Education Level

Maine's public school teachers were more likely to have attained advanced degrees in 2019: 44% had completed a Master's degree or higher compared to only 33% in 1999.

However, Maine's teachers have completed less education than the average teacher in America. In 2016, 57% of teachers nationwide had completed a master's degree or higher.⁶

Table 2: Educational Attainment of Maine Public School Teachers 2018-19

Educational Attainment	Women Count	%	Men Count	%	Total Count	%
Less Than Bachelor's	129	1.2%	144	4.3%	273	1.9%
Bachelor's	4,487	42.0%	1,317	39.4%	5,804	41.4%
Bachelor's + 15 or more Cr	1,290	12.1%	514	15.4%	1,804	12.9%
Master's or more	4,769	44.7%	1,369	40.9%	6,138	43.8%
Total	10,675	100.0%	3,344	100.0%	14,019	100.0%

Teacher Compensation

Educator salaries in Maine vary regionally. The highest salaries are paid in Cumberland County with an average teacher salary of \$63,796 in school year 2019. As in 2000, the lowest salaries are found in Washington County, where the average teacher earned \$44,298 in 2019.

Average Teacher Salary by County

Washington

Waldo

Somerset

Somerset

Segadahoc

Hancock

Franklin

Cumberland

Androscoggin

Figure 6: Average Maine Teacher Salary by County

Maine's average teacher salary of \$51,663 in FY 2018 was $32^{\rm nd}$ in the nation, not significantly different from its rank of $33^{\rm rd}$ in 2000. Maine continues to have the lowest average teacher salaries in New England. Teachers in Maine earned 65% of the average salary earned by teachers in Massachusetts and more than 10% less than teachers in New

12

⁶ NCES Digest of Education Statistics: 2017 https://nces.ed.gov/programs/digest/d17/ch_2.asp

Hampshire, the state with the next lowest teacher salaries. Maine's teacher salaries have not kept pace with inflation, losing nearly 1% of their value since 2000.

Table 3: Maine Teacher Salaries Compared to Nation and Region⁷

	Constant 2017-18 dollars				
State	1999-2000	2009-10	2016-17	2017-18	Percent change, 1999-2000 to
					2017-18
United States	61,275	63,287	61,005	60,483	-1.3
NE Average	64,751	67,279	68,018	67,188	0.04
Maine	52,121	52,784	52,228	51,663	-0.9
New Hampshire	55,306	58,894	58,819	57,833	4.6
Vermont	55,341	56,193	58,642	58,527	5.8
Massachusetts	68,271	79,306	79,861	79,710	16.8
Connecticut	75,892	73,670	74,796	73,113	-3.7
Rhode Island	68,947	68,331	67,976	66,758	-3.2

Starting salaries are an important career consideration. Table 4 shows national starting salaries of 2018 teacher graduates. Nationally, students in education have low starting salaries compared to other occupations. Even when the salary is compared on a

Table 4: National Beginning Salaries of College Graduates 20188

Major	Starting Salary	Per Day*
Business, Management, Marketing	\$52,040	\$216.83
Computer and Information Sciences	\$71,411	\$297.55
Education	\$38,548	\$208.37
Engineering	\$66,638	\$277.66
Health Professions & Related	\$52,076	\$216.98
Liberal Arts – General Studies	\$48,961	\$204.00
Mathematics and Statistics	\$61,709	\$257.12
Physical Sciences	\$46,250	\$192.71
Public Administration and Social Services	\$35,146	\$146.44
Social Sciences	\$46,797	\$194.99

^{*} National work year assumptions: Teachers 185 days/year, all others 240 days/year

⁸ From National Association of Colleges and Employers, First Destinations for the College Class of 2018: Findings and Analysis, page 11. https://www.naceweb.org/job-market/graduate-outcomes/first-destination/class-of-2018/

⁷ SOURCE: NCES, Digest of Education Statistics, selected years, 1969-70 through 2017-18. https://nces.ed.gov/programs/digest/d18/tables/dt18_211.60.asp?current=yes

per day basis, to remove the effect of the shorter work year of teachers, teaching is paid less than many other comparable professions. This is particularly true in science, technology, engineering and mathematics (STEM) fields. A student employed in Mathematics or Statistics can expect a starting salary 60% higher than that of a graduate in Education, which contributes to national shortages of qualified math teachers.

Moreover, when compared with other occupations in Maine that require a bachelor's degree, Maine teachers average 20% less pay, as shown in Figure 7.

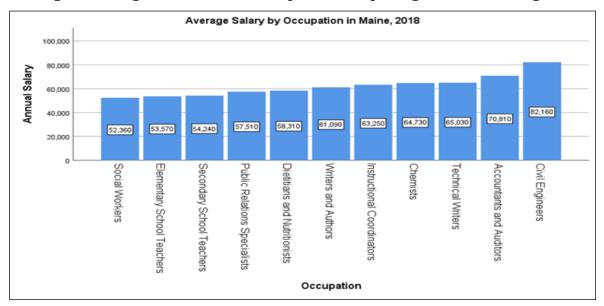


Figure 7: Wages in Maine for Occupations Requiring a Bachelors Degree

Note: Data from the Bureau of Labor Statistics for occupations with occupational requirements, as defined by BLS, similar to teachers. Teachers do not include Special Education or Career and Technical teachers.

Teacher Turnover & Retention

Maine's overall teacher retention rates are slightly better than the national average. A recent MEPRI study found that from the 2016 to the 2017 school year, 87.2% of Maine's teachers stayed in their jobs. ⁹ The national average in the 2013 school year, the most recent available data, was lower at 84%. The annual rate at which Maine's public school teachers moved to other public schools in Maine was 3.7% averaged across periods from

14

⁹ Johnson, Morris (2018). Teacher Turnover in Maine: Analysis of Staffing Patterns 2005-06 to 2016-17. MEPRI, http://mepri/maine.edu/posts

2007 to 2017, which was half of the national rate of 8% in 2013. The annual percentage of Maine teachers who left teaching altogether was 7.5%, similar to the national rate of 8%.

