# The University of Maine

# DigitalCommons@UMaine

Maine Education Policy Research Institute

Research Centers and Institutes

6-1-2020

# Maine Principals' Perceptions of Beginning Teacher Preparation

Janet C. Fairman

Maine Education Policy Research Institute, University of Maine

Tammy M. Mills

Maine Education Policy Research Institute, University of Maine

Patricia L. Lech

Maine Education Policy Research Institute, University of Maine

Amy F. Johnson

Maine Education Policy Research Institute, University of Maine

Follow this and additional works at: https://digitalcommons.library.umaine.edu/mepri

Part of the Early Childhood Education Commons, Higher Education Commons, and the Teacher Education and Professional Development Commons

#### Repository Citation

Fairman, Janet C.; Mills, Tammy M.; Lech, Patricia L.; and Johnson, Amy F., "Maine Principals' Perceptions of Beginning Teacher Preparation" (2020). *Maine Education Policy Research Institute*. 65. https://digitalcommons.library.umaine.edu/mepri/65

This Report is brought to you for free and open access by DigitalCommons@UMaine. It has been accepted for inclusion in Maine Education Policy Research Institute by an authorized administrator of DigitalCommons@UMaine. For more information, please contact um.library.technical.services@maine.edu.

# Maine Principals' Perceptions of Beginning Teacher Preparation



# Prepared by:

Janet C. Fairman, Ph.D.

Tammy M. Mills, Ph.D.

Patricia L. Lech, M.D., M.S.

Amy F. Johnson, Ph.D.

June 2020

Maine Education Policy Research Institute

University of Maine

Orono, Maine



Published by the Maine Education Policy Research Institute in the College of Education and Human Development, University of Maine.

MEPRI was established to conduct nonpartisan studies on Maine education policy and the Maine public education system for the Maine Legislature.

Statements and opinions by the authors do not necessarily reflect a position or policy of the Maine Education Policy Research Institute, nor any of its members, and no official endorsement by them should be inferred.

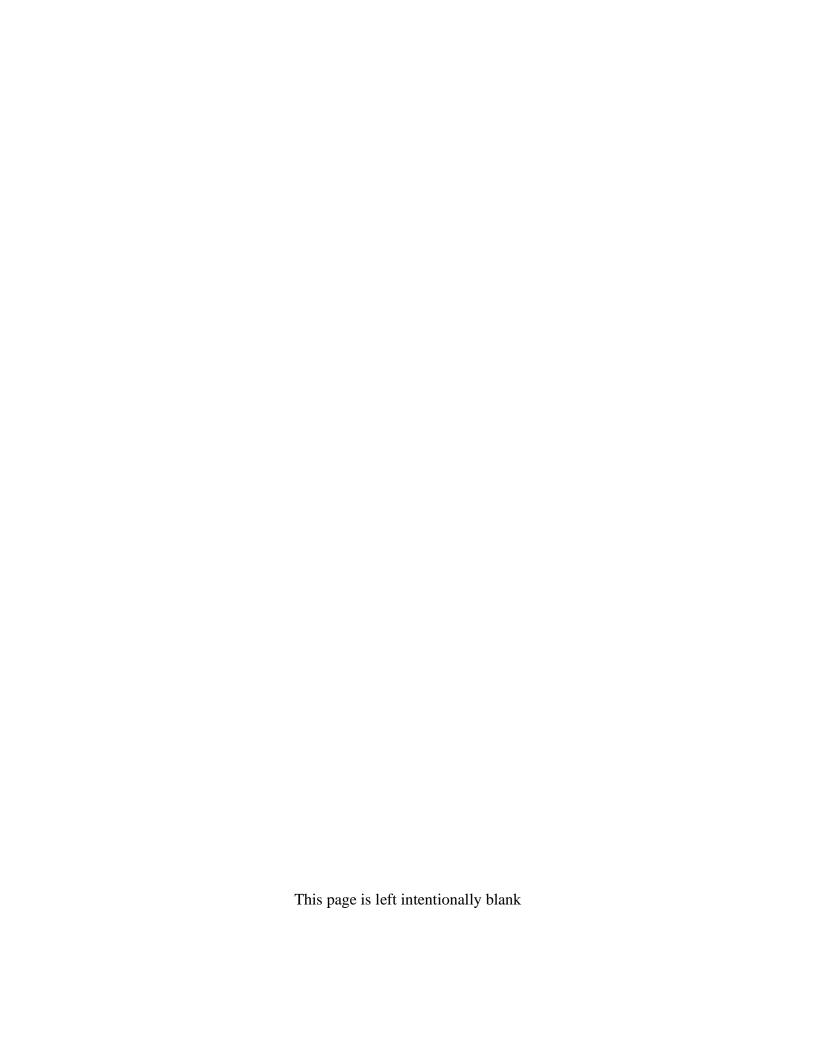
The University of Maine does not discriminate on the basis of race, color, religion, sex, sexual orientation, national origin or citizenship status, age, disability, or veteran's status and shall comply with Section 504, Title IX, and the A.D.A in employment, education, and in all other areas of the University. The University provides reasonable accommodations to qualified individuals with disabilities upon request.

This study was funded by the Maine State Legislature, and the University of Maine System

Copyright © 2020

# **Table of Contents**

Introduction1
Background and Review of the Research
Methodology
Findings4
Beginning Teacher Preparation Programs and Certification Pathways4
Beginning Teachers' Qualifications and Preparation to Teach
Areas Teachers are Most Prepared8
Areas Teachers are Least Prepared
Supports for Beginning Teachers
Retention of Beginning Teachers
Principals' Hiring Preferences
Suggestions for Teacher Preparation Programs
Conclusions
Preparation Pathways and Hiring
Qualifications of Beginning Teacher Job Applicants
Preparation Program Preferences
Success and Gaps in Teacher Preparation
Retention and Support for Beginning Teachers
Implications
Bibliography
Appendices 40



### **Overview of the Study**

Why was this study conducted? The Joint Standing Committee on Education and Cultural Affairs of the Maine State Legislature requested the Maine Education Policy Institute (MEPRI) to conduct a statewide survey of school principals to obtain employers' perceptions of beginning teacher preparation. Teacher quality and preparation is a central concern for ensuring effective instructional practices at the classroom level and improvement in student academic outcomes. Principals directly supervise and evaluate teachers in schools, and they offer a valuable perspective in understanding the strengths and gaps in the preparation of beginning teachers. The information presented in this report will help policymakers assess how well teacher preparation programs are doing in the training of new teachers hired in Maine, and to recommend changes to address any gaps in teacher preparation. The report will also potentially inform work on revising administrative rules for Maine teacher certification (Department of Education Rule Chapter 115) in 2020-21.

What do you need to know to put this study into context? A review of the research shows strong evidence that the quality of teachers' classroom instruction has a strong effect on student achievement, accounting for 30% of the variance in student achievement (Hattie, 2009). The quality of teachers' initial preparation is one important factor that determines the quality of classroom instruction, while on-going professional development is another factor that supports continued improvement in teaching quality (Blank & de las Alas, 2009; Yoon, Duncan, Lee, Scarloss & Shapley, 2007).

Teacher shortages, coupled with teacher attrition, especially among new teachers, have encouraged research aimed at identifying concerns and recommendations for improving teacher preparation programs. The quality of teacher preparation programs at colleges and universities is often questioned when student achievement fails to show the desired gains (Grossman & McDonald, 2008). Education reform efforts have promoted alternative routes for teacher licensure to increase the supply and diversity of new teachers. However, many alternative programs and certifications lack reliability and are not aligned to best practices for teacher education. The negative effects of fast-track programs risk producing poorly prepared teachers and continuing the high rate of teacher turnover (Darling-Hammond, 2006a; Cochran-Smith & Fries, 2005; Strong, 2006).

There is some research evidence regarding principals' perceptions of new teachers; yet, scant evidence exists regarding principals' perceptions of teacher education programs. While some studies examine principals' perceptions of knowledge, skills, and characteristics of beginning teachers, (e.g. Chong, Rotgans, Loh, & Mak, 2012; Torff & Sessions, 2005; Torff & Sessions, 2009), only a few studies focus specifically on the connection to teacher education programs (Truog, 1998; Bear, Torgerson, Marshall, Tracz, & Chiero, 2013; Brenner, Elder, Wimbish, & Walker, 2015).

Some studies indicated principals did not see differences in teaching quality for teachers prepared through traditional teacher education programs versus the alternative routes (Bear et al.,

2013). Studies in rural areas found that principals felt alternative route programs might help improve their ability to recruit teachers and fill teaching slots in high needs content areas, but principals also felt teachers who had student teaching experience through traditional programs may be better prepared for the classroom (Brenner et al., 2015).

Overall, there is a lack of research on the topic of principals' views of new teacher preparedness, despite principals' responsibilities related to hiring and supporting new teachers. The gap in research further illuminates the complex relationship between teacher education programs and PK-12 schools. In light of current reforms focused on accreditation standards for university programs, development of multiple alternative routes to licensure, demands for teachers to possess high levels of assessment literacy, and new understanding of the effects of student trauma, there is a need to examine PK-12 schools' perceptions of beginning teacher quality that reflect the product of teacher preparation programs and other routes to certification. The study presented in this report seeks to inform both policy and research audiences around the preparation of beginning teachers in Maine.

What did we learn and conclude from the study? Findings from this study are described in more detail in the main body of this report. An overview of key findings is presented here.

**Preparation Pathways and Hiring.** Most of the responding principals (94%) indicated their schools have hired beginning teachers in the past five years from traditional teacher preparation programs in Maine, while 48% indicated their schools have hired beginning teachers from programs outside Maine. A majority (62%) of the schools have hired beginning teachers from alternative certification pathways including "grow your own" pathways within their districts or conditionally certified teachers from outside their districts. Schools at the middle and secondary grade levels were more likely to hire conditionally certified teachers than schools with elementary grades. Schools in city and rural settings were more likely to hire teachers who were conditionally certified than suburban or small town schools.

Qualifications of Beginning Teacher Job Applicants. Principals' assessments of the professional qualifications for beginning teacher job applicants in the past five years varied significantly by school setting. Principals in suburban settings were more likely to feel their job applicants have been highly qualified, while principals in city and remote rural settings viewed their applicants as somewhat less qualified.

**Preparation Program Preferences.** Some survey items asked about their preferences for particular teacher preparation programs in Maine. Principals were about equally split between having no particular preference and having one or more preferred programs, or patterns of hiring from certain programs. They indicated that hiring is strongly influenced by geographic proximity to the programs from which they draw preservice student teachers/ interns. Principals in central, western and southern Maine most often indicated a preference or pattern of hiring from the

University of Farmington and the University of Southern Maine (USM), while principals in northern Maine most often indicated no preference. Principals indicating a preference for USM noted their ETEP program which includes a year-long internship in classrooms rather than the more typical one semester of student teaching. This view was also re-iterated on other openended comments in the survey which indicates the view that beginning teachers need more experience in classrooms before taking full-time teaching responsibilities. Many principals on the survey indicated they do not hire from specific programs but look at the candidate's best fit for the job and the school's needs. Principals in northern and western Maine felt they had fewer job applicants to choose from and could not limit their hires by program preference.

Success and Gaps in Teacher Preparation. There were important differences in principals' views of how well traditional teacher preparation programs and alternative routes (i.e. transcript analysis) have prepared beginning teachers across different areas of professional knowledge and skill. These differences were confirmed by principals' written comments on various survey questions. Principals felt that both pathways prepared teachers well in terms of content knowledge, but more so at the middle and secondary levels than at the elementary level. Principals felt beginning teachers prepared through traditional programs were better prepared to plan instruction and create appropriate learning environments, while teachers coming through transcript analysis may be better prepared to collaborate with peers and engage in professional learning.

Across various survey items, principals provided strong and consistent feedback indicating they feel more work is needed to prepare beginning teachers in certain areas, including: effective classroom management and management of challenging student behaviors; communication with families, understanding student and family differences and barriers to learning; building relationships with students and families; using a variety of instructional and assessment strategies to engage all learners; understanding and implementing interventions for students who struggle; supporting students' social/ emotional learning needs and using trauma-informed practices; organizational skills; peer collaboration, and professionalism in terms of work ethic, attitudes, behavior, communication skills, and dressing appropriately for school.

The sudden closure of schools in spring 2020 and shift to remote delivery of PK-12 instruction and student services illuminated the need to prepare beginning teachers to be ready to teach in this new context. Areas principals highlighted as very important in this new context included: integration of appropriate technology platforms and tools for instruction, effective communication and outreach to parents and families, the ability to plan and deliver differentiated instruction that engages diverse learners, understanding of social/emotional learning and trauma-informed practices and the greater challenges families are experiencing with remote education, and the ability to be flexible and adapt practices in creative ways.

**Retention and Support for Beginning Teachers.** Principals indicated that retention of beginning teachers may differ significantly, depending on the school setting. City and suburban

principals were more likely to indicate that their beginning teachers tend to remain in their districts for six years or more, while small town and remote rural schools indicated their beginning teachers typically stay two or three years until they are professionally certified, and then leave to work in more urban or higher-paying districts. Suggestions to improve the retention of beginning teachers included: increased teacher pay; equity statewide in teacher pay; providing strong systems of support within the school; and improved preparation that helps preservice teachers to understand diversity among students, practice communication with students and parents, and hone classroom management skills.

Most principals indicated that job expectations are the same for beginning teachers as those on continuing contracts. They also indicated that the process for professional evaluation is generally the same, but beginning teachers are observed more often and provided more detailed feedback after observations. Formal observations ranged from two or three times per year, while informal observations ranged from three to ten times per year. Principals across all regions of Maine described efforts to support beginning teachers during their first year and beyond, which they felt was critical to retention and developing successful teachers. Most principals indicated beginning teachers are paired with a peer mentor and have a separate orientation. Only seven of the 227 principals completing this survey indicated their schools provide instructional coaching or interventionists to beginning teachers, although their comments indicated they felt this type of support is very important for teacher development and retention.

What are some potential implications for education policy and/ or practice? The findings have important implications for state education policy and practice related to both curricula and practicum/ internship experiences of preservice teachers, whether they follow traditional preparation pathways or alternative pathways to certification. The findings also contribute to the research literature on the preparation of beginning teachers, and add to the growing evidence on the challenges that smaller schools and remote rural schools continue to face in recruiting highly qualified beginning teachers and retaining them—a problem that is difficult to address through state policies. The findings also hold insights for local school policies and practices regarding the support staffing, professional development and other supports they put into place to develop and retain their beginning teachers. We share some thoughts for consideration here:

- Principals reported a preference for hiring beginning teachers that have more student teaching experience rather than less, and hold the perception that many young, beginning teachers do not have realistic conceptions of teaching and working with students and families. Programs like USM's ETEP may provide a model for other preparation programs to consider. Other suggestions were further increasing time in classrooms earlier in the preservice program and considering the fall semester for placements.
- The job of teaching has become more demanding and complex, and students' academic learning and social/ emotional learning needs are diverse and challenging. Principals indicated more work is needed to prepare teachers who can use a variety of effective and differentiated instructional and assessment strategies, interventions for struggling

students, classroom management strategies, and trauma-informed practices to support all learners. Additional coursework, student teaching experiences in diverse community settings, opportunities to work with students in special education, and preparation in special education rules and support systems could strengthen the preparation of regular education teachers and improve retention. A prior MEPRI study (Fallona and Johnson, 2019) described the benefits of dual general and special education preparation programs.

- While traditional Maine teacher preparation programs continue to be a steady source of new teachers for schools at all levels, it is also quite common for schools to hire beginning teachers from out of state, or with less than the full requirements for preparation (conditional certification). This points to the critical need to focus on inservice induction supports that are available to help all beginning teachers to develop their skills, rather than focusing solely on our traditional preparations programs that will only supply a portion of beginning teachers.
- Despite the concerns about several areas where beginning teachers struggle to develop their skills, a large majority of schools (85%, Table 4) do not reduce the load of responsibilities for beginning teachers in order to allow time to meet with mentors, pursue professional development, or have additional time for planning. This is especially concerning for conditionally certified teachers, who are also expected to pursue academic coursework during evenings and weekends to catch up on certification requirements.
- Principals indicated that beginning teachers lack experience and confidence in their relationship and communications with parents and families, and believe this is a critical piece for students' school success. Programs can look for new ways for preservice teachers to interact with families in community events and programs, during student teaching, and through supervised role-play in their coursework, such as through the enhanced video/ avatar platform known as "Teach Live" used by the University of Maine. Once hired, teachers may benefit from additional training and mentoring in this aspect of their professional role.
- Professional dispositions was an area identified as needing improvement for young, beginning teachers. Preservice programs have an important role in preparing teachers in this way, just as they prepare them to understand subject content and teaching methods. Hiring schools also have a role to play through the induction and mentoring process.
   Some of these concerns relate to broader changes in our culture, attitudes about work, and the prevalence of social media in our daily lives.
- Adequate supports to teachers from specialized student support staff, educational technicians, instructional coaches and interventionists require sufficient funding and staffing at the local level to provide all teachers with the knowledge, tools and strategies needed to support diverse student needs. These resources may not be equally available across schools in different settings and schools of different size in Maine. State and local policy and funding is needed to address the inequities related to the complex problem of teacher quality and retention across different school settings in Maine.

What methods were used to conduct this study? This study used survey methods to obtain the views of principals in Maine about beginning teacher preparation. The Qualtrics platform was used to conduct an anonymous online survey of principals. An invitation was emailed to 505 randomly selected public school principals/assistant principals by MEPRI. A link to the survey was also emailed to the Maine Principals Association's membership list of 750 individuals, which included current public and private/semi-private school principals, as well as some retired school administrators and superintendents. The total number of public schools in Maine is 599. A total of 227 principals completed the surveys and 206 (91%) indicated they had direct involvement in evaluating the performance of beginning teachers during the past five years. Of the 227 responding principals, 191 (84%) provided general demographic information about their schools. The survey format included both fixed-choice items with some options to select "other" and write comments and several open-ended items for written comments. Questions on the survey investigated the following broad research questions:

- What programs and pathways to certification do beginning teachers follow?
- What are Maine principals' perceptions about beginning teachers' professional qualifications and level of preparation/ readiness to teach?
- How are schools currently supporting beginning teachers in their first year of teaching?
- How long do new teachers typically stay in their first district of employment?
- Do Maine principals prefer to hire new teachers from certain teacher preparation programs?
- What suggestions and feedback do principals have for teacher preparation programs in Maine?

How robust are the findings? The survey link was emailed to a randomly selected sample of 505 Maine public school principals/ assistant principals by MEPRI. A link to the survey was also emailed to the Maine Principals Association's membership list of 750 individuals, which included current public and private/ semi-private school principals, as well as some retired school administrators and superintendents. The total number of public schools in Maine is 599. We received a total of 227 completed surveys which we consider to be a strong response. The obtained survey sample is broadly representative of Maine schools as a whole in terms of demographic characteristics and geographic location. More detailed information on the survey sample and Maine schools is found in Appendix B.

#### Introduction

The Joint Standing Committee on Education and Cultural Affairs of the Maine State Legislature requested the Maine Education Policy Institute (MEPRI) to conduct a statewide survey of school principals to obtain employers' perceptions of beginning teacher preparation. Teacher quality and preparation is a central concern for ensuring effective instructional practices at the classroom level and improvement in student academic outcomes. Principals directly supervise and evaluate teachers in schools, and they offer a valuable perspective in understanding the strengths and gaps in the preparation of beginning teachers. The information presented in this report will help policymakers assess how well teacher preparation programs are doing in the training of new teachers hired in Maine, and to recommend changes to address any gaps in teacher preparation. The report will also potentially inform work on revising administrative rules for Maine teacher certification (Chapter 115) in 2020-21.

#### **Background and Review of the Research**

Among the many variables that influence student learning outcomes, the quality of teachers' instruction has a strong effect on student achievement, accounting for 30% of the variance in student achievement (Hattie, 2009). The quality of teachers' initial preparation is one important factor that determines the quality of classroom instruction, while on-going professional development is another factor that supports continued improvement in teaching quality (Blank & de las Alas, 2009; Yoon, Duncan, Lee, Scarloss & Shapley, 2007).

Teacher shortages, coupled with teacher attrition, especially among new teachers, has encouraged research aimed at identifying concerns and recommendations for improving teacher preparation programs. Current education reforms focus on developing PK-12 students who can compete globally. However, the quality of teacher preparation programs at colleges and universities is often questioned when student achievement fails to show the desired gains (Grossman & McDonald, 2008).

College and university teacher preparation programs face challenges in preparing teachers as a result of increased costs in higher education, shrinking resources, and the demands in meeting accreditation standards (Cochran-Smith & Fries, 2005). Education reform efforts have promoted alternative routes for teacher licensure to increase the supply and diversity of new teachers. However, many alternative programs and certifications lack reliability and are not aligned to best practices for teacher education. The negative effects of fast-track programs risk

producing poorly prepared teachers and continuing the high rate of teacher turnover (Darling-Hammond, 2006a; Cochran-Smith & Fries, 2005; Strong, 2006).

Many teacher preparation programs, whether traditional or alternative route, are reevaluating and restructuring to improve the overall education for teacher candidates (Berry, 2004; Darling-Hammond, 2010). Darling-Hammond (2010) notes that effective teacher education programs are coherent; that is, learning opportunities are structured around course work and clinical experiences that help preservice teachers connect theory and practice. However, a review of related literature indicates there is a lack of coherence in some programs, creating feelings of inadequacies in first-year and novice teachers (Berry, 2004; Levine, 2006; Darling-Hammond, 2006b). As a result, first-year teachers often state that they do not feel adequately prepared to teach when hired, and their principals often agree (Levine, 2006).

There is some research evidence regarding principals' perceptions of new teachers; yet, scant evidence exists regarding principals' perceptions of teacher education programs. While some studies examine principals' perceptions of knowledge, skills, and characteristics of beginning teachers, (e.g. Chong, Rotgans, Loh, & Mak, 2012; Torff & Sessions, 2005; Torff & Sessions, 2009), only a few studies focus specifically on the connection to teacher education programs (Truog, 1998; Bear, Torgerson, Marshall, Tracz, & Chiero, 2013; Brenner, Elder, Wimbish, & Walker, 2015).

Because alternate route certification programs vary in their intent, design, and delivery, it is difficult to draw conclusions about the impact of alternative programs on teacher effectiveness (Ing & Loeb, 2008). In one study, (Bear et al., 2013), principals did not see marked differences in teacher effectiveness for teachers prepared through traditional programs versus multiple alternative routes to certification. In that study, principals indicated there is a need to improve teachers' ability to manage classroom instruction and to better meet the needs of students whose first language is other than English. On a positive note, principals felt beginning teachers were generally better prepared to integrate technology.

In their study of principals' perceptions about alternate route programs in rural areas (programs that were still connected to university programs), Brenner et al. (2015) reported that principals believed alternate route programs could help meet the high need for teachers in their state and that alternate route candidates might possess advantages over traditionally-educated teachers in terms of greater content knowledge, experience, and maturity. However, principals

also voiced concerns related to alternative routes about the absence of student teaching, the characteristics of individuals seeking alternate routes to teaching, and a sense that beginning teachers prepared through alternative routes would need extra support and mentoring in the first year of teaching.

Overall, there is a lack of research on the topic of principals' views of new teacher preparedness, despite principals' responsibilities related to hiring and supporting new teachers. The gap in research further illuminates the complex relationship between teacher education programs and PK-12 schools. In light of current reforms focused on accreditation standards for university programs, development of multiple alternative routes to licensure, demands for teachers to possess high levels of assessment literacy, and new understanding of the effects of student trauma, there is a need to examine principals' perceptions of beginning teacher quality that reflect the product of teacher preparation programs and other routes to certification. The study presented in this report seeks to inform both policy and research audiences around the preparation of beginning teachers in Maine.

### Methodology

This study used survey methods to obtain the views of principals in Maine about beginning teacher preparation. The Qualtrics platform was used to conduct an anonymous online survey. An invitation was emailed to 505 randomly selected public school principals/assistant principals by MEPRI. A link to the survey was also emailed to the Maine Principals Association's membership list of 750 individuals, which included current public and private/semi-private school principals, as well as some retired school administrators and superintendents. The total number of public schools in Maine is 599. The survey was initiated in February 2020 and halted due to the Covid-19 pandemic and school closures. A shorter, revised survey was later conducted in early May 2020 over a period of 2 weeks. We received 227 completed surveys which we consider to be a strong response. Most of the respondents (n=206 or 91%) indicated they had direct involvement in evaluating the performance of beginning (first-year) teachers during the past five years, and therefore had the opportunity to observe and assess teachers' level of preparation and readiness to teach, which is the focus of this survey study.

The obtained study sample broadly reflected the demographic diversity of Maine school principals as a whole. Demographic information on schools was provided by 191 of the

responding 227 principals. These questions were general and could not be used to identify any responding principal or school.

Most responding principals worked in schools that included elementary grades (n=106, 56%), while slightly over a third of principals' schools included either middle grades (n=71, 37%) or secondary grades (n=67, 35%). About a third of the responding principals worked in schools of 400 or more students (n=65, 34%), while half worked in schools 151-400 students (n=95, 50%). Nearly half of the principals worked in schools in a "small town" setting (n=88, 46%), while other principals worked in remote rural (n=49, 26%), suburban (24, 12%) or urban (30, 16%) locations. Just under half of responding principals (n=86, 45%) worked in schools where over 51% of the students qualify for free or reduced lunch, while slightly more than half (n=105, 55%) indicated student eligibility was 50% or less. Appendix B presents more detailed demographic information about the study sample and a comparison with statewide demographics for all Maine public schools.

The survey format included both fixed-choice items with some options to select "other" and write comments and several open-ended items for written comments.

The following broad research questions guided this study:

- What programs and pathways to certification do beginning teachers follow?
- What are Maine principals' perceptions about beginning teachers' professional qualifications and level of preparation/ readiness to teach?
- How are schools currently supporting beginning teachers in their first year of teaching?
- How long do new teachers typically stay in their first district of employment? Do Maine principals prefer to hire new teachers from certain teacher preparation programs?
- What suggestions and feedback do principals have for teacher preparation programs in Maine?

#### **Findings**

Our discussion of the survey results is organized in roughly the same order as the above list of overarching research questions.

# **Beginning Teacher Preparation Programs and Certification Pathways**

Principals were asked to think about all the beginning teachers their school had hired within the past five years, and to indicate the different types of preparation programs and pathways to initial certification those teachers had followed. Principals were also asked to indicate the most common type of preparation program and route to initial certification followed

by their beginning teachers in the past five years. We analyzed the survey data in two ways: first by looking at the certification pathways by grade spans in schools (Table 1) and then by urban/rural characteristics of school locations (Table 2).

Most of the responding principals (94%) indicated their schools had hired beginning teachers who graduated from traditional teacher preparation programs in Maine, while nearly half (48%) indicated their schools had hired beginning teachers from traditional programs outside of Maine. Just over half the principals (54%) in schools with secondary grades indicated that some of their beginning teachers had graduated from preparation programs in other states, whereas only 42% of elementary and 40% of middle level principals had hired beginning teachers from out of state programs. This may reflect the greater challenge of recruiting teachers in some content areas in higher grades.

A majority (62%) of the responding principals reported beginning teachers hired by their schools had followed less traditional or alternative preparation routes to certification. Across the grade spans, a sizable portion of principals (43%-55%) indicated some of their beginning teachers had followed "grow your own" pathways with somewhat larger percentages indicating this pathway at the middle and secondary school levels. Slightly fewer principals across the grade spans (34%-58%) indicated they had hired conditionally certified teachers from outside their districts who had not completed their student teaching. Principals in higher grade spans (middle and secondary) were more likely than principals at the elementary grade span to indicate that their beginning teachers were hired under conditional certification from outside the district without having completed student teaching. Specifically, 34% of principals in elementary schools indicated that some of their beginning teachers were hired with the conditional certification status without prior student teaching experience, while 47% of principals in schools with middle grades and 58% of principals in schools with secondary grades gave this response. These results may reflect that schools are more challenged in hiring fully certified beginning teachers in some content areas in higher grades than they are in hiring general education teachers at the elementary level. Table 1 shows the different preparation programs and pathways of beginning teachers hired over the past five years, as reported by principals, broken out by grade span level(s) of schools.

Table 1. Preparation Pathways of Beginning Teachers by Hiring School Grade Span: Percentages and Numbers of School Principals (n=191)

Route to Certification	Elementary Schools % (N)	Middle Schools % (N)	Secondary Schools % (N)
Graduated from a teacher preparation program in Maine	94% (100)	92% (66)	90% (60)
Graduated from a teacher preparation program in another state	42% (44)	40% (29)	54% (36)
Grow your own route; Ed Tech or other school district employee who was encouraged to pursue teaching (including Conditional Certification route)	43% (45)	51% (37)	55% (37)
Hired under conditional certification from outside the district without prior completion of a student teaching experience	34% (36*)	47% (34)	58% (39)
Total number of Principals	106	72	67

Note: Some principals worked in more than one grade span area; their responses are counted in each applicable grade span. \*34 of these 36 principals worked in schools in small town or remote rural areas.

When we analyzed the data on beginning teachers' certification pathways by the urban/rural characteristic of the school setting, we also found that beginning teachers most often came through traditional teacher preparation programs in Maine, regardless of the school setting (87%-94% principals responding). Roughly half the principals indicated their beginning teachers came from traditional programs in other states (33%-67%), with the highest percentages in city and suburban settings, and the lowest percentage in the rural remote setting. Principals in city schools (63%) and remote rural schools (51%) were more likely to indicate their beginning teachers had come through "grow your own" routes (conditionally certified) than principals in other settings. And principals in remote rural schools (61%) and small town settings (40%), particularly elementary schools, were most likely to report their schools hired beginning teachers under conditional certification who had not completed student teaching. Table 2 below shows the different preparation programs and pathways of beginning teachers hired over the past five years, as reported by principals, by school setting characteristics. Note that 32 principals did not indicate their school setting.

Table 2. Preparation Pathways of Beginning Teachers by Hiring School Setting:

Percentages and Numbers of Principals School Settings (n=223)

Route to teacher certification	Overall	City or Urban	Suburban	Small town	Remote Rural	Not given
Graduated from a teacher preparation program in Maine	94%	87%	92%	99%	90%	94%
	(209)	(26)	(22)	(87)	(44)	(30)
Graduated from a teacher preparation program in another state	48%	57%	67%	44%	33%	56%
	(106)	(174)	(16)	(39)	(16)	(18)
Grow your own route; Ed Tech or other school district employee who was encouraged to pursue teaching (including Conditional Certification route)	47%	63%	38%	42%	51%	44%
	(104)	(19)	(9)	(37)	(25)	(14)
Hired under conditional certification from outside the district without prior completion of a student teaching experience	44%	33%	33%	40%	61%	47%
	(98)	(10)	(8)	(35)	(30)	(15)
Total number of Principals	223	30	24	88	49	32

# Beginning Teachers' Qualifications and Preparation to Teach

Principals were asked for their overall assessment of the qualifications of beginning teachers who had applied for jobs (not necessarily been hired) at their schools within the last five years, regardless of the preparation or certification pathways teachers had followed. Both the broader research literature and recent MEPRI studies indicate greater challenges for teacher recruitment and retention of experienced and/ or credentialed educators in some content areas and in rural school settings (Aragon, 2016; Fairman, Mills & Lech, 2019; Moeller, Moeller & Schmidt, 2016; Morris & Johnson, 2018; Sutcher, Darling-Hammond & Carver-Thomas, 2016; US Dept. of Education, 2018). We found that there were significant differences in principals' assessments of their applicants' professional qualifications. For example, principals working in suburban schools were much more likely to report their beginning teacher applicants were "extremely or very qualified" (71%), compared to principals in city schools (40%) or rural and

small town schools (37% and 56%). Principals working in city schools (57%), rural remote schools (53%), and who did not indicate any school setting (60%) were more likely to indicate their beginning teacher applicants were "moderately qualified". These results are shown in Table 3 below.

Table 3. Principals' Assessment of Beginning Teachers' Qualifications for Job Applicants in Past Five Years: Percentages and Numbers of Principals School Settings (n=216)

School Setting	Extremely	Moderately	Slightly	Total
School Setting	or Very	Qualified	or Not at	Total
	•	Quaimed		
	Qualified		all	
			Qualified	
City or Urban	40% (12)	57% (17)	3% (1)	30
Suburban	71% (17)	25% (6)	4% (1)	24
Small town	56% (49)	42% (37)	2% (2)	88
Remote rural	37% (18)	53% (26)	10% (5)	49
Not indicated by principal	40% (10)	60% (15)	0% (0)	25
Total	106	101	9	216

A series of fixed-choice survey items listed areas of teachers' professional knowledge and skill. Principals were asked to indicate the three areas where beginning teachers hired by their schools in the past five years have been "most prepared" and "least prepared". In the sections that follow, we first focus on the areas beginning teachers were reported to be most prepared and then we look at areas where they were reported to be least prepared. In both sections, we compare: 1) principals' assessments of teachers' preparedness for teachers from traditional preparation programs in Maine with teachers certified through teachers transcript analysis (conditional certification), and 2) principals' assessments of teachers' preparedness for teachers at different grade span levels.