For the current study, these prior analyses were updated with additional longitudinal data about the staff who were teaching in 2015-16 to determine their status in the 2018-19 school year (i.e., to calculate three-year retention rates of the 2015-16 teacher cohort). These new analyses are summarized in Table 5 alongside the one-year retention rates from the 2019 MEPRI study of teacher turnover.

Table 5: One-year and Three-year Retention and Mobility rates of Maine Public School Teachers

		One-year	Three-year
		retention rate	retention rate
		2015-16 to 2016-17	2015-16 to 2018-19
Retained	Remained a teacher in Maine's public school sector	91.3%	77.2%
Changed	Left teaching in a public school but remained in the education sector (i.e., private school or another position)	2.4%	6.7%
Left	Left Maine's education sector	6.3%	16.1%

The most common reason for leaving teaching in the public sector but still working in education was to move to a private school. Thirty eight percent of those who left teaching in the public sector but remained in education between the 2016 and 2017 school years moved to a private school. Fifty seven percent of those who left between 2015 and 2018 moved to a private school.

While it is normal to expect some turnover as older teachers retire, the turnover rate of beginning teachers is a separate issue. Table 6 shows a comparison of the retention rates of beginning versus experienced teachers in Maine. Nearly 8% of Maine's public school teachers with less than 4 years of experience left Maine's education sector between the 2016 and 2017 school years, and 16.6% of teachers with less than 4 years of experience left education in Maine between 2016 and 2019.

For context, a national study (NCES, 2015)¹⁰ of 5-year beginning teacher retention

15

 $^{^{10}\} Raue, Gray.\ Career\ Paths\ of\ Beginning\ Public\ School\ Teachers:\ \underline{https://nces.ed.gov/pubs2015/2015196.pdf}$

Table 6: Beginning vs. Experienced Teacher Retention in Maine

	One-year retention (2015-16 to 2016-17)		Three-year retention (2015-16 to 2018-19)	
	Beginning teachers (<4 years)	Experienced teachers (4+ years)	Beginning teachers (<4 years)	Experienced teachers (4+ years)
Remained a public school teacher	88.8%	91.8%	76.9%	77.2%
Left teaching in public school but still in education	3.5%	2.2%	6.5%	6.7%
Left Maine's education sector	7.7%	6.0%	16.6%	16.0%

showed that having a mentor or participating in an induction program decreased attrition rates. For example, 80% of the new teachers in the study who were assigned a mentor remained in teaching 5 years later, while only 64% of those who were not assigned a mentor remained in teaching. Induction programs were similarly effective; 80% of teachers who participated in an induction program remained in teaching after 5 years, but only 69% of those who did not participate in an induction program did. The study also found a significant difference in retention rates between teacher making a base salary of at least \$40,000 (85% retention) and those making less (68% retention). Note, for the first year in the study, 2007, \$40,000 would be worth nearly \$50,000 in today's dollars. \$40,000 for the last year of the study, 2013, in today's dollars would be worth \$44,416. Nationally, over half of teachers who left teaching reported that the manageability of their workload and the general work conditions were better in their new jobs than when they were in teaching.

Teacher Survey Results

Recruitment Information

The first section of the teacher survey collected information about the preparation and recruitment pathways of each respondent. The majority (52%) of the public school teachers obtained their education from a traditional college or university program in Maine, 22% were educated out of state and 21% pursued the alternative certification route through transcript analysis. As noted in the study methods section the pool of teacher survey respondents was representative of the overall teaching workforce in Maine.

Teachers in the survey found sites such as ServingSchools and SchoolSpring to be the most effective means of finding a teaching job. Over twice as many respondents said they found their job through such services (44.1%) as did the number using the next most common job-finding method, networking (19.8%).

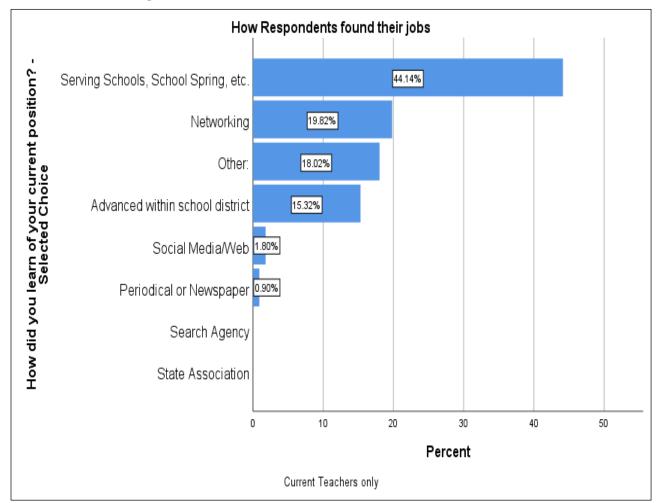


Figure 8: How Teachers Learned of Current Position

Maine's teachers are drawn to the profession by their love of children, the importance of the job and their enthusiasm for what they are teaching. Such reasons represent 65% of the respondents' choices. Pay, benefits and the school schedule comprise 25% of the choices made.

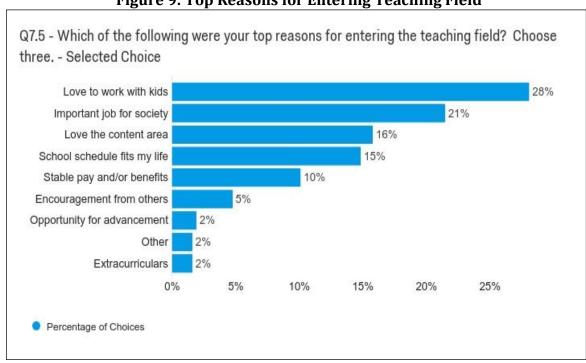


Figure 9: Top Reasons for Entering Teaching Field

When educators who are not teaching in Maine's public schools were asked what would make it easier or more desirable for them to apply for a teaching job in Maine, some mentioned a central application bank:

- "A central "job bank" similar to NH's"
- "More streamlined application processes."
- "Easier website to navigate openings (outside of serving schools)"

Others mentioned the difficulty of finding jobs in their area:

- "A position in a nearby school."
- "The availability for jobs in Northern Maine doesn't come around often."