**Areas Teachers are Most Prepared.** There were interesting differences in the way principals' assessed beginning teachers' preparedness for teachers hired through traditional teacher preparation programs in Maine versus teachers hired through the transcript analysis route

to conditional certification. For teachers coming from the <u>traditional preparation programs in Maine</u>, areas they were deemed "most prepared" (in descending order) were:

- 1. Integrating technology with content
- 2. Content knowledge (subject area knowledge)
- 3. Planning for instruction
- 4. Creating appropriate learning environments for students

For teachers prepared through <u>transcript analysis</u>, areas they were deemed "most prepared" were:

- 1. Content knowledge
- 2. Collaborating with other educators in the school
- 3. Engaging in on-going professional learning
- 4. Engaging students within content area

These results show that principals felt beginning teachers from both traditional teacher preparation programs in Maine and from the alternative route of transcript analysis are both well prepared in their content areas. Some of the notable differences in principals' assessments of the two groups of beginning teachers include the perception that traditionally prepared teachers are better prepared to plan instruction and to create appropriate learning environments for students, and the perception that teachers coming from the transcript analysis route may be better prepared to collaborate with their peers and engage in professional learning.

In thinking about the contrasting perceptions of teacher preparedness we note that some teachers choosing the transcript analysis pathway to certification have pursued college degrees in a content area rather than education, and some worked in other careers prior to teaching where they have developed strong content knowledge. These factors likely help explain the strong preparation in content for teachers coming through the transcript analysis route. Additionally, beginning teachers who have previously worked in their schools in other positions (e.g., as educational technicians) and pursued conditional certification through transcript analysis may already have strong working relationships with other teachers in their schools to support collaboration. Other teachers who have worked in prior careers that required teamwork and collaboration may also have better preparation to collaborate as new teachers with their colleagues in the school, than beginning teachers coming from traditional preparation programs who do not have other substantial work experience.

We also found important differences in the way principals assessed beginning teachers' preparation by grade span level. For the areas where principals indicated teachers were "most

prepared", as listed in the preceding paragraphs, we found the following important differences for teachers prepared through traditional preparation programs in Maine:

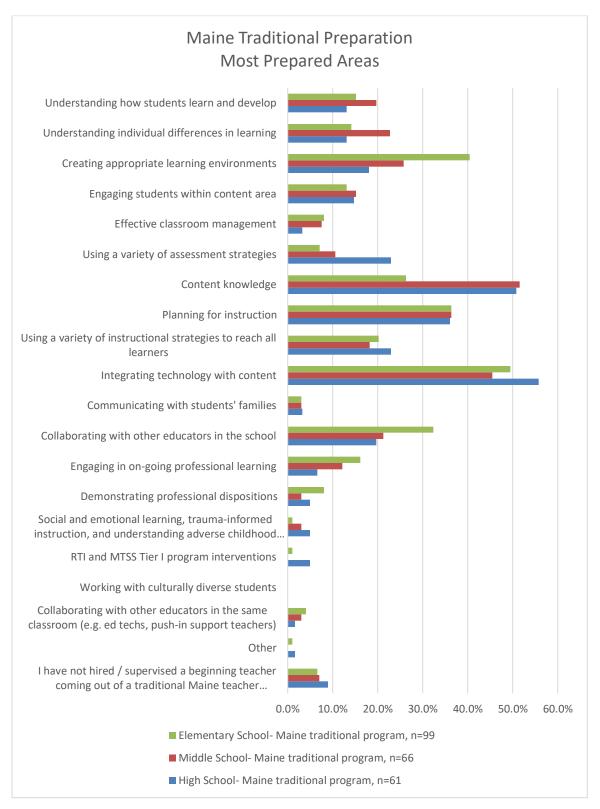
- Middle and secondary level teachers were deemed to be more prepared in content knowledge than were elementary teachers.
- Elementary level teachers were deemed to be more prepared in creating appropriate learning environments than middle or secondary teachers.

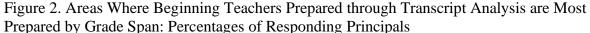
For teachers prepared through the transcript analysis route to conditional certification, we found these grade level differences in principals' perceptions:

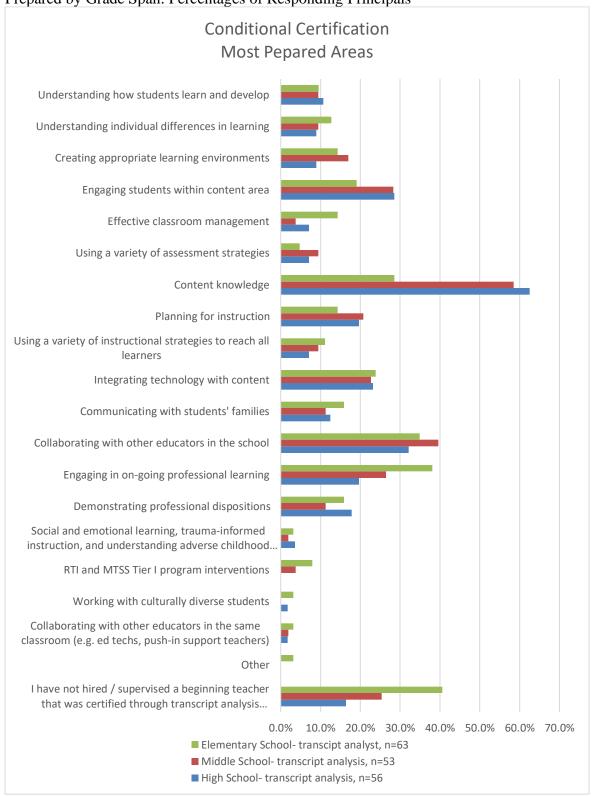
- Middle and secondary level teachers were deemed to be more prepared in content knowledge and in their ability to engage students within their content areas than were elementary teachers.
- Elementary teachers were deemed more prepared to engage in on-going professional learning than were middle and secondary level teachers.

Figures 1 and 2 present the survey results for areas where principals indicated beginning teachers are "most prepared", showing significant contrasts on perceived levels of preparation for the two preparation routes and across the three grade spans.

Figure 1. Areas Where Beginning Teachers from Maine's Teacher Preparation Programs are Most Prepared by Grade Span: Percentages of Responding Principals







Areas Teachers are Least Prepared. We found more similarities than differences in principals' perceptions of the areas where beginning teachers' were "least prepared", when contrasting the preparation pathways. For teachers coming from the traditional preparation programs in Maine, areas they were deemed "least prepared" (in descending order) were:

- 1. Effective classroom management
- 2. Communicating with families
- 3. Response to Intervention (RTI) / Multi-Tiered System of Support (MTSS) Tier 1 program interventions
- 4. Social/emotional learning, trauma-informed practices, and ACEs
- 5. Using a variety of instructional strategies to teach all learners

For teachers prepared through <u>transcript analysis</u>, areas they were deemed "least prepared" were:

- 1. Effective classroom management
- 2. Using a variety of instructional strategies to teach all learners
- 3. Using a variety of assessment strategies
- 4. Response to Intervention (RTI) / Multi-Tiered System of Support (MTSS) Tier 1 program interventions
- 5. Social/emotional learning, trauma-informed practices, and ACEs

For both groups of teachers, (traditionally prepared and those coming through transcript analysis), principals identified classroom management as a top area of concern where teachers were "least prepared". They also identified the use of instructional interventions to support students who are struggling in their learning as an area of concern, and teachers' knowledge and ability to implement trauma-informed practices for students with social/emotional learning challenges as areas where both groups of beginning teachers are least prepared.

One difference in principals' perceptions was the view that teachers prepared by traditional preparation programs are less prepared to communicate with students' families than are teachers coming through the transcript analysis route. A possible explanation for this difference may be that beginning teachers coming from traditional preparation programs may be younger and less experienced generally than teachers who may choose to go through the alternative teaching route later in life after having worked in other careers. In essence, this may be a difference in teachers' maturity and confidence levels between the two groups of teachers. It is less surprising that teachers coming through the transcript analysis route are least prepared to implement a variety of instructional and assessment strategies in the classroom, as they most

likely would not have had the same degree of coursework in educational methods as teachers prepared by traditional programs.

There were also differences in the way principals assessed beginning teachers' preparation by grade span level. For the areas where principals indicated teachers were "least prepared", as listed in the preceding paragraphs, we found the following important differences for teachers prepared through traditional preparation programs in Maine:

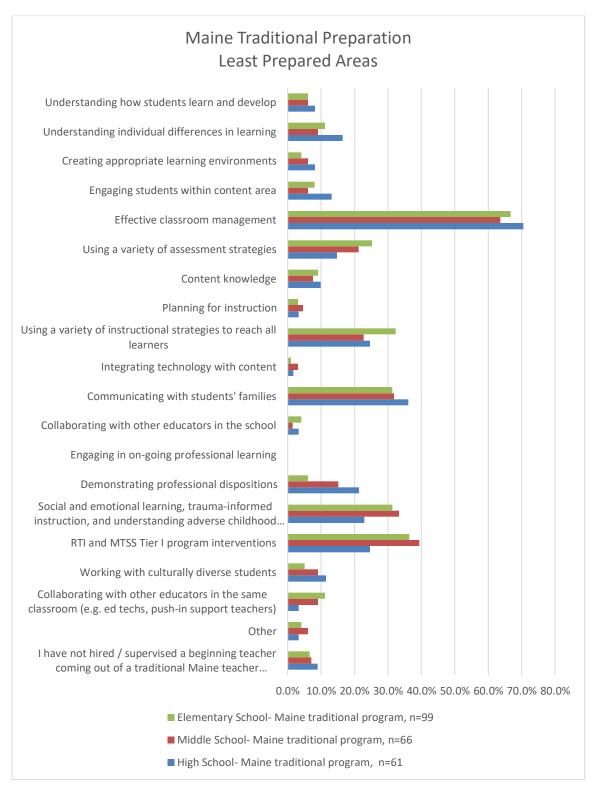
- Secondary level teachers were deemed less prepared than elementary and middle level teachers in the area of RTI and MTSS Tier I interventions.
- Secondary level teachers were deemed less prepared in the area of social/ emotional learning and trauma-informed practices than were elementary and middle level teachers.

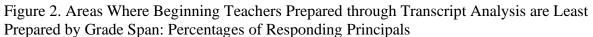
For teachers prepared through the transcript analysis route to conditional certification, we found these grade level differences in principals' perceptions:

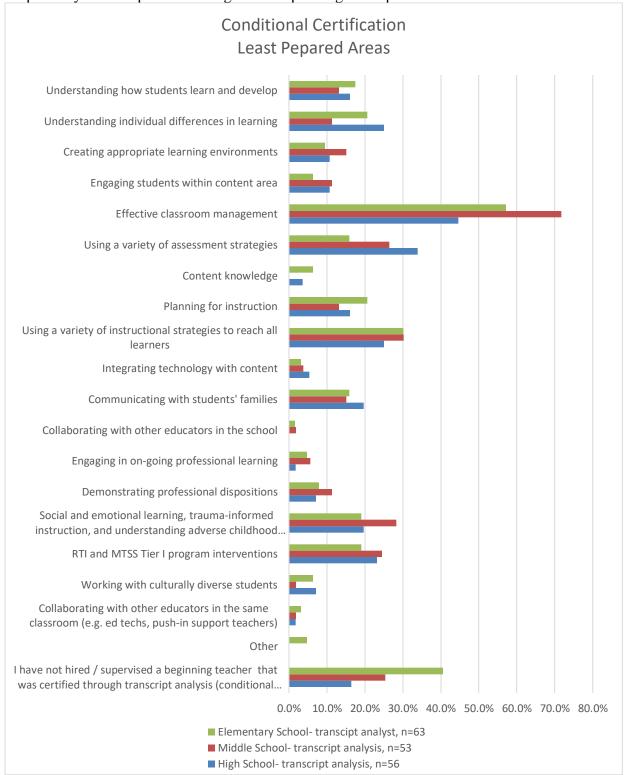
- Secondary level teachers were deemed less prepared than elementary and middle level teachers in the area of effective classroom management.
- Elementary teachers were deemed less prepared than middle or secondary level teachers in using a variety of assessment strategies.
- Elementary and secondary teachers were deemed less prepared than middle level teachers in the area of social/emotional learning and trauma-informed practices.

Figures 3 and 4 present an overview of these results for the survey question on areas where principals perceived beginning teachers to be least prepared, and shows contrasts between the two preparation routes and grade spans.

Figure 1. Areas Where Beginning Teachers from Maine's Teacher Preparation Programs are Least Prepared by Grade Span: Percentages of Responding Principals







Looking at the findings as a whole on areas where principals perceived beginning teachers to be least prepared, the findings indicate there is a need to improve beginning teacher preparation, both for teachers in traditional preparation programs and for teachers using the transcript analysis route to conditional certification, in four broad areas of professional teaching knowledge and skills:

- Effective classroom management;
- Using a variety of instructional and assessment strategies to support all learners;
- Instructional interventions to support struggling learners; and
- Trauma-informed practices to support students with social/ emotional learning and behavior challenges.

These broad findings will also be discussed later in the section on principals' suggestions and feedback for teacher preparation programs.

### **Supports for Beginning Teachers**

Principals were asked if their schools have different job expectations for beginning teachers and, if so, to indicate how expectations varied using a list of provided responses and an option to indicate "other" expectations by comments. Most of the responding principals (n=163, 85%) indicated that expectations for beginning teachers are the same in their first year as for other teachers in the school, and that they have the same duties. None of the principals indicated that beginning teachers have fewer classes to teach. However, 8% of principals indicated that beginning teachers have fewer non-instructional duties, such as committee assignments or other duties. And 8% of principals indicated "other" types of differences through written comments. A total of 16 principals provided written comments to elaborate on their responses. Seven principals noted that beginning teachers may have additional support through a "teacher support group", "mentoring", or an instructional coach. Two principals noted beginning teachers would have additional professional development in their first year. Table 4 below presents the results for the question on expectations for beginning teachers.

Table 4. Schools' Expectations for Beginning Teachers: Percentages and Numbers of Responding Principals (n=192)

Trumbers of Responding Timerpuls (H=192)	
No, beginning teachers have the same duties and expectations	85% (163)
Fewer non-instructional duties (e.g., committee assignments)	8% (16)
Other	8% (16)
Smaller class size	2% (3)
More planning / prep time	1% (2)
Fewer student supervision duties (e.g. lunchroom, recess, etc.)	1% (2)
Fewer courses to teach	0% (0)

Another survey question asked principals to indicate a minimum number of times that beginning teachers are formally observed by their supervisor for evaluation purposes. The Maine Department of Education's Chapter 180 administrative rules for Performance Evaluation and Professional Growth (PEPG) Systems allows school administrative units (SAUs) to determine the frequency for formal teacher evaluations, but specifies that teachers on continuing contract must be evaluated at least every three years. Beginning teachers must be formally evaluated with a summative rating of their teaching during each year of their probationary period. On the survey, a majority of responding principals (n=114, 60%) indicated beginning teachers are formally observed a minimum of three or more times in the first year for evaluation purposes, while 26% of principals indicated teachers are formally observed a minimum of twice per year. Additional written comments were provided by 21 principals. The number of formal observations noted in the comments ranged from one to five. Ten principals said their schools use several informal or shorter observations/ walk throughs for new teachers, in addition to the formal observations. The number of informal observations for beginning teachers varied from three to as many as ten in the written comments. Table 5 shows the results for this survey question.

Table 5. Number of Formal Observations of Beginning Teachers for Evaluation Purposes: Percentages and Numbers of Principals (n=191)

None	0% (0)
Once per year	2% (3)
Twice per year	26% (50)
Three or more times per year	60% (114)
Other (comment)	13% (24)

Principals were also asked if the formal evaluation process was different for beginning teachers than other teachers and, if so, to explain in a written comment how it was different. More principals indicated that the process was not different (n=104, 54%) than indicated it was different (n=88, 46%). A total of 98 principals wrote comments to explain formal evaluation of teachers in their schools. Overall, the comments indicated that the formal evaluation process was not fundamentally different, but the number and frequency of observations differed, where beginning teachers receive more observations and feedback each year and are formally evaluated every year for the first two to three years, while continuing contract teachers were typically observed less often and formally evaluated once every three to five years. Further, principals indicated they spend more time doing more in-depth or longer observations of beginning teachers, in addition to the shorter walk-through visits, and also give more in-depth feedback and sometimes coaching support for beginning teachers. Four principals noted that beginning teachers are also paired with a mentor as part of the evaluation process. One principal said the superintendent observes beginning teachers for at least one of the observations, and another principal indicated that beginning teachers are not asked to do a "self-evaluation" but rather do a more "general reflection".