Salary was a theme that prevented many of these teachers from teaching in Maine. This is a sampling of the comments:

- "Better pay."
- "Increase salary."
- "Higher wages."
- "Money."
- "Make a living wage."

- "Higher salaries, I currently commute to Haverhill, MA to teach during the day from Auburn. Believe it or not, even with fuel, tolls, and driving in awful weather, it is still financially better for my family."
- "I would love to live in Maine again but it is hard to leave the higher salaries, retirement, and benefits in Massachusetts."
- "Increased salary. I turned down my offer in Maine because I would have had to accept an \$8,000 pay cut from my previous position."

A Maine public school teacher said:

"Many of my friends from local teaching programs have moved to Massachusetts, where they are valued more and compensated more for their hard work. They now have an improved quality of life."

The teacher certification requirements also came under some criticism, such as:

- "More affordable ways to take required courses to get a credential. I already have a B.A. and Masters so I don't qualify for federal aid or most scholarships."
- "Acceptance of my NJ credentials, education, and experience."
- "If my degrees in my area of specialty and my 20 years of teaching experience was valued over a certificate."
- "I've been in the classroom for nearly 20 years from [community college] to [well-known private Maine high school]. The shortsighted and outdated certification process is a big barrier for me to go public."

These responses provide helpful context about the motivations that incentivize individuals to enter the profession as well as the barriers that dissuade educators from the public teaching sector.

Teacher Preparation and Induction

The next section of the survey asked respondents about their teacher preparation pathways and the supports they found most helpful in their beginning years of teaching. These survey questions were targeted at teachers with five or fewer years of experience in order to capture the most recent experiences and to limit the length of the survey for other categories of teacher experience.

Beginning teachers who had only completed one semester of practice teaching before starting their careers were less likely to feel prepared than those who had a full academic year internship: 62.5% of teachers with one (or more years) of student teaching

felt very prepared when they began their careers, but only 44.8% of teachers with one semester of practice teaching felt the same. Teachers who taught under a conditional

Table 7: Teacher Preparation: Did your teacher preparation pathway prepare you for success as a beginning teacher?

Selected Choice	Conditional or other alternative cert pathway (N=22)	One semester student teaching (N=29)	One academic year (or more) student teaching (N=16)
I felt very unprepared		6.9%	6.2%
I felt somewhat unprepared	13.6%	17.2%	
I felt somewhat prepared	50.0%	31.0%	31.2%
I felt very prepared	36.4%	44.8%	62.5%

certificate or another alternative route also felt less prepared for their roles than those with a full year internship, with only 36.4% reporting feeling "very" prepared. However, when combining the "somewhat" and "very" prepared responses, alternative pathway teachers were more likely to feel at least somewhat prepared (86.4%) than those with just one semester of student teaching (75.8%). Of those with one full year of student teaching, 93.7% felt "somewhat" or "very" prepared.

About half of the respondents took the opportunity to answer the related question "In what areas (if any) were you unprepared for the role?" with a short-answer comment. Of those, issues related to classroom management and special education policies comprised the majority of comments. Challenges with working with students' social and emotional needs, dealing with parents, time management, and workload were also mentioned more than once.

In the next question, only 16% of beginning teachers said they were "very prepared" for the social, emotional and behavioral needs of their students when starting their careers. This number improved to 59.9% when adding in the 44% who felt at least "somewhat" prepared. However, this leaves a concerning 40.1% who said they were either somewhat or very unprepared to support and manage these needs.

Table 8: When starting your job, how well prepared were you for the social / emotional / behavioral needs of your students?

	Frequency	Percent
Very unprepared	21	18.8%
Somewhat unprepared	24	21.4%
Somewhat prepared	49	43.8%
Very prepared	18	16.1%
Total	112	100.0%

Given a list of options, beginning teachers overwhelmingly identified some form of mentoring as an effective support. Four out of five respondents (80.3%) identified one or more of the following mentoring supports as a top three choice: having a dedicated mentor or formal coach, having increased mentoring within the classroom (from co-teaching, modeling or peer observations), or more mentoring conversations outside of classroom time. The next most popular choice was having a lower class-size (50.0%). Fewer duties, more professional development, and a team-oriented teaching approach were also seen as effective supports by a sizeable proportion of beginning teachers as seen in Table 9.

Table 9: Which supports do you feel are most effective for supporting beginning teachers? Choose your top three.

Support Description	Count of	% of
Support Description	Respondents	Respondents
A designated mentor or formal leadership coach	58	52%
Lower class size	56	50%
Increased mentoring supports within the classroom (co-teaching, modeling, peer observations)	48	43%
Fewer non-instructional duties	38	34%
More professional development opportunities	36	32%
Team-oriented teaching approach	35	31%
More mentoring conversations outside of classroom time	23	21%
Other	9	8%
Flexible attendance requirements at school events	6	5%
Regional networking groups	6	5%
More pathways to advancement in school or district leadership	6	5%
Regional centers to sponsor, identify and disseminate research on best practice	5	5%
Total respondents	112	100%

These responses provide useful insights into the types of supports that should be prioritized to meet the needs of teachers in their first five years of practice.