Formative feedback for teachers, from peers, instructional coaches or supervisors can be helpful in guiding and supporting teachers in their professional development and improvement of classroom practice (Hattie, 2009). The Chapter 180 administrative rules specify that all teachers should have observations of teaching practice with formative feedback each year, and that beginning teachers or teachers that are new to a SAU should receive a minimum of at least two observations with formative feedback from a qualified peer mentor, as well as ongoing opportunities for professional teaching support for a minimum of one year. Principals were asked

on the survey if beginning teachers typically have formative visits from a trained peer mentor or instructional coach and, if so, how often these occur. On this survey question, about twice as many principals (n=73, 38%) indicated teachers had formative classroom visits three to four times per year, as the number who indicated these visits happened either twice a year (n=47, 25%) or five or more times per year (n=45, 23%), while 16 principals (8%) indicated their schools do not provide this type of support. Table 6 presents results for this survey question.

Table 6. Number of Formative Classroom Visits for Beginning Teachers from a Trained Peer Mentor or Instructional Coach: Percentages and Numbers of Responding Principals (n=192)

None; my school does not offer this support	8% (16)
Twice per year	25% (47)
Three to four times per year	38% (73)
Five or more times per year	23% (45)
Once per year	6% (11)

Finally, principals were asked to indicate what other types of supports or peer mentoring were routinely provided by their schools to beginning teachers, using a provided list that also allowed for "other" supports to be indicated by comments. Most of the responding principals (n=162, 84%) indicated their schools provide a peer mentor within the same school building as the beginning teacher, and half of the principals (n=96, 50%) indicated the peer mentor typically teaches the same content area as the beginning teacher. Most principals (n=164, 85%) indicated that beginning teachers have a separate orientation and/ or training from other teachers or newly hired teachers. Half of the principals (n=102, 53%) indicated that beginning teachers have opportunities to meet with other beginning teachers, for example through professional learning communities and other structures. More than a quarter of principals (n=55, 29%) indicated their schools provide additional resources to beginning teachers to pursue professional development. Principals were given the option to describe the other supports provided to beginning teachers. In these 30 comments, nine principals indicated their schools have a peer group for beginning teachers that meets regularly and is part of the induction process, seven principals said their schools provide support through instructional coaching or interventionists, four principals said they meet with beginning teachers individually more often to ensure they feel supported, and two

principals said their schools offer a separate orientation for beginning teachers. Table 7 presents results for this survey question.

Table 7. Supports and Peer Mentoring Provided to Beginning Teachers: Percentages and Numbers of Responding Principals (n=192)

New teachers have a separate orientation/ training	86% (164)
The assigned peer mentor is regularly in the same school building	85% (162)
Opportunities to meet with other beginning teachers (e.g., PLCs)	53% (102)
The assigned peer mentor typically teaches the same content area subject(s) as the new teacher	50% (96)
New teachers receive additional resources to pursue professional development	29% (55)
Other/ or comments on above supports provided	16% (30)

# **Retention of Beginning Teachers**

Principals were asked how long most of their beginning teachers tend to stay in their districts, using a fixed-choice list of responses ranging from one year to six or more years. Half of all responding principals (n=95, 50%) indicated that beginning teachers typically remain in their districts for six or more years. However, there were significant differences in expected retention of beginning teachers across different school settings. Principals in city (69%) or suburban settings (75%) were much more likely than principals in smaller town (43%) and rural remote settings (39%) to indicate that beginning teachers would stay for six years or more. A quarter (25%) of principals in small town settings and 29% of principals in rural remote schools indicated their beginning teachers might only stay two to three years or until they are professionally certified. This finding confirms prior research showing that smaller and more rural schools and districts have greater challenges in retaining their new teachers and are often the first stepping stone to a career in larger and often higher paying school system elsewhere (Fairman, Mills & Lech, 2019). Table 8 presents these results.

Table 8. Length of Time Beginning Teachers Typically Remain in the District by School Setting: Percentages and Numbers of Responding Principals (n=191)

School	One year	Two to three	Four to five	Six or more	Total
Setting		years (until they are	years	years	
		professionally			
		certified)			
City or Urban	0	17% (5)	14% (4)	69% (20)	29
Suburban	0	14% (3)	13% (3)	75% (18)	24
Small town	0	25% (22)	32% (28)	43% (38)	88
Remote rural	0	29% (14)	33% (16)	39% (19)	49
Unlisted	0	0	1 (100%)	0	1
Total	0	44	52	95	191

An open-ended question asked principals what comments or suggestions they have about how to improve retention of beginning teachers. A total of 81 principals (36%) wrote substantive comments in response to this question, beyond "no". The most frequently mentioned suggestions for retaining beginning teachers stressed increased teacher pay and more equitable pay across the state (25 principal comments), or described the importance of supports to beginning teachers within the school (22 comments) including the induction and professional development, PLCs, mentoring and formative feedback from peers, supervisors, and coaches/ interventionists.

Comments representing these two areas for improvement included the following:

Make teacher salaries equitable across the State.

We lose good teachers due to low salaries. They can do the same job and earn \$10,000 more in a district 30 minutes away.

Support, support, support- no "gotchas". Just be honest on what they need to work on and offer them strategies to try and mentors aligned with those needs.

Place an ed tech in their room year one. They definitely need that time to meet with others and coaches so they can feel like they are being successful.

Improve systems of support – include informal supports from administrators, PLCs for new teachers led by a district administrator, more opportunities to observe other teachers Peer mentors in the building, as well as access to behavior specialist is key.

Another area that principals highlighted (10 comments) as critical for retaining new teachers is better initial preservice preparation to understand the realities of working in schools with diverse students and families to beginning teachers can be better prepared with instructional strategies, classroom management skills, and communication skills work engage with families, as well as the emotional resiliency to cope with the stress of working with students who have experienced trauma. Comments related to these views were:

Ensure that they have a significant amount of training in trauma and classroom management as well as experience developing and implementing positive behavior plans.

Strengthening behavior management and giving strategies for social/emotional strategies. Many new teachers struggle with the amount of trauma some students have experienced and they take that stress on themselves. If they have more strategies and/or learn the boundaries to separate the trauma so they don't experience secondary trauma, that would be helpful.

We must find ways to reduce the demands on teachers who are increasingly teaching children with complex behavioral and social-emotional needs. The 'range' of learners in any one classroom is continually expanding to the point of being difficult to sustain.

Other suggestions for improving retention of new teachers fell into the following thematic categories: providing educational technicians in the classroom and hiring additional student support staff in the school (3 comments); hiring additional student support staff in schools (3); reducing workload and class size in more challenging schools (3); reducing workload or class size for teachers in more challenging schools (3); increased student teaching experience (3); giving teachers student loan forgiveness (2); reducing hurdles to becoming a certified teacher (1) such as navigating the state certification process; re-examining the requirements for PRAXIS; a phased approach to taking on full teaching responsibility (1); and reducing the number of new state education initiatives (1).

Some principals, particularly in rural remote settings, were less optimistic that much could be done to improve retention of beginning teachers. A principal from a northern school commented, "Retention happens when new teachers are already from our area and want to stay." Another principal in northern Maine noted the challenge of long commutes for teachers, "Many of our new teachers travel between 30-45 minutes to get to our school and once they start families they want to be closer to home."

### **Principals' Hiring Preferences**

Principals were asked through an open-ended question to indicate if they prefer to hire beginning teachers from any particular Maine teacher preparation programs, and if there are programs they prefer to avoid in hiring new teachers. A total of 171 principals (75%) wrote a comment of some type, even if it was simply "no" preference. Overall, almost half of the principals (n=80, 47%), primarily in central and southern Maine, wrote comments citing particular programs they prefer to hire from, typically hire from, or have had good success with in their schools' recent hires. Not surprisingly, geographic proximity to programs was a strong factor in principals' preferences, and was also related to where their student teachers come from. We sorted the county location of principals' schools into four broad geographic regions for data analysis.

Qualitative analysis of the written comments revealed that principals in central Maine more often indicated a preference or pattern of hiring from the University of Maine at Farmington (UMF) (23 principal comments) than other schools, with the University of Southern Maine's (USM) Extended Teacher Education Program (ETEP) specifically mentioned as a preference by eight principals. The ETEP program at USM is unique from other preparation programs in the state in that the internship is a full year of student teaching in a district rather than one semester of 15 weeks. Students teach in one grade level in the fall and then in another grade level in the spring. They continue to take university courses during the year to strengthen the research to practice connections. This program also tends to attract individuals pursuing teaching as a second career, and some principals may prefer hiring more mature individuals who also have previous work experience. Other programs mentioned at least once by principals in central Maine on this survey item included: Bowdoin College, Kennebec Valley Community College, St. Joseph's College, Thomas College, the University of Maine at Augusta (UMA), and the University of Maine at Orono (UM)

In southern Maine, more principals (18) noted they typically hire or prefer to hire from the University of Southern Maine's (USM) ETEP program than indicated they hire or prefer to hire from UMF (13). Roughly equal numbers of principals mentioned hiring teachers from St. Joseph's College (7) as mentioned UM (5). Other teacher preparation programs mentioned at least once by principals in southern Maine included: Bowdoin College, Colby College, Lesley University, Thomas College, and the University of New England (UNE).

Principals from schools in northern Maine most often indicated that they had no specific preferences. Principals specifically indicated UMF (5) about equally often as UM (4), and two principals indicated they hire from the University of Maine at Presque Isle (UMPI). Other programs mentioned by principals in northern Maine included: Husson University, UMF, UMFort Kent, UM-Machias, and USM.

And principals in western Maine most often mentioned they typically hire or prefer to hire from UMF (21), and nine principals mentioned USM specifically. Other programs western Maine principals mentioned as preferred programs or programs they have hired from included: Husson University, Lesley University, St. Joseph's College, and UM.

A large number of principals (n=66, 39%), particularly from northern and western Maine and many in central and southern Maine as well, indicated they did not have any specific preference among the Maine teacher preparation programs, but found that many programs produce equally well-prepared teachers. Principals from various regions often commented that they select individuals with the "best fit" and preparation for teaching, rather than focusing on the programs they attended. Some representative quotes included:

I think most programs are sufficient. The quality of the teacher rarely relates directly to the quality of the program.

All University's within the UMaine System prepare new teachers to a similar level.

We really focus on each individual applicant and if they match our teaching philosophy and love working with kids.

We focus a great deal on how prepared they are for the interview, what their recommendations say, and their experience during student teaching etc.

We simply hire the best candidate for the job.

Other principals, most often in northern and western regions, commented that they struggle to recruit teachers and do not feel they have the option to prefer one program over another. They are simply trying to fill vacant slots. A principal in northern Maine commented, "At this point in time, we can't be picky. We are lucky to get certified teachers to apply." One western Maine principal wrote, "With the shortage of teacher candidates, the preparation program in which the candidate was involved has not even been a consideration in hiring," and another wrote, "We are not picky. We struggle getting candidates, especially after June."

Two principals specifically noted that they prefer to hire teachers from preparation programs that are accredited, and two principals noted they prefer to hire teachers from programs with "live" instructors/instruction rather than fully "online" teacher preparation programs.

Principals were also asked if they hire conditionally certified teachers, to indicate if they have a preferred university program for teachers to complete their coursework. Most principals answering this question (n=183, 86%) indicated they either do not have a preference or do not typically hire conditionally certified teachers. Yet, 30 principals (14%) indicated they do have some preferences or recommend where conditionally certified teachers should complete their coursework, noting that this was often based on geographic proximity to the school where the new teacher is employed. Most often mentioned were USM (10 principal comments) and UMF (10). Other programs mentioned at least once included: Easter Maine Community College, Husson University, Maine Educators Consortium, Thomas College, UMF, UM, and the University of Phoenix (online program).

#### **Suggestions for Teacher Preparation Programs**

Multiple questions on the survey asked principals directly for their suggestions to improve teacher preparation. One open-ended item asked principals if there are any skills or teacher dispositions that seem even more important now for teacher preparation, given what schools have learned recently through the shift to remote PK-12 education during school closures for the Covid-19 pandemic. Most principals (n=171, 75%) wrote comments on this question, indicating it was a topic of strong interest and relevance for them. Responses described a wide range of observations and we highlight here the predominant themes. Their comments communicated that certain skills and dispositions are important for both live, in school instruction as well as remote instruction, while some are particularly important for successful remote education. A complete list of written responses to this survey question is found in Appendix C.

Overwhelmingly, a majority of the comments focused on two areas that are particularly important in the context of remote education: **the ability to learn, select and integrate appropriate technology platforms and tools into instruction** (71 principals, 42%) and the need for beginning teachers to be better prepared to **communicate effectively and professionally with parents and students during remote education** (n=62, 36%). With respect to technology, principals mentioned specific technology platforms and tools such as Google

Classroom and others that their teachers need to become fluent with to teach remotely, but also emphasized that teachers need to use technology selectively and for pedagogical purposes, not simply select apps to keep kids busy at home. A few representative comments included:

The ability to be comfortable with technology and the ease to self-teach some technology skills.

A variety of formats for extending learning opportunities including Google Classroom, Seesaw, Class Dojo, Unified Learning, Zoom, Microsoft Teams.

Technology platforms that will engage students and parents and allow the teacher to collect evidence of student learning and engagement.

With respect to communication with families, many principals shared the view that their younger and less experienced teachers are generally reluctant to pick up the phone and call parents to check in with them and may not have communicated frequently enough with families during the school closures in spring 2020. Other principals were concerned that teachers' communications via phone or email did not show professional skills and courtesy. Others emphasized the importance in communication with parents and students for developing positive, productive relationships with the teacher and school. This is clearly a skill that principals would like teachers to develop and strengthen, beginning in their preparation programs. It is also a skill and disposition they feel is important for both in person and remote education contexts, but even more critical in times of remote education. Related to this was the theme of understanding diverse family situations when setting expectations for student work at home and communicating with families, reflected in 19 (11%) of the principals' comments. Some representative comments on the theme of communication were:

Teachers need the ability to develop strong relationships with each student and his/her family to carry them through the hardships of remote learning. Students need to be connected to their teachers in order to remain engaged.

Good communication skills between families and the classroom is very important.

A professional disposition and ability to communicate with families through multiple avenues including phone calls.

Understand that kids come from a variety of backgrounds and need support and caring adults to help them navigate school.

Another significant theme in principals' comments related to teachers' ability to plan and implement instruction and interventions to meet the diverse learning needs across their students (n=37, 22%), along with understanding special education law and making use of Universal Design for Learning (UDL) components to make remote instruction more accessible to students with disabilities (6 comments). These were areas of general concern, whether for in person instruction or remote instruction. Further, several principals (n=21, 12%) focused on the need for teachers to plan for ways to better "engage" students in their learning at home. And, 15 principals (9%) emphasized the need for teachers to be "flexible", "nimble", "creative", think "outside the box", and to "adapt" their regular practices to fit the different context of remote learning from home for students in different situations. Some comments reflecting these views included:

All teachers need to really understand the developmental needs of their learners given the level of independent work students are doing.

Providing a variety of ways for students to demonstrate attainment of skills.

Teachers need to learn new methods of maintaining student engagement with a curriculum that is diverse.

How to modify curriculum, especially to incorporate more active and hands on learning.

Delivering instruction with universal design components of presentation, engagement, and assessment.

Knowledge of special education law, learning style differences, and understanding of intervention strategies would be advantageous.

They need to be flexible and willing to learn. They can't be scared to try new things.

Several principals (n=22, 13%) also indicated that teachers need to **understand students' social/ emotional learning needs and trauma-informed practices** for both live inschool instruction and remote instruction. Comments with this theme included:

Social emotional learning and ways to do this remotely.

Understanding ACES, and student/family social-emotional needs and local resources. Classroom management is always a struggle, specifically with students that have experienced trauma.

Developing empathy for families, poverty-informed & trauma-informed teaching. Trauma-sensitive approach to teaching, knowledge of diverse learners (socio-economic, language barriers, race, specific learning disabilities, etc.).

Other areas mentioned less often by principals were: **time management and organizational management skills** (7 principals), the need to **collaborate with peers** when working remotely (5), **classroom management** (4), and ability to **continue professional development** online or remotely during school closures (2). A complete list of all responses to this survey question on important skills and dispositions, particularly in the context of remote instruction, is found in Appendix C.

Another open-ended question asked principals for any additional ideas about where teacher preparation programs should focus their efforts to improve teacher preparation. A majority of principals (n=142, 63%) wrote comments in response to this question. Many of the ideas and suggestions they shared were similar to the comments on the previous question about skills and dispositions that teachers need, as revealed through their experience with remote education this spring. Suggestions were also consistent with principals' perceptions on areas where beginning teachers are least prepared. Again, we review the most frequent, recurring themes in this section. A complete list of responses to this question is provided in Appendix D.

In response to this survey question, the most frequently suggested areas to improve teacher preparation programs were: **classroom management skills** (n=48 principals, 34%), **differentiated instruction and intervention strategies** (n=41, 28%), and **social/emotional learning and trauma-informed practices** (n=36, 25%). Comments on these topics did not vary much from other similar comments on other survey questions, but some representative comments included the following:

Effective classroom management that includes productive student engagement.

Behavior and classroom management is one huge area.

New teachers are typically lacking in classroom management and differentiation skills as compared to teachers who have been teaching for a few years.

Differentiation of instruction; including diverse learning styles and RTI.

Increased focus on improving knowledge of special education law, learning style differences, and understanding of intervention strategies.

Understanding the RTI process as well as the IEP process and how important it is to do interventions.

Educating the whole child, especially understanding and planning for the socio-emotional side of the learner is a necessary area of focus for prep programs given the covid-19 crisis.

Social and emotional understanding is very important as well as reaching a variety of learning styles. Classroom management is essential.

The inclusion of trauma-informed teaching strategies.

They need to learn how to engage their students in lessons with passion and I find that is lacking.

Other recurring themes consistent with principals' feedback on other survey questions called for improvement in preparing new teachers to **communicate effectively** with parents, students and even colleagues in their schools (n=16, 11%), and to **develop relationships with students and families** and **understanding cultural and other kinds of diversity among students** (n=11, 8%). Some principals (n=9, 6%) called for programs to **increase student teaching experiences**, including work with students in special education, as well as moving these earlier in the preparation program (and fall semester instead of spring semester) so new teachers will have a better understanding of the reality of teaching and stronger classroom management skills. Some comments on these topics were:

Crucial Conversations Skills for their work with peers, administrators, and parents.

Effective written and oral communications (parents, students, other staff, etc.).

Communication with parents regularly about both concerns and celebrations.

RELATIONSHIPS with students and parents. Communication and investment in relationships with the families.

Parent and community relations are important skills that add credibility and respect for teachers. They come in with limited experiences and low confidence.

On helping teachers really 'experience' difficult student, parent, staff and other real world examples that come up in the school buildings.

Help new teachers understand the landscape of student experiences, range of abilities/backgrounds/behaviors/needs they will encounter.

Culturally responsive teaching and social emotional learning are two areas that are particularly relevant.

They need more time working in schools.

Teachers should be required to complete a short internship in special education so that they are able to improve collaborative planning with teams for students. It amazes me how little gen ed teachers understand about special education.

Immersion is important — learning to work with a variety of students with diverse backgrounds.

Several principals (n=12, 9%) noted the need for new teachers to improve their **professionalism** generally, including communications with others, use of social media, personal use of cellphones and FaceBook while in the classroom, work ethic and attitudes, and even how teachers dress for work. A few of these comments included:

New educators tend to struggle with interview skills and making a strong and professional first impression.

Professionalism and positive attitude when working with colleagues.

Work ethic and commitment to fulfilling professional responsibilities are also barriers to success.

Work ethic. I have had two first year teachers they would not do something they expect to work from 8-3 and do nothing else.

They also do not present themselves as professionals with their written communication skills and with core skills such as being on time for duties, being prepared for staff meetings, IEPs or RTI meetings, completing work towards their PEPG plans, or professional dress code.

I have had to speak to a few new/younger teachers about their cellphone use and activity on FB during school hours—it's not professional and it shows a poor example to our students.

Relatively few principals (n=9, 6%) called for improved teacher preparation in **content knowledge in reading or math**, and relatively few principals (n=7, 5%) indicated a need for improved preparation to **use different assessment and formative feedback** approaches.

As a recap from earlier sections of this report, other comments from principals to other questions on this survey also provided clues about where Maine's teacher education programs need to strengthen their programs to ensure teachers are ready for the realities of today's classrooms and the full scope of their professional roles in schools. As described earlier in this report, on the fixed-choice survey item that asked principals to indicate three areas where their beginning teachers have been least prepared, the top areas indicated were classroom management, communicating with families, using diverse instructional and assessment strategies for diverse learners, and understanding students' social/emotional learning needs and trauma-informed practices.

Also, an open-ended question asking principals for suggestions on how to improve retention of beginning teachers (described in the previous section), roughly one third of principals who wrote a comment either recommended improving teacher pay and equity in pay statewide, or stressed the importance of teacher supports within the school such as mentoring, formative feedback, and professional development. Principals also recommended better preservice preparation for working with students and families for children with challenging behaviors and experience with trauma.

Taken together, the feedback from principals on this survey consistently point to the need to improve teachers' preparation to work with diverse learners and students with challenging behaviors, improve classroom management skills, and to communicate more effectively with families and others. Principals also emphasized the importance of providing support structures within schools that include supervisors, specialized student support staff, and peers working with beginning teachers to improve their success and retention.

#### Conclusion

This survey was conducted to solicit principals' perceptions of the preparedness of beginning teachers their schools have hired over the past five years, along with their feedback and suggestions for areas where Maine teacher education programs should focus their efforts to improve the preparation of new teachers. The response to the survey was strong, with representation from all regions of the state and schools of varying demographics. Clearly, this is a topic that is of high relevance and importance to both school districts and to teacher preparation programs in the state. And principals had a lot to tell us—as indicated by the high number of written comments on the many open-ended survey items, some of which were quite detailed. In

this section we summarize some broad conclusions from the survey data, followed by some thoughts about potential implications for state and local education policy and practice.

## **Preparation Pathways and Hiring**

Most principals indicated their schools have hired beginning teachers in the past five years from traditional teacher preparation programs in Maine, and almost half indicated their schools have hired beginning teachers from programs outside Maine. Yet, a majority the principals indicated their schools have hired beginning teachers from "grow your own" pathways or other alternative pathways from outside of their districts. Principals in city and rural schools were more likely to hire teachers who were conditionally certified.

## **Qualifications of Beginning Teacher Job Applicants**

Principals' assessments of the professional qualifications for beginning teacher job applicants in the past five years varied significantly by school setting. Principals in suburban settings were more likely to feel their job applicants have been highly qualified, while principals in city and remote rural settings viewed their applicants as somewhat less qualified.

## **Preparation Program Preferences**

Some survey items asked about principals' preferences or patterns of hiring from particular teacher preparation programs in Maine. Principals were about equally split between having no particular preference and having one or more preferred programs or patterns of hiring. They indicated that hiring is strongly influenced by geographic proximity to the programs from which they draw preservice student teachers/ interns. Principals in central, western and southern Maine most often indicated a preference or pattern of hiring beginning teachers from the University of Farmington and the University of Southern Maine (USM), while principals in northern Maine most often indicated no preference. Principals indicating a preference for USM noted their ETEP program which includes a year-long internship in classrooms rather than the more typical one semester of student teaching. This view was also re-iterated on other openended comments in the survey which suggested that beginning teachers need more experience in classrooms before taking full-time teaching responsibilities. Many principals on the survey indicated they do not hire from specific programs but look at the candidate's best fit for the job and the school's needs. Principals in northern and western Maine felt they had fewer job applicants to choose from and could not limit their hires by program preference.

#### **Success and Gaps in Teacher Preparation**

There were important differences in principals' views of how well traditional teacher preparation programs and alternative routes (transcript analysis) have prepared beginning teachers across different areas of professional knowledge and skill. These differences were confirmed by principals' written comments on various survey questions. Principals felt that both pathways prepared teachers well in terms of content knowledge, but more so at the middle and secondary levels than at the elementary level. Principals felt beginning teachers prepared through traditional programs were better prepared to plan instruction and create appropriate learning environments, while teachers coming through transcript analysis were better prepared to collaborate with peers and engage in professional learning.

Across various survey items, principals provided strong and consistent feedback indicating they feel more work is needed to prepare beginning teachers in certain areas, including: effective classroom management and management of challenging student behaviors; communication with families, understanding student and family differences and barriers to learning; building relationships with students and families; using a variety of instructional and assessment strategies to engage all learners; understanding and implementing interventions for students who struggle; supporting students' social/emotional learning needs and using trauma-informed practices; organizational skills; peer collaboration, and professionalism in terms of work ethic, attitudes, behavior, communication skills, and dressing appropriately for school.

The sudden closure of schools in spring 2020 due to the Covid-19 pandemic and shift to remote delivery of PK-12 instruction and student services illuminated the need to prepare beginning teachers to be ready to teach in this new context. Areas principals highlighted as very important in this new context included: integration of appropriate technology platforms and tools for instruction, effective communication and outreach to parents and families, the ability to plan and deliver differentiated instruction that engages diverse learners, understanding of social/emotional learning and trauma-informed practices and the greater challenges families are experiencing with remote education, and the ability to be flexible and adapt practices in creative ways.

#### **Retention and Support for Beginning Teachers**

Principals indicated that retention of beginning teachers differs significantly, depending on the school setting. City and suburban principals were more likely to indicate that their

beginning teachers tend to remain in their districts for six years or more, while small town and remote rural schools indicated their beginning teachers typically stay two or three years until they are professionally certified, and then leave to work in more urban or higher-paying districts. Suggestions to improve the retention of beginning teachers included: increased teacher pay; equity statewide in teacher pay; providing strong systems of support within the school; and improved preparation that helps preservice teachers to understand diversity among students, practice communication with students and parents, and hone classroom management skills.

Most principals indicated that job expectations are the same for beginning teachers as those on continuing contracts. They also indicated that the process for professional evaluation is generally the same, but beginning teachers are observed more often and provide more detailed feedback after observations. Formal observations ranged from two or three times per year, while informal observations ranged from three to ten times per year. Principals across all regions of Maine described efforts to support beginning teachers during their first year and beyond, which they felt was critical to retention and developing successful teachers. Most principals indicated beginning teachers are paired with a peer mentor and have a separate orientation. Only seven of the 227 principals completing this survey indicated their schools provide instructional coaching or interventionists to beginning teachers, although their comments indicated they felt this type of support is very important for teacher development and retention.

#### **Implications**

The findings have important implications for state education policy and practice related to both curricula and practicum/ internship experiences of preservice teachers, whether they follow traditional preparation pathways or alternative pathways to certification. The findings also contribute to the research literature on the preparation of beginning teachers, and add to the growing evidence on the challenges that smaller schools and remote rural schools continue to face in recruiting highly qualified beginning teachers and retaining them—a problem that is difficult to address through state policies. The findings also hold insights for local school policies and practices regarding the support staffing, professional development and other supports they put into place to develop and retain their beginning teachers. We share some thoughts for consideration here:

• Principals reported a preference for hiring beginning teachers that have more student teaching experience rather than less, and hold the perception that many young, beginning teachers do not have realistic conceptions of teaching and working with students and

families. Programs like USM's ETEP may provide a model for other preparation programs to consider. Other suggestions were further increasing time in classrooms earlier in the preservice program and considering the fall semester for placements.

- The job of teaching has become more demanding and complex, and students' academic learning and social/emotional learning needs are diverse and challenging. Principals indicated more work is needed to prepare teachers who can use a variety of effective and differentiated instructional and assessment strategies, interventions for struggling students, classroom management strategies, and trauma-informed practices to support all learners. Additional coursework, student teaching experiences in diverse community settings, opportunities to work with students in special education, and preparation in special education rules and support systems could strengthen the preparation of regular education teachers and improve retention. A prior MEPRI study (Fallona and Johnson, 2019) described the benefits of dual general and special education preparation programs.
- While traditional Maine teacher preparation programs continue to be a steady source of new teachers for schools at all levels, it is also quite common for schools to hire beginning teachers from out of state, or with less than the full requirements for preparation (conditional certification). This points to the critical need to focus on inservice induction supports are available to help all beginning teachers to develop their skills, rather than focusing solely on our traditional preparations programs that will only supply a portion of beginning teachers.
- Despite the concerns about several areas where beginning teachers struggle to develop their skills, a large majority of schools (85%, Table 4) do not reduce the load of responsibilities for beginning teachers in order to allow time to meet with mentors, pursue professional development, or have additional time for planning. This is especially concerning for conditionally certified teachers, who are also expected to pursue academic coursework during evenings and weekends to catch up on certification requirements.
- Principals indicated that beginning teachers lack experience and confidence in their relationship and communications with parents and families, and believe this is a critical piece for students' school success. Programs can look for new ways for preservice teachers to interact with families in community events and programs, during student teaching, and through supervised role-play in their coursework, such as through the enhanced video/ avatar platform known as "Teach Live" used by the University of Maine. Once hired, teachers may benefit from additional training and mentoring in this aspect of their professional role.
- Professional dispositions was an area identified as needing improvement for young, beginning teachers. Preservice programs have an important role in preparing teachers in this way, just as they prepare them to understand subject content and teaching methods. Hiring schools also have a role to play through the induction and mentoring process.
   Some of these concerns relate to broader changes in our culture, attitudes about work, and the prevalence of social media in our daily lives.

Adequate supports to teachers from specialized student support staff, educational
technicians, instructional coaches and interventionists require sufficient funding and
staffing at the local level to provide all teachers with the knowledge, tools and strategies
needed to support diverse student needs. These resources may not be equally available
across schools in different settings and schools of different size in Maine. State and local
policy and funding is needed to address the inequities related to the complex problem of
teacher quality and retention across different school settings in Maine.

# **Bibliography**

- Aragon, S. (2106). *Teacher shortages: What we know*. A report of the Education Commission of the States. Retrieved from: https://www.ecs.org/teacher-shortages.
- Bear, P., Torgerson, C., Marshall, J., Tracz, S., & Chiero, R. (2013). Surveys of teacher education graduates and their principals: The value of the data for program improvement. *Teacher Education Quarterly*, 40 (3), 143-161.
- Berry, B. (2004). Taking action to improve teaching quality: Addressing shortcomings in The Teaching Commission Report. Center for Teaching Quality (CTQ).
- Blank, R. K., and de las Alas, N., 2009. Effects of teacher professional development on gains in student achievement: How meta-analysis provides scientific evidence useful to educational leaders. Washington, DC: Council of Chief State School Officers.
- Brenner, D., Elder, A., Wimbish, S., & Walker, S. (2015). Principals' perceptions about alternate route programs in rural areas. *Rural Educator*, 36 (2), 38-46.
- Chong, S., Rotgans, J., Wai Mon, L. & Mabelene, M. (2012). Modelling the determinants of school leaders' perceptions of beginning teacher's efficacy. *Educational Research and Evaluation*, 18 (3), 231-244.
- Cochran-Smith, M., & Fries, K. (2005). Researching teacher education in changing times: Politics and paradigms. In M. Cochran-Smith & K.M. Zeichner (Eds.) *Studying Teacher Education* (pp. 69-109).
- Darling-Hammond, L. (2006a). Constructing 21st century teacher education. *Journal of Teacher Education*, 57(3), 1-15.
- Darling-Hammond, L. (2006b). *Powerful teacher education: Lessons from exemplary programs*. San Francisco, CA: John Wiley & Sons.
- Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, 61(1-2), 35-47.
- Fairman, J., Mills, T., & Lech, P. (2019). *Challenges with teacher retention and staffing shortages in Maine school districts*. A research report of the Maine Education Policy Research Institute (MEPRI). Orono, ME: University of Maine.
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103 (6), 1013-1055.
- Grossman, P., & McDonald, M. (2008). Back to the future: Directions for research in teaching and teacher education. *American Education Research Journal*, 45 (1), 184-205.
- Hattie, J., 2009. Visible learning: A synthesis of over 800 meta-analyses relating to achievement. New York, NY: Routledge.