Teacher Retention

Satisfaction

The survey asked current teachers with 6 or more years of experience several questions about their feelings toward their career. One important finding is that less than a third of Maine's public school teachers (32%) are "very satisfied" with their jobs. For context, the Pew Foundation reports that 49% of Americans are very satisfied with their current job. An additional 48% were somewhat satisfied; the remaining teachers were neutral (6.7%), somewhat dissatisfied (10.7%) or very dissatisfied (2.9%). Perhaps more concerning, more than half of responding teachers (55.5%) had "seriously considered leaving the teaching profession" in the prior year. Given the serious implications of this response pattern, additional analysis was conducted to further explore the response patterns of those who had contemplated retirement or changing careers.

When analyzed by age group, more teachers reported considering leaving than not in all age groups except under 35 years (where 46% of teachers have seriously considered leaving their profession). Importantly, even teachers who are satisfied with their jobs have considered leaving teaching. As seen in Table 10, 30% of teachers who reported being very

Table 10: Cross Tabulation of Job Satisfaction with having "seriously considered leaving the teaching profession in the past year"

Overall, how satisfied are you with your role as a teacher?	Total number of respondents	% Responding "Yes" to having
	·	considered leaving
Very dissatisfied	13	76.9%
Somewhat dissatisfied	48	93.8%
Neutral	30	86.7%
Somewhat satisfied	211	58.3%
Very satisfied	141	29.8%
Total	443	55.5%

¹¹ https://www.pewsocialtrends.org/2016/10/06/3-how-americans-view-their-jobs/

satisfied with their role as a teacher have seriously considered leaving; 58% of somewhat satisfied teachers and 87% of teachers neutral on their role as teacher have seriously considered leaving, Additional insights can be gained through the comments provided in the survey such as

"In regards to the question about if I had considered leaving the teaching profession in the past year, I can't even begin to articulate how many times I've envisioned myself getting up and never coming back. I am expected to do way too much for way too little. I've been teaching for nearly six years, I am still unable to pay all my bills. I give everything I have to this job and my personal life is suffering in ways I never expected. I can't keep this up. At the same time, teaching is my calling. I just feel so taken advantage of."

Teachers who have seriously considered leaving teaching are twice as likely to say one of the most important improvements that could be made to their jobs is more administrator support, with 66% of teachers who considered leaving teaching opting for more administrator support and on 33% of the teachers who haven't considered leaving saying so.

Hours worked and Job-related Stress

Teachers reported working long hours every week. About half of both beginning and experienced teachers (50% and 52% respectively) reported working between ten and nineteen hours per week outside the school day. A total of 19% of beginning teachers and 14% of experienced teachers reported working more than 20 hours outside of the school day each week. Less than a third of new teachers (31%) worked less than 10 hours per week outside of the school day, about the same as experienced teachers (33%).

Table 11: Hours Worked Per Week Outside of School Day (Beginning vs. Experienced Teachers)

	Beginning Teachers (N=321)	Experienced Teachers (N=431)
<10	31%	33%
10-19	50%	52%
20-29	18%	13%
30 or more	1%	1%

One experienced teacher said,

"The expectations on teachers are overwhelming! Our time is not valued. For 35 hours of teaching time with children, we have only about 2 hours of in school prep time in our district. I have to bring home work at night and on weekends; when possible I go in on Saturdays for the day instead of spending time with my family. When do we get overtime hours?"

Seventy-two percent of Maine Public School teachers report stress levels that impacted their sleeping. The source of the most stress was the complex needs of students within the classroom (behavioral or academic) with 69% of teachers choosing this as one of three sources of stress. The third largest source of stress was the complex needs of students and their families outside of school with 29% of teachers choosing this source of stress. Selected of comments on the subject include:

- "There needs to be more in place to support children's mental health and behavioral issues."
- "Concerned about the ever increasing number of students that are coming through the
 system that have/need behavior issues/problems with no avenue for help for them. They
 have to stay in the regular classroom and completely disrupt the entire class. Schools need
 funds and avenues for these students to learn and be successful."
- "I think that trauma, parental drug use, and an increase in disabilities is changing the teaching profession and that many schools are not equipped with the resources and strategies to handle this change. I'd like to see an increase in interventions through Elementary School through qualified social work services, behavioral coaching, and PBIS teams. I also think outside of education there needs to be more wrap around services for families because in some circumstances we can see writing on the wall with these kiddos and our hands are tied to help improve their outcome especially once they hit HS age."
- "I think that student behavior is impacting teachers' ability to teach. Why spend all these personal hours planning, if you can't even implement lessons consistently due to student behavior. How do we get more support for students who are interrupting learning on a consistent basis."
- "Very needy kids are coming to school, and schools are doing their best to meet their needs, but teachers are overwhelmed. We have way more behavior problems and kids living in traumatic situations. It is more challenging now to be in the classroom than ever before."

The second most common cause of stress was paperwork and reporting requirements, with 37% of teachers reporting this as a significant factor.

- "You really need to address the intense amount of paperwork/ reports etc. that teachers need to do in addition to everything else."
- "Think about your support of teachers. Are you helping them to reach their students or hindering them with paperwork and other demands that take away from really reaching a student?"

- "Please let teachers have more time to do their job instead of saddling them down with paperwork such as teach portfolios."
- "You absolutely need to cut back on paperwork for SPED Teachers. It is taking away from actually teaching student. A complete overhaul of SPED practices needs to be done so the teacher can be freed up to teach students that have learning issues. It's such common sense that the more demands you place on a SPED teacher the less work they will/can do with their students. If my child were in need of SPED services, I would choose to decline SPED services and do a 504 plan and remediate skills at home."
- "Hire staff to do Special Education paperwork, so the Special Education Teacher can focus on teaching the students."