- Ing, M., & Loeb, S. (2008). Assessing the effectiveness of teachers from different pathways: Issues and results. In P. Grossman & S. Loeb (Eds.), *Alternative routes to teaching: Mapping the new landscape of teacher education* (pp. 157–185). Cambridge, MA: Harvard Education Press.
- Levine, A. (2006, September 18). *Educating school teachers*. Retrieved from <a href="http://edschools.org/pdf/Educating\_Teachers\_Exec\_Summ.pdf">http://edschools.org/pdf/Educating\_Teachers\_Exec\_Summ.pdf</a>
- Moeller, M. R., Moeller, L. L., & Schmidt, D. (2016). Examining the teacher pipeline: Will they stay or will they go? *The Rural Educator*, 37 (1), 25-38.
- Morris, L., & Johnson, A., (2018). *Teacher turnover in Maine: Analysis of staffing patterns from 2005-06 to 2016-17*. A research report of the Maine Education Policy Research Institute (MEPRI). Gorham, ME: University of Southern Maine.
- Strong, M. (2006). *Does new teacher support affect student achievement?* New Teacher Center: University of California, Santa Cruz.
- Sutcher, L., Darling-Hammond, L., Carver-Thomas, D. (2016). A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S. Palo Alto, CA: Learning Policy Institute. Torff, B., & Sessions, D. N. (2005). Principals' perceptions of the causes of teacher ineffectiveness. Journal of Educational Psychology, 97 (4), 530-537.
- Torff, B., & Sessions, D. N. (2009). Principals' perceptions of the causes of teacher ineffectiveness in different secondary subjects. *Teacher Education Quarterly*, 36 (3).
- Truogg, A. (1998). Principals' perspectives on new teachers' competencies: a need for curricular reform? *New Teacher Educator*, *34* (1), 54-69.
- U.S. Department of Education Office of Postsecondary Education. (2018). *Teacher shortage areas nationwide listing: 1990-1991 through 2015-2016.* Retrieved from: http://www2.ed.gov/about/offices/list/ope/pol/tsa.html.
- Yoon, K. S., Duncan, T., Lee, S. W., Scarloss, B., and Shapley, K. L., 2007. *Reviewing the evidence on how teacher professional development affects student achievement*. Institute of Education Sciences Regional Educational Laboratory Program.

#### **Author Information**

**Janet C. Fairman** is an Associate Professor in the School of Learning and Teaching, College of Education and Human Development, University of Maine, and co-Director of MEPRI. She holds a doctorate degree in education policy and has expertise in the areas of education policy analysis, program evaluation, and qualitative research methodology. Her research includes a focus on STEM education, innovative and reform practices in education and teacher leadership.

**Tammy M. Mills** is an Assistant Professor of Curriculum, Assessment and Instruction in the School of Learning and Teaching, College of Education and Human Development, University of Maine. She holds a doctorate degree in teacher education/ teacher development and has expertise in teaching learning, culturally and linguistically responsive pedagogy, and qualitative research methods. Her research interests include the self-study of teacher education practice, development of teacher knowledge and skills for literacy instruction, teacher leadership and putting complex contemporary theories to work in understanding educational contexts.

**Patricia L. Lech** is a Senior Research Associate in the School of Learning and Teaching, College of Education and Human Development, University of Maine. She has expertise in quantitative research methods and statistical data analysis, as well as education program evaluation.

**Amy F. Johnson** is co-Director of MEPRI at the University of Southern Maine. She holds a doctorate degree in public policy and has expertise in education policy analysis, program evaluation, qualitative research methods and statistical analysis. Her areas of research interest include equitable school funding models, teacher preparation program accountability, STEM education and college readiness.

# **Appendices**

**Appendix A: Survey Instrument** 

**Appendix B: Respondent School Demographics** 

**Appendix C: Written Comments for Item on Remote Education** 

Appendix D: Written Comments for Item on Suggestions for Areas to

**Improve Teacher Preparation Programs** 

### **Appendix A: Survey Instrument**

## **Employer Perceptions of Beginning Teacher Preparation: A MEPRI Survey Study**

The Maine Education Policy Research Institute (MEPRI) has been asked by the state legislature to conduct a research study to explore principals' perceptions about the preparation of beginning teachers, and to learn more about how schools support beginning teachers in their first year of practice. To this end, MEPRI is conducting a survey of public school principals focusing on beginning teachers. You are invited to share your views by participating in this anonymous study conducted by Dr. Janet Fairman of the University of Maine (janet.fairman@maine.edu).

#### **Supervision of Beginning Teachers**

Did you have direct involvement in evaluating the performance of any first-year teachers during the past five years? (Note: this means beginning teachers, not individuals with prior teaching experience who were new to your school.)

Yes, I supervised one or more first-year teachers in the most recent five years.

No, I have not supervised or evaluated a beginning teacher in the past five years

#### **Teachers' Qualifications**

Thinking about the beginning (first year) teachers who were hired to teach at your school in the past five years, what pathways did they take to get their initial teaching certification? Check **all** that apply. If you have been in the school for fewer than 5 years, make your best estimate based on your knowledge of the school's history.

Graduated from a teacher preparation program in Maine.
Graduated from a teacher preparation program in another state.
"Grow your own" route; Ed Tech or other school district employee who was encouraged to
pursue teaching (including Conditional Certification route)
Hired under conditional certification from outside the district without prior completion of a
student teaching experience

beginning teachers?
Graduated from a teacher preparation program in Maine.
Graduated from a teacher preparation program in another state.
"Grow your own" route; Ed Tech or other school district employee who was encouraged to
pursue teaching (including Conditional Certification route)
Hired under conditional certification from outside the district without prior completion of a student teaching experience
When hiring a beginning teacher, are there certain Maine teacher preparation programs you prefer to hire from? Are there certain Maine teacher preparation programs that you prefer <b>not</b> to hire from? Why or why not?
If you hire a conditionally certified teacher, do you recommend a specific university program for completion of coursework?
completion of coursework:
Yes (please indicate program)
No
I have not encountered this situation
What was your overall assessment of the qualifications of beginning teachers who applied for

During the past five years at your school, what was the most common route to certification for

jobs at your school within the last five years?

Extremely qualified Very qualified Moderately qualified Slightly qualified Not at all qualified

## **Teacher Preparation / Readiness to Teach**

In this section you will be asked to think first about beginning teachers from Maine's traditional teacher preparation programs, then about beginning teachers who certified through transcript analysis. The questions ask for the 3 areas where beginning teachers were most prepared then for the 3 areas where they were least prepared. Please respond based on your school's beginning teachers from the past five years.

p

eparation programs, choose the top 3 areas where you feel they were the most prepared.
I have not hired / supervised a beginning teacher coming out of a traditional Maine teacher preparation program
Understanding how students learn and develop
Understanding individual differences in learning
Creating appropriate learning environments
Effective classroom management
Content knowledge
Engaging students within content area
Using a variety of assessment strategies
Planning for instruction
Using a variety of instructional strategies to reach all learners
Integrating technology with content
Communicating with students' families
Collaborating with other educators in the school
Collaborating with other educators in the same classroom (e.g. ed techs, push-in support teachers)
Engaging in on-going professional learning
Demonstrating professional dispositions
Social and emotional learning, trauma-informed instruction, and understanding adverse childhood experiences
RTI and MTSS Tier I program interventions
Working with culturally diverse students
Other

For beginning teachers you have hired / supervised coming out of traditional **Maine teacher preparation programs**, choose the top 3 areas where you feel they were the **least prepared.** 

pr	<b>eparation programs</b> , choose the top 3 areas where you feel they were the <b>least prepared</b> .
	I have not hired / supervised a beginning teacher coming out of a traditional Maine teacher preparation program
	Understanding how students learn and develop
	Understanding individual differences in learning
	Creating appropriate learning environments
	Effective classroom management
	Content knowledge
	Engaging students within content area
	Using a variety of assessment strategies
	Planning for instruction
	Using a variety of instructional strategies to reach all learners
	Integrating technology with content
	Communicating with students' families
	Collaborating with other educators in the school
	Collaborating with other educators in the same classroom (e.g. ed techs, push-in support teachers)
	Engaging in on-going professional learning
	Demonstrating professional dispositions
	Social and emotional learning, trauma-informed instruction, and understanding adverse childhood experiences
	RTI and MTSS Tier I program interventions
	Working with culturally diverse students
	Other

For beginning teachers you have hired / supervised that were **certified through transcript analysis (conditional certification)**, choose the top 3 areas where you feel they were the **most prepared**.

I have not hired / supervised a beginning teacher that was certified through transcript analysis (conditional certification)
Understanding how students learn and develop
Understanding individual differences in learning
Creating appropriate learning environments
Effective classroom management
Content knowledge
Engaging students within content area
Using a variety of assessment strategies
Planning for instruction
Using a variety of instructional strategies to reach all learners
Integrating technology with content
Communicating with students' families
Collaborating with other educators in the school
Collaborating with other educators in the same classroom (e.g. ed techs, push-in support teachers)
Engaging in on-going professional learning
Demonstrating professional dispositions
Social and emotional learning, trauma-informed instruction, and understanding adverse childhood experiences
RTI and MTSS Tier I program interventions
Working with culturally diverse students
Other

For beginning teachers you have hired / supervised that were **certified through transcript analysis (conditional certification)**, choose the top 3 areas where you feel they were the **least prepared**.

I have not hired / supervised a beginning teacher that was certified through transcript analysis (conditional certification)
Understanding how students learn and develop
Understanding individual differences in learning
Creating appropriate learning environments
Effective classroom management
Content knowledge
Engaging students within content area
Using a variety of assessment strategies
Planning for instruction
Using a variety of instructional strategies to reach all learners
Integrating technology with content
Communicating with students' families
Collaborating with other educators in the school
Collaborating with other educators in the same classroom (e.g. ed techs, push-in support teachers)
Engaging in on-going professional learning
Demonstrating professional dispositions
Social and emotional learning, trauma-informed instruction, and understanding adverse childhood experiences
RTI and MTSS Tier I program interventions
Working with culturally diverse students
Other

Given what your school has learned from the experience of shifting to remote or online education this spring, are there certain skills or dispositions that are even more important for new teachers to acquire through preservice preparation?				
Additional comments: to improve new teachers' training and preparation, where should new teacher preparation programs focus their efforts?				
Beginning Teacher Support				
Does your school have different job expectations for beginning teachers? Check all that apply.				
No, beginning teachers have the same duties and expectations Fewer courses to teach Smaller class size				
More planning / prep time Fewer student supervision duties (e.g. lunchroom, recess, etc.) Fewer non-instructional duties (e.g. committee assignments) Other				
At a <b>minimum</b> , how many times per year are first-year beginning teachers formally observed by a supervisor for evaluation purposes?				
None Once per year Twice per year Three or more times per year Other (comment)				
Is the formal performance evaluation process different for beginning teachers than for more experienced teachers?				
No Yes (please describe below)				

How often do beginning first-year teachers typically have formative classroom visits from a trained **peer mentor or instructional coach**? (This does not include formal observations for evaluation purposes.)

None; my school does not offer this support Once per year Twice per year Three to four times per year Five or more times per year

What other kinds of supports and peer mentoring are routinely provided to new teachers in your school/ district? Check all that apply.

The assigned peer mentor is regularly in the same school building

The assigned peer mentor typically teaches the same content area subject(s) as the new teacher

New teachers receive additional resources to pursue professional development

New teachers have a separate orientation / training

Opportunities to meet with other beginning teachers (e.g. PLCs)

Other / Comments on the above

#### **Beginning Teacher Career Course**

	How lon	g do mos	st beginning	teachers star	v in vour	district?
--	---------	----------	--------------	---------------	-----------	-----------

One year

Two to three years (until they are professionally certified)

Four to five years

Six or more Years

Do you have any comments or suggestions	about how to improve rete	ntion of beginning
teachers?		

#### **School Demographics**

What is the grade configuration of your school? Check all grade levels that apply.

Elementary Middle level High school What is the approximate enrollment at your school?

Less than 150 students 151 to 250 students 250 to 400 students 400 or more students

What percentage of students at your school qualify for free or reduced price lunches?

0 to 25% 26% to 50% 51% to 75% 76% to 100%

What best describes your school setting?

City or Urban Suburban Small town Remote rural

In what county is your school located?

Androscoggin

Aroostook

Cumberland

Franklin

Hancock

Kennebec

Knox

Lincoln

Penobscot

Piscataquis

Oxford

Sagadahoc

Somerset

Waldo

Washington

York

Thank you for participating in our survey. Since this survey is anonymous, you will receive reminder emails even though you have already completed it.

## **Appendix B: Respondent School Demographics**

These tables compare the demographics of the respondent principals' schools to Maine public school data from the National Center for Educational Statistics (NCES).

Tables B1a and B1b. Grade Spans in School

Table B1a. Respondent principals' schools that includes these grade levels (n=191)

Elementary	56% (106)
	3070 (100)
Middle	37% (71)
level	0,70 (71)
High school	35% (67)

Table B1b. NCES Maine public school grade configuration that includes these levels (n=599)

Grades PK-4	62% (374)
Grades 5-8	65% (387)
Grades 9-12	26% (153)

Table B2. School Enrollment for Responding Schools

	Respondent principals' schools (n=190)	Maine public schools NCES data (n=572)
Less than 150 students	16% (30)	26% (151)
151 to 250 students	24% (46)	21% (119)
250 to 400 students	26% (49)	28% (158)
400 or more students	34% (65)	25% (144)

Technical schools (n=27) are not included in NCES data.

Table B3. Percentage of students qualifying for free or reduced price lunch

	Respondent principals' schools (n=191)	Maine public schools NCES data (n=566)
0 to 25%	19% (37)	15% (84)
26% to 50%	36% (68)	39% (220)
51% to 75%	36% (68)	41% (232)
76% to 100%	9% (18)	5% (30)

NCES Maine public school data does not include 33 technical schools or rural schools

# Tables B4a and B4b. School setting

Table B4a. Respondent principals' schools (n=191)

50110015 (11 151)		
City or Urban	16% (30)	
Suburban	13% (24)	
Small town	46% (88)	
Remote rural	26% (49)	

Table B4b. Maine public schools NCES data (n=599)

City: Small	9% (52)
Suburb: Midsize	7% (44)
Suburb: Small	4% (24)
Town: Fringe	3% (18)
Rural: Fringe	16% (97)
Town: Distant	6% (33)
Town: Remote	6% (35)
Rural: Distant	33% (197)
Rural: Remote	17% (99)

Table B5. County location

	Respondent principals' schools (n=190)	County where Maine public school is located, NCES data (n=599)
Androscoggin	6% (12)	6% (37)
Aroostook	6% (11)	7% (43)
Cumberland	18% (35)	16% (97)
Franklin	3% (6)	3% (17)
Hancock	4% (8)	6% (34)
Kennebec	13% (24)	9% (54)
Knox	3% (6)	4% (21)
Lincoln	2% (3)	3% (18)
Oxford	7% (14)	5% (31)
Penobscot	7% (13)	11% (68)
Piscataquis	2% (3)	1% (8)
Sagadahoc	2% (3)	3% (18)
Somerset	6% (12)	6% (34)
Waldo	4% (7)	4% (26)
Washington	5% (9)	6% (34)
York	13% (24)	10% (59)

### **Appendix C: Written Comments for Item on Remote Education**

(Open-ended Survey Question) Given what your school has learned from the experience of shifting to remote or online education this spring, are there certain skills or dispositions that are even more important for new teachers to acquire through preservice preparation?

- 1:1 modalities...
- A growth mindset is always essential.
- A growth mindset, the ability to use independent thought and desire to be creative and not being afraid to take chances.
- A professional disposition and ability to communicate with families through multiple avenues including phone calls
   Technology
- A sense of adventure when it comes to new learning/instructional strategies, whether remote or in person.
- A variety of formats for extending learning opportunities including Google Classroom, Seesaw, Class Dojo, Unified Learning, Zoom, Microsoft Teams.

  Understanding ACES, and student/family social-emotional needs and local resources.
- Ability to adapt to change which requires self awareness and creative problem solving.
- Ability to be flexible, reach out to families.
- Ability to connect with students and families
   Ability to engage learner's using multiple platforms
- Absolutely The ability to use a variety of technologies as a coordinated vehicle to construct a virtual classroom environment. Many of our newest teachers understand the importance of technology as an instructional tool. While this is a stereotype for the generation it happens to also be somewhat true they grew up with it. That said, this does not mean that they can more effectively use it to enhance their classroom or remote instruction. It would be great if teacher preparation programs looked remote learning best practices.
- accepting responsibility for developing strategies to engage students in online learning
- All teachers need to really understand the developmental needs of their learners given the level of independent work students are doing. Communicate with families.
- An understanding of diverse family situations at home.
- An understanding of the reality of the digital divide that students, families and educators are faced with.
- Assessment flexibility and personal relationships developing
- Backward planning and segmented instruction
- Beginning teachers can never have enough training or experiences with classroom management and learning environment. Also, reading instruction can be more of a focus area.
- Being able to adjust. Understanding how a student's home life affect their learning.
- Being able to plan engaging lessons for multiple learning styles.
- Being an effect of communicator with students and parents is even more critical. More isn't always better and less isn't always worse. Knowing your families and students and how to engage with them socially/emotionally is ever important too.