Teacher Pay

Salary was a significant problem for many teachers. Although the survey did not specifically ask about compensation, teachers had plenty to say on the subject. This is a sampling of the many comments made by survey respondents in response to other questions (such as about job satisfaction):

- "Low pay is very, very discouraging."
- "I am in my third year of teaching full time, with graduate level certification, and am only making \$36,000/year. Most teachers I know need second or third jobs because the pay is too low to make ends meet...This will be my last year teaching in Maine, but I am willing to give teaching another chance in a state that pays a reasonable salary in comparison to the cost of living."
- "The \$40k entry pay is a joke. I'm 4 yrs in and just hitting \$40k so there's no help to those who didn't start this year. I also make less money than my 16 yr old making minimum wage. Let that sink in. It's embarrassing and insulting."
- "It is challenging to make ends meet on this salary, especially with student loans, car payments, etc"
- "My family is struggling financially. My college son works at a retail store and is capable of making more money than I am as a teacher. It's discouraging!"
- "Teachers need to be paid more. Period."
- "Teachers are always "patted on the back" or given an "atta boy" for his/her work, and the paycheck is a slap in the face!"
- "This job is incredibly exhausting and I am incredibly poorly compensated for doing it."
- "For the state to truly attract and retain high-quality teachers, we need to be paid more!"
- "I believe teacher pay needs to be significantly increased to promote long term teacher retention. This is an incredibly high stress and mentally demanding career that should financially reflect the importance of the job."
- "The pay in Maine is not competitive, if you want to retain talented teachers instead of constantly hiring provisional teachers, the salary needs to be at least 20% higher."

 "Competitive salaries with neighboring states (NH & MA) would keep and attract quality educators and their families to move to and stay in Maine! As of right now, the pay here is minimal and cost of living is high."

Pension was another aspect of compensation with which teachers were dissatisfied. This is a sampling of the many comments on it:

- "The pension program is insulting."
- "The WEP is unfair and should be overturned. I worked for many years paying into Social Security. I lose that benefit, and will not receive SS benefits should something happen to my husband."
- "It's ridiculous that I cannot collect my full social security. I worked for 25 years in the private sector. It's honestly worth considering a move to New Hampshire to teach there. Why penalize teachers?"
- "Other states allow teachers to receive Social Security benefits as well as MSRetirement. Maine should also. I currently work at a part time job outside of school to help pay my bills and a child's college loan. Many teachers hold part time jobs and/or work in the summer. Maine should allow us to collect both!!"
- "I am disgusted with our former governor's push to limit cost of living adjustments to our pensions. I put in so much more time over the course of a school year than my contract dictates. Hitting teachers after the fact in retirement is more than just a slap in the face."
- "Allow teachers to collect (without penalty) on Social Security contributions they have made when working outside of the teaching profession."

These concerns are not surprising, given national research on the challenges of teacher compensation as well as the prior studies in Maine. However, they do point to an ongoing need to continue to address compensation, workload, and conditions in order to retain teachers.

School Administrators

According to The Wallace Foundation, school principals are second only to teachers in the ability to impact student achievement (NASSP¹² & NESP, 2013). Research from the Center for Public Education and the National School Boards Association indicates that it takes a principal five years after starting at a new school to improve staff and student performance. Maine's data also mirrors national statistics in terms of principal retention,

¹² https://www.nassp.org/policy-advocacy-center/nassp-position-statements/

with fewer than half of principals in Maine schools staying in one school beyond five years (Maine Principal Study, 2011.) This impacts student and staff performance, increased teacher turnover, and creates a financial burden of recruitment and induction. A 2016 Legislative Task Force on School Leadership, notes that Maine now faces a "...school leadership crisis as principalships, superintendencies, and other critical administrative positions go unfilled or have limited candidate pools." (127th Legislature, Task Force on School Leadership, 2016.)

Current Administrator Workforce

Gender: The gender ratio varies greatly by administrative position. Eighty-eight percent of Special Education Directors and Assistant Directors are women, while only 28% of Superintendents are women. Principals and other building administrators, at 51% and 48% respectively, are nearly evenly split between the genders. Other district administrators (Assistant Superintendents, Curriculum Coordinators, and Supervisors of Instruction) at 77% women, share a similar gender ratio to teachers. The gender balance among administrators has improved in the last 20 years. In 1999, 40% of principals were women and only 12% of superintendents.

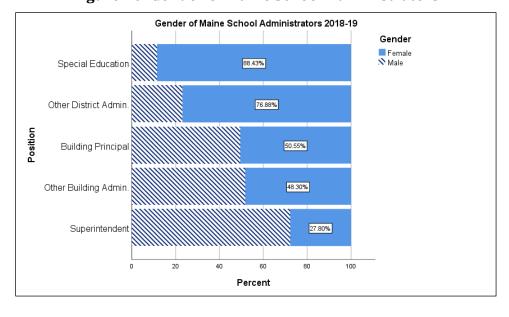


Figure 10: Gender of Maine School Administrators

Notes on Figure 10:

Building Principals are Principals and Directors of Career and Technical Education; Other Building Administrators are defined as Assistant Deans, Assistant Principals, Assistant Directors of Career and Technical Education, and Deans; Other District Administrators include Assistant Superintendents, Curriculum Coordinators, and Supervisors of Instruction. Special Education includes Directors and Assistant Directors.

Note on all administrator tables: Administrators with more than one administrative position were assigned to the position with the highest FTE. If the Administrator had equal FTE across more than one position, they were assigned to the highest position. For example, someone who split their time between Principal and Superintendent would be assigned the role of Superintendent for the purposes of this report.

Age: The average age of a Maine Public School administrator in 2018-19 was 52. Over half (57%) were over age 50, a 7 percentage-point increase since 1999; 41% were over age 55 and 12% were 65 or older.

Table 12: Age Comparison with 1998-99 Study

Age Range	1998-99	2018-19
Younger than 30	1%	0.3%
30-39	10%	12%
40-49	39%	31%
50 or older	50%	57%

Note: the positions captured as administrators may not align to the definitions applied in 1998-99; this table is for general comparison only.

Administrator Experience

In the 2018-19 school year, 56% of Maine's public school and district administrators had five or fewer years of experience in their current position. More specifically, 45% of building Principals and 62% of Superintendents had 5 or fewer years of experience in their position type, with 26% of Principals and 22% of Superintendents having less than 2 years experience in that role. Given that 44% of Superintendents and Assistant Superintendents were age 60 or older in 2020, Maine can expect that, in the future, many of the more experienced people filling these positions will need to be replaced and the number of Superintendents with limited experience will rise.