• Being familiar with:

Google classroom

Instructing in short chunks via Meets of Zoom

Engaging students through alternative modes of instruction

Meeting the needs of diverse learners via distance learning

Effectively communicating with students and parents.

Determining what is vital to know versus good to know.

- Building confidence in communicating with families and understanding social/emotional needs and/or family situations.
- Classroom management is always a struggle, specifically with students that have experienced trauma.
- Classroom management

Differentiation

- Classroom management, data collection and analysis, multiple assessment pathways
- COMFORT WITH TECHNOLOGY PLATFORMS SEESAW, GOOGLE CLASSROOM EVEN AT THE K-3 LEVEL.
- Communication how to reach out effectively to parents.
- Communication is a critical one. It has been my observation and experience that younger teachers are particularly reticent to contact parents by phone. They are often ill-at-ease using the telephone as a means of communication and prefer electronic communications. I believe that this is a generational issue. How to conduct an effective parent phone call is something that we have had to train new teachers in.
- Communication with families and understanding quality instruction that translates to remote learning.
- Communication with families in supportive, productive ways including technology such as Class DoJo or See Saw.

The use of technology to support student learning.

- Communication with families, developing empathy for families, poverty-informed & trauma-informed teaching
- Communication with families.

Professional Collaboration in a digital environment.

- Communication with parents and students (emails and phone calls), differentiation to meet student needs, accommodations, focusing on key skills and content, engaging students.
- Communication. Some newer teachers are scared to pick up the phone and call that is not how they typically communicate with others.
- Connecting with families, engaging learners and various technology experience
- Connecting with students, collaborating and working as a team with colleagues.
- Content standards
  - Supporting students who require accommodations such as guided teacher notes, etc. Organizational skills
- Creating engaging practice of learning that is not just worksheet review.
- Creating relationships with students and families and understanding that this is an ongoing relationship that needs to be fostered by the staff member. I also think that

- being familiar with and using technology to engage students and families has become even more important through this process.
- Definitely being familiar with and comfortable using multiple platforms for online learning.
- Designing interactive lessons through Google Classroom.
- Different learning platforms to use
  - I wouldn't take a lot of time teaching this, but giving some thought to best practices for remote learning. We have learned some things now that we wish we had done from the start
- Different platforms for online learning and how to use them.
- Differentiation for learners
  - Using online tools to engage students in creative and critical thinking
- Differentiation, and communicating with families.
- Differentiation, interacting and communication with parents, reacting to and supporting kids with social, emotional, and mental health concerns.
- Diverse teaching strategies, family communication and technology integration
- Effective communication via technological platforms. Be more familiar with programs to meet students' individual needs. For instance, Google Meets, Google Classroom, Flipgrid, etc.
- Effective communication with parents.
- Effective organization and planning of instruction in a collaborative way, through an online platform, requires self-discipline and perseverance. I've been pleased to observe our new teachers meet this challenge with success. A teacher's ability to apply the 4 C's (Communication, Collaboration, Critical Thinking, and Creativity)successfully is an indicator of the impact that they will have on student learning.
- Effective use of technology
  - Designing instruction and assessment for remote learning
  - Communicating with learners and families
  - Understanding that many learners lack executive functioning skills
- engagement of students remotely accountability for completion of work feedback vs grading technology
- Engaging students in learning
- Engaging students through the use of technology, Trauma informed practices, communicating with families
- Everybody seemed to learn on the fly. Expectations were not at a typical standard so it is difficult to give ideas on what could have been different.
- Familiarity with effective strategies for online instruction.
- Family communication, professional disposition,
- Fearless well-planned communication home. It is a reality of the job and teachers should come in knowing that is something they should do early and often Flexibility in shifting learning environments and being able to adjust for the best needs of all the learners they interact with.
- Flexibility & Adaptability, focus on relationships with students

- Flexibility and "thinking outside the box".
- Flexibility; understanding how to differentiate tactics to engage and ensure all students receive equitable access.
- Flipped Classroom models, google and integration of technology
- Good communication skills between families and the classroom is very important Balancing curriculum with engaging activities is necessary to have continued student and family engagement.
- Google Classroom
- Google classroom

online learning platforms

parent communication- identifying when students have obstacles in and/out of their control and what to do

hosting zoom/google meeting,

intervention and extensions for learners

- Having a solid tool box of curriculum delivery methods that are not all internet based.
- Having established social and emotional trusting relationships with the students prior to remote learning is crucial.
- Having solid fundamental knowledge of planning to support online delivery, and understanding student emotional/mental health needs.
- How to modify curriculum, especially to incorporate more active and hands on learning.
- How to present a balanced lesson when everyone is not at the same place; pacing for remote learning; giving meaningful feedback; and how to assess understanding
- How to teach CTE hands-on skills through online learning.
- How to use technology as a supplemental resource. How to communicate effectively to parents and students remotely. Data collection and how to organize this properly so it is useful.
- I believe that having the ability to engage students electronically outside of the school is an entirely different skill set than utilizing technology in the classroom. Obviously, the distance aspect requires supporting students and providing content instruction without actually having direct contact with the student. Even if teachers have enrolled in and completed on-line courses, that experience doesn't necessarily translate into having the skills to deliver their own on-line instruction.
- I don't think any teacher prep program could train people to do this really well, beyond an emphasis on getting to know the individual needs of students and then to make plans to intervene and support groups of students based on overlapping needs. This can translate back to "real" school.
- I think all new teachers should have a basic understanding of online learning programs.
- I think if preservice teachers are well-versed in how to collaborate with others and listen to and consider feedback, they gain skills quickly as they teach.
- I think our newer teachers were much more prepared for this. I think an area that is a struggle is they don't have the savvy that is necessary in managing parents/guardians at the level that is required with this current situation.
- I work in a PreK-3 building. Guided reading instruction is weak for beginning teachers.

- Incorporating more technology into their teaching and extending their teaching of devices, apps, etc.
- Innovation, flexibility, tech skills
- Integrating technology into instruction, communicating with families
- Integrating technology into the classroom.
- integrating technology communication
- Knowledge of all that Google has to offer. Willingness to ask and receive assistance!
- Knowledge of special education law, learning style differences, and understanding of intervention strategies would be advantageous.
- Laws governing FERPA/Technology
- Learning to be effective communicators using a variety of methods.
- learning to use a VARIETY of online platforms to promote engagement and deeper thinking
- maintaining lines between home and school. The lines have been blurred and teachers are asked to share their own homes and it sometimes invades people's privacy.
- Meeting the wide range of student needs Parent communication Using online platforms
- Multiple pathways to learning, flexible student focused choices for student learning
- Navigating the technology required to deliver lessons while maintaining student engagement in content rich lessons.
- New teachers have had a difficult time letting go of some material as we pare down to the essentials for increased equity and access.
- Newer teachers have done well with this transition. Skills that are more important are engaging students and families. We have started to talk about it as "marketing" the learning.
- Not just for new teachers but experienced teachers to be able to continue with the learning process remotely or online. Knowing the children can still continue to learn even though they are not physically in the classroom.
- Online technology platforms for students to engage in their learning Repertoire of ways to communicate and connect with families, especially families that are hard to reach
- organizational management- being able to multitask effectively and create lesson plans
  that can be followed remotely and being able to provide feedback
  effective written and oral communications (parents, students, other staff etc.)
  understanding and adapting to different learning styles (visual, auditory, etc.)
  understanding individual differences
  using technology to engage and instruct effectively
  Trauma informed instruction (both at a distance and in the traditional classroom)
  authentic assessment in the new reality
- Our challenge is not access or resources in technology, our challenge is how to engage kids in online learning such that we see a return on work assigned. Also, social/emotional learning (SEL) is of paramount importance. You need to introduce

- this as your graduates are going to see the fallout from the shutdown next year and thereafter.
- Perhaps more technology options / add-ons for google classroom or engaging collaborative activities for students and assessments.
- Planning to meet needs of all learners, using a variety of technology platforms, SEL & Trauma
- Professional dispositions, and communicating with families.
- Providing a variety of ways for students to demonstrate attainment of skills.
- Remote or online learning under normal circumstances is different than what is needed right now. Right now, skills around student engagement, relationship building, communication, and SEL are more important. Dispositions that are flexible, positive, and collaborative are more important. I think it is important for your study to acknowledge that this period of remote learning is not typical. There is a public health crisis, and we are using remote learning as a means of supporting students and families. It is less about technology and more about communication and support.
- Setting high expectations for academics while supporting the social/emotional needs of learners
- Social emotional understanding of students and families Balance of relationships over work.
- Social/emotional engagement
- Supporting students and families under stress, not taking things personally.
   The more technology skills are great but also the ability to think creatively on how to learn offline.
- Teachers need the ability to develop strong relationships with each student and his/her family to carry them through the hardships of remote learning. Students need to be connected to their teachers in order to remain engaged.
- Teachers need to be nimble, and adjust for an even broader range of learners. So learning strategies and dispositions around reaching every student is even more important.
- Teachers need to be prepared to engage students in online learning activities. They also can't be afraid to pick up the phone to speak with parents.
- Teachers need to be really versed in understanding the content standards and knowing which ones build on one another.
- Teachers need to be relatable to students and other staff. Communication and flexibility are key.
- Teachers need to learn new methods of maintaining student engagement with a curriculum that is diverse.
- Teachers really need to learn how to use technology for teaching and learning instead of just apps that keep students busy
- Teachers should be required to complete Maine Special Education Law. This would help the planning of UDL lessons.
- Tech integration and identifying multiple pathways have been crucial to the success of students and teachers.
- Technology and family communication skills are essential in shifting to remote learning.

- technology integration and using technology to communicate with parents
- technology integration, assessing through multiple modes, and social emotional health.
- technology integration, variety of instructional strategies, parent/family communication
- Technology platforms that will engage students and parents and allow the teacher to collect evidence of student learning and engagement.
- Technology resources for online learning
- Technology skills, differentiated learning, engaging teaching practices
- Technology, flexibility, instructional planning, communication with families.
- That not all students have the capacity to do the work that is being assigned and that this inability is not a sign of defiance. Instead it is a sign of struggle and it is important to meet the individual needs of their students.
- The ability to adapt on the fly is crucial currently and facility with a variety of tech platforms is a plus for sure.
- The ability to be comfortable with technology and the ease to self-teach some technology skills.
- The ability to work with parents is an important skill that is even more important now.
- The different in best practice instruction and assessment strategies, in person versus online. And always, better prep in trauma informed, rti, ell, special ed, poverty as affecting learning.
- The importance of building relationships, connecting with families and understanding the varied needs of students and families.
- The importance of the home school relationship and of course ways to engage students and families with technology.
- The integration of technology and emphasis on communication skills that are both face-to-face and online would be valuable to support organizational practices that help students succeed.
- The need for integration of technology without compromising standards/curriculum is very important.
- The newer teachers did not realize the needs of all of our students. Although their students may have had access to technology and internet, there were many students in our school who did not. The new teachers were comfortable using different platforms to work with their students.
- The trauma-informed strategies and supports.
- The use of technology for remote learning, e.g. Google Meet and Google Classroom
- The use of technology is absolutely essential. Working with families is critical. Differentiating instruction for the unique situations that face each child is important.
- There are a multitude of online resources available to teachers and students. It is just finding the time to learn and experiments with these technologies that is difficult.
- They need to be flexible and willing to learn. They can't be scared to try new things.
- Thinking outside of the box. Not getting mired in the classroom structures, but in finding ways to make the work accessible and manageable without direct instruction.
- This has require much more communication with families and I find that my newer teachers are not comfortable with communication and are slower at connecting and setting learning times up because of this. They also seem to be slower at setting a schedule for remote learning and also know what to do. They have more skills than my

- veteran teachers when it comes to the use of technology to make remote learning happen, but the communication and knowing what and how to teach remotely is a struggle.
- time management, how to make a personal schedule when there is so much unstructured time.
- Trauma informed care and understanding of how poverty affects WHOLE families!
- Trauma informed classrooms. Empathy and patience. So many teachers still expect students to do as they are told and act how they feel they should act and students in today's society are not built that way. So much more still needs to be done in this area. In addition, classroom management must be more adequately addressed, as well as differentiation.
- Trauma/ACES-informed teaching/learning.
- Trauma-sensitive approach to teaching, knowledge of diverse learners (socio-economic, language barriers, race, specific learning disabilities, etc.), professional etiquette using technology as communication.
- Ultimately the skill set of staff to communicate home has been an issue and continues
  to be. For some reason staff are unlikely to reach out to parents. That is a big problem.
  I also think that pre service needs to put students into classrooms more through their
  years in college. This would help students know what the job looks like long before
  they have been hired.
- Understand that kids come from a variety of backgrounds and need support and caring adults to help them navigate school.
- understanding independent learners v. dependent learners. understanding how students make meaning and connection to their lives (contextualized learning v. decontextualized learning)
- Understanding that the profession is real work with many damaged families and distorted views of life. Families are unique and tend to not consider your concerns.
- Understanding the diverse needs of students as learners and within their family structures.
- Understanding the possibilities of reaching a variety of independent levels in the same classroom; Delivering instruction with universal design components of presentation, engagement, and assessment; and communication with students so they are not flooded with emails; How to explicitly include executive functioning instruction and skill development
- Unit planning using backwards design is critical. Differentiation for students based on student needs and choice is ALWAYS critical.
- Use of google classroom, zoom, being dedicated to following through.
- Use of online platforms for teaching (Google classroom; Zoom; Flipchart etc..) Social emotional learning and ways to do this remotely
- Use of technology tools to engage everyone.
- Use of technology
- Use of technology and communication with parents and students
- Use of technology in the classroom and ability to communicate with families.
- Use of technology, communication skills, social emotional understanding.
- Use of technology, flexibility differentiated instruction

- Use of technology/overuse of technology how much is too much? Assessment practices during remote learning Grading in remote learning.
   Communication with parents
- Use to digital platforms to engage students instructionally
- Using a consistent online platform and teaching students how to independently navigate it.
- Using professional and appropriate communication with families.
- Using technology for instruction, providing remote learning opportunities
- Using technology to enrich and engage learning rather than just complete work. SEL is huge! Knowing how to build relationships and have meaningful partnerships with parents. Team collaboration.
- We are a pre-K-2nd grade school. The remote learning situation has not been strong with that contingent often due to lack of support or skill on the home end and also due to the age and development of our students. So important skills now becoming clearer include assisting parents in helping their children, as well as pre-teaching about supporting home routines and practices.
- While tech savvy, these less experienced teachers are in need of on going PD around instruction, child development, special needs, ELL, how to differentiate, etc.
- Willingness to adapt, growth mindset, familiar with technology, organized, understanding students will have different supports at home

# Appendix D: Written Comments for Item on Suggestions for Areas to Improve Teacher Preparation Programs

(Open-ended Survey Question) Additional comments: To improve new teachers' training and preparation, where should new teacher preparation programs focus their efforts?

- 1. Best practice strategies models of Marzano, Danielson and Marshall must be explicit taught to preservice teachers. As this is how they are evaluated.
  - 2. RTI and differentiation
  - 3. Work ethic I have had two first year teachers they would not do something they expect to work from 8-3 and do nothing else
- 1.Formative and summative assessments
  - 2. Knowing the learning continuum both academically and social emotionally.
  - 3. Creating positive relationships.
- A more in depth understanding of content standards, effective classroom management, mathematical understanding of contents (middle level), and digital teaching platform use. Social emotional, trauma based and poverty strategies as well as diverse levels of learners (not necessarily ELL) but other diversities considered. Differentiated teaching techniques.
- A stronger knowledge base in teaching reading and writing, implementation of differentiated instruction, use of assessments to determine where students are, and gauging instruction accordingly. Another weak area is reaching struggling learners and not "labeling' or viewing students as incapable or unable to make catch up growth.
- ACES and Social and Emotional Learning
- Additional and more hands on with classroom management strategies.
- Again, communicating with families knowing and understanding what is appropriate
  and what isn't appropriate information to share and just building confidence. Also,
  classroom management and structures so students can succeed in their classrooms the
  difference between what behaviors require office support and what behaviors they can
  handle in their classroom with difference strategies.
- Behavior and classroom management is one huge area. This does need to include partnering and how to communicate with families. But continued work on differentiation by all modalities for both instruction and assessment is crucial.
- behavior management
- Certainly classroom management and instructional planning
- Child development and the learning continuum
  - Communication and collaboration with families
  - Understanding of trauma informed practices
  - Classroom Management
  - Instructional Design
- Classroom behavior and management, social-emotional training and how to help the student be resilient.
  - Communication skills with family, colleagues, other stakeholders
- Classroom management We have so many new teachers that can plan and deliver fantastic lessons but can not manage the classroom.