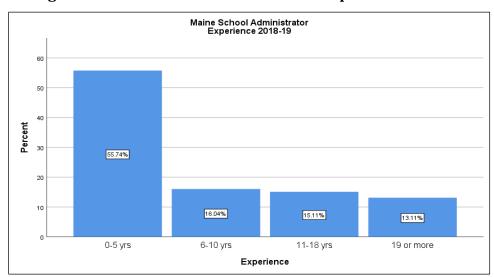


Figure 11: Maine School Administrator Experience 2018-19

Administrator Turnover

As with teachers, MEPRI researchers used statewide administrative staffing data to investigate turnover and retention among Maine's public school administrators. Data about administrators in 2015-16 was matched to the following year (2016-17) to calculate one-year turnover, and to 2018-19 to determine three-year retention rates. In the three years between the 2016 school year and the 2018 school year, nearly a third (31%) of Maine's public school administrators left their positions; 22% of them left education in Maine altogether and the remainder moved to another role.

Table 13: One-year and Three-year Administrator Retention Rates

	One-year retention rates (between 2015-16 and 2016-17) (N=981)	Three-year retention rates (between 2015-16 and 2018-19)
Remained as admin in public sector	90.1%	69.1%
Left admin position in public sector, working in some other type of position or in private sector	3.6%	7.8%
Left Maine's education sector altogether	6.3%	22.6%

The one-year retention rate for administrators (90.1%) between 2015-16 and 2016-17 was roughly similar to that of teachers (91.3%, from the prior Table 5). In both cases, roughly 1 in 10 individuals left their roles, including an identical 6.3% of each cohort who left the education field entirely (as opposed to just changing to a different role). However,

differences emerge when looking at the three-year retention rates of the 2015-16 cohort. Only about 7 in 10 of those Maine administrators remained in their role after three years as opposed to 8 of 10 teachers. The rate of 2015-16 administrators who left the field of education within three years (22.6%) was 1.4 times a large as the 16.1% of teachers in the same cohort year who left. This is likely due, at least in part, to the higher average age of administrators (52 in 2018-19) compared to teachers (46 in 2018-19); a higher proportion of administrators in any given year are eligible for retirement.

Administrator Survey Results

As noted in the study methods section, we obtained an adequate response rate of 295 (37%) of all Maine public school administrators. However, the response pool underrepresents inexperienced professionals; 56% of Maine's administrators have 5 or fewer years of experience but just under a quarter of the survey takers (72 respondents) were in this category. This is perhaps to be expected given that the available email contact information for beginning administrators may not have been as accurate, and that these professionals may have been less willing to take the extra time needed to complete the survey. Thus these results should be seen as "average" or aggregate views and perhaps less indicative of how beginning administrators might respond as a group.

Recruitment

The most common reason for becoming an administrator was to have greater influence on the lives of children, with 29% of administrators with 10 or fewer years of experience choosing that reason. The second most popular reason was having the opportunity to perform an educationally important job.

The most common method of finding an administrator position is advancement within the school or district. Fifty-three percent of administrators with less than 5 years and 32% of more experienced administrators learned of their current position this way. The next most important source of administrator jobs for new administrators is websites like Serving Schools and SchoolSpring, accounting for 29% of the survey respondents of more or less experience. Networking was the third most common source of administrator jobs. Twenty-five percent of administrators with 6 or more years of experience reported

finding their positions through networking. New administrators clearly had less developed networks, only 11% of them found their current position through networking.

Administrator Induction

Administrators new to their role (i.e., with less than 5 years of experience) were, in general, satisfied with their jobs and felt prepared for their new role as seen in Table 14 on the next page.

When asked what supports would be most effective two-thirds (67%) of new administrators chose some form of mentoring, either use of experienced school administrators as mentors (46%) or a designated mentor or formal leadership coach (40%) with some rating both as effective. Regional networking groups and a family-friendly work structure were also popular, with each selected by 31% of respondents as a top three choice.

Table 14: Beginning Administrator Job Satisfaction

Question (N=72)	Strongly Agree	Slightly Agree	Neutral	Slightly or Strongly Disagree
I am satisfied with my role as Administrator	47%	40%	6%	7%
My administrator program prepared me for success	30%	45%	53%	10%
I was well-prepared for the politics of leadership	25%	38%	14%	23%
The professional development I've participated in as Administrator has been relevant	47%	36%	10%	4%
My professional development has been sustained/ongoing	58%	31%	6%	6%

Despite seemingly high overall levels of satisfaction with their roles, 44% of administrators with less than 5 years of experience in their roles say that, in the last school year, they seriously considered leaving their role as administrator.

Better compensation was the top of the list for what would be most likely to convince these new administrators to stay in their role at their school or district with 50% choosing this as one of their top three options. Job security (contract renewal), a family-friendly work structure, and professional coaching or support were the other popular incentives with 33% of respondents choosing each option.

Administrator Retention

The same questions were posed to administrators with 6 or more years of experience. Results of the items related to job satisfaction and preparation are summarized in Table 15.

Table 15: Experienced Administrator Satisfaction

Question	Strongly Agree	Slightly Agree	Neutral	Slightly or Strongly Disagree
I am satisfied with my role as Administrator	59%	29%	5%	7%
My administrator program prepared me for success	24%	44%	17%	14%
I was well-prepared for the politics of leadership	20%	38%	10%	32%
The professional development I've participated in as Administrator has been relevant	46%	41%	7%	6%
My professional development has been sustained/ongoing	57%	30%	7%	5%

Although 88% of administrators with 6 or more years of experience in their current role say they are satisfied with their role, 55% say they seriously considered leaving their role in the last school year. This varies considerably by position. Superintendents are the most satisfied with 40% seriously considering leaving, and Directors and Assistant Directors of Special Education the least satisfied with 71% considering leaving their position.

Table 16: In the last school year, have you seriously considered leaving your role as administrator? (Experienced Administrators)

Position	Yes	No
Principals and Assistants	59%	41%
Superintendents & Assistants	40%	60%
Special Education Directors and Assistants	71%	29%
Curriculum Coordinators and Other	60%	40%

Maine public school administrators spend long hours on the job. A cumulative total of 83% reported working 10 or more hours per week outside of the school day; over 40% were working 20 or more additional hours per week including evenings and weekends. One administrator wrote "24/7" when asked how many hours outside of the school day they worked.

Table 17: Hours per Week Worked Outside of the School Day

Additional Hours per week	Frequency	Percent
<10	44	16.8%
10-19	106	40.5%
20-29	78	29.8%
30-39	25	9.5%
40 or more	9	3.4%
Total	262	100%

These long hours have a significant impact on Administrators. Administrators who reported working 20 or more extra hours per week were significantly more likely to report having seriously considered leaving their position in the last year, at 68% compared to 41% of those who reported working less than 20 extra hours per week. This was a significant relationship (chi-square, p<.001). These patterns varied somewhat by position type, with 53% of Principals, 52% of Superintendents, 48% of Assistant Superintendents, 35% of Directors and Assistant Directors of Special Education, and 32% of Assistant Principals reporting working 20 or more hours per week outside of school.

More than a quarter (27%) of administrators report stress that interferes with their sleep. The most common source of stress was the volume of work and lack of resources. Administrators' top three causes of stress are described in Table 18.

Table 18: Administrators' Top Three Issues Causing Stress

Stressor	Percent	
3.163361	choosing	
High self-expectations	51%	
Supervision and Evaluation	34%	
State reporting	33%	
Budgeting	27%	
Evening meetings	26%	
Accountability	23%	
Litigation	21%	
School Board relations	21%	
External communications (press, social media, etc.)	14%	
Collective Bargaining	12%	

In written comments, Administrators provided these illuminating details:

- "The majority of my day is putting out fires... Staff support, parent needs and paperwork consume that majority of my days. My job is impossible and when I speak to my colleagues everyone is in the same boat. We are expected to be on the job 24/7. We are all burned to a crisp."
- "That's the biggest stressor, that there are simply far too many demands to do any aspect of it really well. I come out of an hour meeting, for example, to find 2-3 hours worth of emails and to-do items that have piled up in that hour. . . . I think it's important for policymakers to recognize that the pressures and tasks are relentless, that this drives some from administration, and that others not yet in administration see this and don't want it for themselves, hence shortages."
- "Public schools are expected to do far more than we have the resources to support."

A teacher observed the impact of administrators' workloads:

• "Supportive administrators can become less so as demands on them are increased. This is more evident now than when I took this position 12 years ago."

One issue mentioned by many administrators was mental health issues of students and their families.

- "The amount of mental health issues affecting students is causing a huge amount of stress on staff at all levels."
- "A majority of administration time is not on instruction and the teaching and learning, but on the growing number of dis-regulated children due to drugs and its overwhelming impact on families, communities and our culture."
- "Students are entering our school with greater needs, emotionally, behavioral and educationally. This is causing a strain on our resources across the board, (finances, space, staffing, etc).

Aside from the pressing need for more resources and staff, Administrators repeatedly mentioned reporting as an issue:

- "Stop the constant stream of reports -- PreK, Teacher Eval, NEO reports, GaTE applications, etc, etc"
- "New State mandates and reporting take time away from important work with staff and students."
- "State reporting is all consuming. The same information is asked for on multiple forms (ie attendance and behavior on CNA as well as district reports)."

Changes in policy was another common refrain:

- "Policymakers and lawmakers are continuously changing and moving the goal posts for schools and districts."
- "It is nearly impossible to keep up with the continuous changes at the state level. I would love more autonomy to use my expertise in order to help our district make the best decisions in order to support our students."
- "Hold targets still so schools can hit them. It takes years to make meaningful change in schools. Yo-yoing between different assessments and standards sets, perpetually enacting

new mandates for schools makes the job feel insurmountable at times and perpetuates the 'just wait a few minutes and this too shall pass' mindset among some educators."

Many Administrators felt unsupported. They are blamed for situations for which they have little control and have little ability to respond due to the need to respect the privacy of the students and staff involved.

- "I think it is important that the DOE supports schools particularly as parents complain or file for due process. It often feels as if the DOE automatically assumes ill intent by the district."
- "Administrators are often put in no win situations we can never make everyone happy. We are almost always seen as the "bad guy"; the press/social media vilify administrators and educators daily (and we can't respond), which makes it difficult to attract people to this profession who wants to work in a field that is looked down on by most, where you are blamed for everything wrong with society?"
- "Community members perpetuating misperceptions in public forums, social media has escalated the level of stress associated with the job. I feel ill equipped to address this."
- "There are just so many years you can give your blood, sweat and tears and feel like it isn't enough... I cannot take being bashed on Facebook or social media when a parent doesn't get the outcome they desire involving their child.. All of my decisions are based on what is best for the students in my district."

One administrator saw a recent improvement:

• "I love my job but it is very time consuming, stressful, and challenging. Feeling supported by Governor Mills and Commissioner Makin has made a world of difference in how we feel about our jobs."

Overall, these findings for Maine's public school administrators reinforce the prevailing concern over the impending shortage of qualified leaders. The challenges in supply, preparation, and workload identified in prior studies of our educator workforce have not abated. Conclusions and recommendations arising from these findings are outlined in the final section of this report.