- Classroom management and professional behaviors (being on time, dress, attitude, collaboration)
- Classroom management and SEL.
- Classroom management and the impact trauma has on learning and development.
- Classroom management has gotten trickier. With many ACES students, shifting social
  and cultural changes, and the exponential increases in technology kids need social and
  emotional instruction. Our school is making the Second Step curriculum a priority.
  Understanding the philosophy behind social and emotional instruction will be key for
  our future educators.
  - I also look for educators well-versed in the use of the Benchmark Assessment System, Data-driven decision-making, and Reading, Writing, & Math Workshop models. But if they don't come with that we can teach them.
- Classroom Management is a huge concern with beginning teachers. They typically step into a classroom that already has a system in place. New teachers struggle with how to handle behavior and what systems to set up, in order to address these concerns.
- Classroom management is a significant area of weakness for beginning teachers, In particular, new teachers lack the capacity to manage students with challenging behaviors.
- Classroom management practices
- Classroom management seems to be a constant need, along with understanding PBIS or RTI style strategies.
- Classroom management seems to be challenging for a younger teacher. Children at he middle level are often rude and disrespectful and many younger teachers take stuff personally. They need to learn to distance themselves.
  - The younger teachers also want to be friends. They need to learn how to use social media with this private lives better.
- Classroom management skills; Preparing multi-tiered units with differentiation.
- Classroom management Technology resources dressing professional
- Classroom management, curriculum, and knowing how to engage all learners. Putting
  it all together is a challenge for new teachers. Understanding the time required to get it
  all done is also not understood.
- Classroom management, differentiated instruction
- Classroom management, differentiation of learning, and CTM / RTI modeling and data collection
- Classroom management, instructional design, RTI.
- Classroom management.
- Classroom management. If a classroom is not managed learning will take backseat.
- Classroom management.
  - Engaging students.
  - Integrating content areas -- project based approaches to learning.
- Collaborative teaching
- Continue to build teachers' understanding of assessment tools and using assessment to inform instruction.

- Continue to educate students about ACES, mindfulness and growth mindset.
- Crucial Conversations Skills for their work with peers, administrators, and parents
  Deeper skills in backwards design unit planning that includes levels of rigor and
  assessments that match
- CTE hires new teachers based n trade experience not necessarily on educational experience. Once hired, they are required to take classes through EMCC to receive their teaching certification.
  - Seems like CTE is often overlooked when surveys are created.
- Culturally responsive teaching and social emotional learning are two areas that are particularly relevant. New Teachers can learn and be prepared to incorporate strategies and explicit teaching of these skills.
- Data proven instructional strategies, how to teach and support students who miss school and getting more real school experience.
- Deeper understanding of cultural diversity.
- Developing repertoire of skills.
- Differentiated instruction.
  - Formative feedback on student work.
  - Instructional strategies (wider variety).

Self-reflection.

Student reflection.

- Differentiating for students both academically and behaviorally Data collection to support RTI process
- Differentiation
- Diverse Learners

Trauma

More course work around meeting the needs of all students within the classroom

- Educating the whole child, especially understanding and planning for the socioemotional side of the learner is a necessary area of focus for prep programs given the covid-19 crisis.
- Effective classroom management strategies
  Building relationships and comfort reaching out to work with families
- Effective classroom management that includes productive student engagement. Differentiation of instruction; including diverse learning styles and RTI.
- Engagement

The importance of developing relationships

Varied modes of formative assessments

- Focus on standards and learning targets when planning, implementing, and assessing.
- For my district, I would like to see more teachers have experience with ELL students...but that won't be true of all district in Maine, of course.
- Grading and Assessing are areas that teachers really have had to change their thinking about and is generally something that we ask teachers to do constantly. Keeping an open mind to constant changing and shifting of thinking (flexibility!) is something new teachers need to know has to happen.
- Guided reading Analyzing data (NWEA, Star360, etc.)

- Guiding new teachers to appreciate the "whole student" is necessary, if we are to successfully identify his/her genius and support the continued development of it. Immersing aspiring teachers in a preparation model that emphasizes such an approach to education, will result in providing each of our students with an equitable opportunity to reach their full potential.
- Have experiences with ACES schools and teachers who work OPENLY with ACES kids.
- Have preparation programs do the student teaching component at the beginning of the year (fall semester) it is so much different (and important!!!) to start a school year than it is to student teach in the second half of the school year. The challenges are great at the beginning of the year enough to sink a first year teacher setting the expectations and procedures with students.
  - Include Responsive Classroom training in the preparatory programs for Elementary pre-service teachers. It is a 4 day institute (28 contact hours). I bet an arrangement could be made to take it for college credit.
- Having a strong foundation of different classroom management strategies.
- Help new teachers understand the landscape of student experiences, range of abilities/backgrounds/behaviors/needs they will encounter.
- How to be a professional More accurate classroom management techniques More accurate understanding of engagement for students
- How to differentiate for all learners and learning styles. Multi tiered approach for supporting each type of learner.
   Creating an environment that not only engages students but engages them in the learning for continued growth. Sometimes I feel activities are simply engagement based and don't lead to strong learning habits that can be applied in life.
- How to run a differentiated lesson.
- I believe student teaching in the fall semester of senior year is more effective than waiting until spring (last) semester. This allows the novice teacher to see what goes into planning for the coming year and how to establish classroom procedures, routines, expectations. It also gives the student teacher valuable insight that they can take back to their college classes during spring semester.
- I don't believe the importance of having a detailed understanding of a content area can be overstated.
- I literally have had new teachers say "I never learned how to..." regarding instruction to meet the needs of varied learners. Honestly, coursework seems very dated. I think more time actually in a real classroom environment is more important.
- I really hesitate to say because I think the emphasis on learning environment, diversity of instructional and assessment strategies, relationship building has been the best thing ever. I wish there was a survey on how to shift mindset of longer term teachers. Honestly, it is rarely my new teachers who need more support. But in general, for all teachers, as above.
- I think it would be good to have an expectation from the teacher prep programs that first-year teachers work a year as educational technicians before their certification. This is where new teachers can get a first-hand view of a classroom, students, and the overall structure of a school. Student teaching is too brief to gain that experience.

- I think the programs are doing a great job I just think teaching has gotten more complicated!
- I wish that the preparation programs graduated students with personal growth plans ready to go. Instead of getting hired, being very busy, and then making a plan, just help them have a plan ready to go before graduation. Also, I think that there should be a course on effective communication with parents, colleagues, and the community. New teachers seem to know how to talk to students, but that is about it.
- I would suggest programs focus on classroom management and organization. My belief is that those areas are most challenging for new teachers and if they don't develop quickly, teachers lacking these skills are the ones that leave the profession quickly.
- Immersion is important learning to work with a variety of students with diverse backgrounds and educational success will promote awareness of the different types of learners and creation of instructional planning to address the needs of learners. More exposure to online learning platforms would also offer opportunity for teachers to have learning experiences virtually and develop an understanding of how these systems can be structured to support learning for different populations of learners.
- Increased focus on improving knowledge of special education law, learning style differences, and understanding of intervention strategies.
- individualized student learning, ACES, content knowledge
- Integrating online learning in lessons.
- It takes years to grow deep content knowledge, but that is an area I believe is foundational in the same way that engaging students and effective classroom management are foundational.
- Learning and assessment styles, diversity, SEL and classroom management.
- Literacy Literacy! Mixed in with Trauma-informed strategies
- longer-term placement; student teachers participate in teacher workshops in August and observe opening of school, including first day/week with students
- More education about tier 1 instructional strategies, accommodations, differentiation, and communicating home
- More learning and understanding about managing the differentiated classroom. Many new teachers arrive with a very thin and general understanding about IEP's and 504 plans. Very little knowledge of how to implement with fidelity all aspects of an IEP or 504 plan.
- MTSS, professionalism, how to teach reading and math
- New teachers are typically lacking in classroom management and differentiation skills as compared to teachers who have been teaching for a few years.
- New teachers come in well equipped with latest technology which is great but lack the ability to manage the real life experiences, management and conversation that continues to be the backbone of what we do.
- New teachers need classroom management training/classes. In my opinion, this is the biggest challenge for all teachers but especially new teachers.
- New teachers need more independent practice time in the classroom. These meaningful independent practice teaching events need to be captured by video and completely analyzed by the student, experienced teacher, and college staff.

- New teachers need to understand the importance of building a relationship with students, understanding their unique needs, how to manage time for the social and emotional needs of the children while still addressing academic concerns, how to differentiate for individuals, how to address lagging skills while still moving forward, the importance of collaborating with colleagues, communication with parents regularly about both concerns and celebrations, that it's OK to ask for help, and that you can't possibly know everything in your first, tenth, or even twentieth year of teaching.
- nc
- On helping teachers really 'experience' difficult student, parent, staff and other real world examples that come up in the school buildings.
- Overall new teachers being hired appear to be well prepared with all that they need to enter the field, with the exception of how to care for themselves and balance their needs as a human being. To promote retention in the field of teaching, young professionals will need to know how to manage their time, set perimeters, and prioritization.
- Overall we have had as good or better luck when hiring through conditional certifications. Teachers who have conditional certification tend to be more motivated to be successful, or have more life experience to share with students.
- Parent and community relations are important skills that add credibility and respect for teachers. They come in with limited experiences and low confidence.
- PBIS and classroom management. I have not had a new teacher come in who was able to effectively manage a classroom (with out a great deal of supports). There is a lack of understanding about ACEs, development and cultural differences, understanding equity.
- Personal side of teaching: communicating with parents, understanding individual needs as well as differences.
- Pre-service teachers need as much classroom-based experience as possible, preferably in a variety of environments. At the elementary level, stronger foundations in reading and math skill development would also be helpful.
- Professionalism and communication.
- Professionalism and positive attitude when working with colleagues.
- Racial and gender identity formation. This is so important----need for ongoing work for new and long serving teachers. This is what gets in the way of the belief in success for all students.
- Relationship building with both students and colleagues.
- RELATIONSHIPS with students and parents. Communication and investment in relationships with the families.
- Requiring elementary teachers to take part in more content knowledge courses and what good pedagogy for teaching those subjects looks like.
- RTI, differentiation, Trauma, customization, teaching about growth mindset
- RTI, RTI, RTI!
- RTI; Classroom management; Pragmatism for today's ACE affected students that can be extremely difficult to work with and that teacher burnout is a real thing Dash they need the proper skills to cope with the hardships of the day to day grind.

- Schools are seeing a rapid increase of children with highly challenging behaviors and dysregulation. Stamina is really needed to even embark on an educational journey at this time, as students need so much support on multiple levels.
- See previous question.
- SEL supports and differences across learners backgrounds, and experiences ,as well more applied learning focus at the younger grades.
- SEL, technology, building a home/school rapport
- Should be a heightened focus on social/emotional
- Show the reality of this profession not a flowery version. When accepting the job and finding out first hand the difficulties of the work, many end up disillusioned and struggle regarding his/her career choice.
- Social and emotional understanding is very important as well as reaching a variety of learning styles. Classroom management is essential.
- Social emotional learning and differentiation.
- Social emotional problems and classroom management.
- Someone has to work with preservice teachers on classroom management and planning lessons. There is some idea out there that you don't really have to do lesson planning that you can fly by the seat of your pants...they need to learn how to look at learning objectives and match appropriate instructional activities...
- Student centered learning and assessments
- Student teachers need to have a stronger sense of the trauma that students are coming to school with, strategies to support those students and an understanding of the special education process and requirements so that they do not see it as a quick fix when students struggle.
- Teacher prep programs in Maine are generally effective. It is difficult to replicate classroom management without running your own classroom that is the area where new teachers struggle the most.
- Teachers first and foremost need to know about ACEs as well as learn about ways to build resilience in students. They should know about Zones of Regulation, mindfulness, Ross Greene's work, etc. It's also super important that young teachers become explicitly aware of their own technology use and what they model to students. I have had to speak to a few new/younger teachers about their cellphone use and activity on FB during school hours--it's not professional and it shows a poor example to our students.
- Teachers should be required to complete a short internship in special education so that they are able to improve collaborative planning with teams for students. It amazes me how little gen ed teachers understand about special education.
- The biggest concern I have noticed and experienced is that most new educators have very limited and/or effective classroom management skills. They also do not present themselves as professionals with their written communication skills and with core skills such as being on time for duties, being prepared for staff meetings, IEP's, or RTI meetings, completing work towards their PEPG plans, or professional dress code.
- The efforts should be spending more time in schools. The traditional program does not permit a beginning teacher to understand how school works and how to set up a learning environment that is conducive to being highly engaging.

- the inclusion of trauma-informed teaching strategies
- The more time perspective teachers can spend working with students the better, whether this be through more classroom experience or programs like Big Brother/Sister, or volunteerism.
- The need to over-plan and over-organize when starting so that the classes can run smoothly.
- There needs to be more focus on classroom management techniques
- There needs to be understanding and competence in both standards based and traditional grading assessment and instruction processes. Also, MTSS tier 1 and 2 needs to be a stronger focus.
- They need more time working in schools.
- They need to learn how to engage their students in lessons with passion and I find that is lacking. They can teach the content but to be able to put one's energy in the lesson where students are eager to learn and are excited about each topic. Takes a lot of energy but the end result makes it worth it.
- They should focus on classroom engagement strategies and classroom management strategies. We can teach the curricular pieces!
- This might be the toughest question of them all there is SO much more for teachers to absorb and learn these days. Maybe grit? New teachers have to be able to network quickly with colleagues to survive. Their mentorship has to go beyond the "formal" system we currently have in place in many schools. I'm not sure it's a question of a unit or topic, it's a mindset. And I'm not sure hiring schools have the capacity to provide the resources needed to adequately support new teachers given today's challenges. Thus the need for grit.
- Tier 1 and Tier 2
- Training should focus on incorporating SEL into classroom management and academic areas. Assessments and data collection to drive instruction in the RtI model tier 1-3. Differentiating instruction to meet the needs of students one size does not fill all.
- Trauma informed practices
   Universal Design Learning tools
   MTSS strategies and effective programs
   Importance of data collection
- trauma informed practices, mental health and classroom management (if on site, obviously). So much depends on connecting with the kids to make them learn, a
- obviously). So much depends on connecting with the kids to make them learn, and if you can't connect because they are distracted, or simply unable to engage due to home environment, it's simply not going to happen.
- Trauma, classroom management and engagement.
- Trauma-informed classroom practices Effective classroom management practices Technology in the classroom
- Trauma-informed instruction
- Trauma-informed practices and classroom management
- understanding of multiple ways of reaching students and effective ways to engage in pursuing professional development opportunities that are of interest.

- Understanding that students learn in different ways and different time frames but still need rigor at all levels. Managing those needs in a classroom can be challenging.
- Understanding the RTI process as well as the IEP process and how important it is to do interventions and document the interventions as well as have a way to assess for growth in place. I also think understanding that they need to collaborate with their team of teachers or coworkers and not be afraid to ask for help if they need it or clarification when they need it. I would also focus on making sure the new teachers are aware of how important communication is with home especially positive and using the phone is very important.
- Unfortunately, classroom management always seems to be the most difficult task for new teachers (traditional).
- Universal Design for Learning strategies incorporate both a belief about engagement and voice and choice, as well as a mindset about designing for varied learners from the outset. Understanding barriers in the curriculum drives everything else (classroom management, high quality instruction and assessment, etc.).
- Using technology to work collaboratively with colleagues
- What form classroom management will they use?
- Working effectively with support staff, understanding that as the professional educator
  in the classroom it is their job to consult with and direct support staff to assist students
  in learning. Often young teachers are very hesitant to give direction to older support
  staff in the classroom.
- You need to stop churning out dozens of English, PE, and History majors and grow your math, special ed. and foreign language graduate pool. UMO you need to stop letting your math faculty run your secondary math education program. Give us an applicant pool, please. Also dispositions. Tell admissions departments to toss out quotas and admit only candidates who WANT to be teachers vs just want to live in their hometowns. Also, a nice touch would be to introduce a school law course at the undergraduate level.