Discussion and Policy Implications

Recruitment

The findings from surveys point to several potential changes that may make public school employment more attractive for teachers and administrators:

- **Centralized job listings**. Teachers at all experience levels rely heavily on job search services to locate openings, as do beginning administrators. However, prior MEPRI studies found that some of Maine's smaller and budget-strapped rural districts choose not to participate in such listing services due to budget constraints. This places them at a distinct disadvantage for finding candidates. Moreover, a statewide job application system would create an opportunity for rich data to help identify areas of the state with the most critical shortages. The recently-implemented Maine Educator Information System (MEIS) has a readily-available job matching feature that could be adopted into Maine's certification system for no additional ongoing cost. However, that service would require initial costs to tailor the built-in function to meet Maine's needs. More importantly, if the certification office is to expand its scope to also support job placement, it would require additional ongoing staff capacity to oversee and provide advising for both employers and applicants. We strongly recommend a feasibility assessment to determine the costs and needs for activating this built-in feature of the MEIS system in order to maximize support for districts to locate and recruit eligible applicants. Potential resources to support this work include Title II funds and federal discretionary grants. Resources for this work may also be available by reprioritizing the use of funds from Maine's state longitudinal data system grant. The need for an efficient system to match applicants to position openings is more critical than ever in the face of the heightened staff shortages caused by the Covid-19 pandemic.
- Streamlined certification requirements. Maine is poised to consider a major overhaul of state regulations regarding initial certification requirements; work is already underway to gain stakeholder input that will frame the rulemaking process.
 MEPRI prepared a report in 2017 ¹³ that compiled the available research to inform this process. The recommendations provided in that report are consistent with the feedback from teachers seeking more flexible ways to demonstrate their knowledge and skills, including:
 - o expanded reciprocity with other states for an initial certificate;

¹³ Fallona, C. and Johnson, A. (2017) An Examination of Features of Evidence-based Teacher Credentialing Systems. Accessed at https://mepri.maine.edu/posts

- more options for demonstrating content knowledge through a combination of coursework, assessments, and/or professional experience
- o performance-based assessment of demonstrated pedagogical knowledge and skills instead of reliance on course credits; and
- ensuring that all preparation pathways align to Maine's initial teaching standards and thus to the professional expectations (PE/PG systems) that are used to assess in-service teachers.
- **Compensation**. As noted in the report, Maine has already taken recent legislative action to increase the minimum teacher salary to \$40,000. This is an important step that has not yet reached full implementation, and thus had not yet had the chance to yield results for improving teacher recruitment. This policy should receive continued support and commitment for full implementation. This may prove challenging in the face of impending state budget shortfalls. It may also be advisable to require periodic adjustment of the minimum salary on a pre-set cycle so that the minimum can keep pace with inflation. Future analyses can also be conducted to assess whether Maine's minimum salary is helping to close the salary gap between teachers and other professions requiring similar education and training. Secondly, policymakers should revisit and consider a recommendation from the 2001 study that was not implemented: allowing career-changers to collect the social security amount to which they are otherwise entitled in retirement based on their prior contributions, in all or in part, as well as their earned state pensions. The current state policy of reducing state retirement payments to adjust for social security continues to be a barrier for individuals to consider public school teaching in Maine, and hinders recruitment from other states and professions.

Professional Preparation & Induction

Survey feedback also provides insights into the need for better models for preparing and supporting beginning teachers and administrators. For teachers, a companion MEPRI report (2020)¹⁴ describes recommendations for building "Grow your own" pathways to recruit and train individuals in the underserved communities in which they live. Residency

¹⁴ Jessen, Fairman, Fallona, and Johnson (2020). Considering Grow Your Own Models Examining Existing Teacher Preparation Models in Maine. http://mepri.maine.edu/posts

models—in which teacher candidates receive income through school employment or fellowships to ease the financial strain of pursuing a teacher education program—are needed now more than ever. Schools are in dire need of additional staff to support inperson and remote instruction due to reduced class sizes and a shrinking pool of teachers. Results of this survey suggest that such residency models should include a year-long internship to bolster the graduates' level of preparedness.

MEPRI has also prepared similar reports (2017¹⁵, 2018¹⁶) to inform administrator preparation with analogous recommendations for more flexible and adaptive on-the-job learning. Increased mentoring supports are also needed for both teachers and administrators. We recommend continued attention to developing regional approaches to coaching of beginning teachers and administrators. Regional models are more efficient than district-level supports as they allow a greater economy of scale, particularly for administrators. Moreover, a regional network allows some separation from the Professional Evaluation / Professional Growth (PE/PG) systems that are in place in each school, which creates more opportunities for formative feedback and candor.

Retention

The survey feedback points to a continued need to take stock of key challenges that are often cited as reasons why educators choose to leave the profession (either to change careers or to retire). Higher compensation was cited by both teacher and beginning administrators as an enticement to remain in their roles. In addition, both groups identified prevalent job conditions that detract from their work. For teachers the most often cited job challenges were 1) a need for more resources (staff, programs, leadership) to support the increasing intensity of students' social and emotional needs; and 2) reduced administrative responsibilities and paperwork (especially in special education). Administrators identified their biggest work condition challenges as overall workload (and specifically a work schedule that is not family-friendly), the burden of supervising and evaluating staff, and

¹⁵ Mette, Fairman, Terzi (2017). Strategies, Supports, and Supervision of Teacher Leaders and Development of Future School Leaders. http://mepri.maine.edu/posts

 $^{^{\}rm 16}$ Fairman and Mette (2018). Exploring Innovative Models for School_Leadership in Maine. http://mepri.maine.edu/posts

state reporting requirements. Each of these issues have been frequently cited and discussed in recent policy conversations, accompanied by recommendations for addressing these challenges through increased resources and professional development.

General

As a final recommendation, we encourage reconsideration of the MDOE's current practice of not collecting data on race and ethnicity of school staff. There is mounting evidence that having an education workforce that reflects the social and cultural diversity of our student body has a positive overall impact on student success. As Maine's population continues to become less homogenous it is imperative that we increase our efforts to recruit teachers and administrators of color. We must resume collecting basic demographic information about our workforce if we are to assess the effectiveness of such efforts.