

2015

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Laurie Catenese

University of Maine at Farmington

Lee Harper

University of Maine at Farmington

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Catenese, Laurie and Harper, Lee, "Why Beginning Teachers Persist in the Profession and the Impact of Induction and Mentoring" (2015). *M.S.Ed. in Educational Leadership Research Projects*. 49.

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Why Beginning Teachers Persist in the Profession and the Impact of Induction and Mentoring

Laurie Catanese and Samuel Harper

University of Maine Farmington

April 5, 2015

Abstract

Increasingly high beginning teacher attrition rates have spurred many states to mandate induction programs. This study seeks to understand what beginning teachers in rural Maine perceive as the greatest factors impacting their persistence in education, and the perceived impact of induction and mentoring on their persistence. A mixed-methods approach yielded findings that indicate the greatest perceived factors are: working with students, collaborating with peers, and administrative support. Induction and mentoring perceptions were both positive and negative. Recommendations are directed at school leaders who must support teachers by providing time for collaboration and networking, and implementing purposeful induction and mentoring activities.

Keywords: persistence, induction, mentoring, beginning teacher, retention, attrition, support, school leaders

Literature Review

The first few years in the classroom can determine whether or not a teacher will persist in the profession. Due to increasingly high attrition rates and the high costs associated with attrition, many states implement induction mandates such as Chapter 118, which was passed by the Maine Department of Education in 1998 and revised in 2008. According to Chapter 118, all school districts are required to implement induction programs, with mentoring as the primary component (Maine Department of Education, 2012). However, studies show that state mandated programs do not necessarily translate into consistent implementation (Cook, 2007; Washburn-Moses, 2010). Even if an induction program is implemented according to state mandates, Morrison (2013) observed that beginning teacher “experiences [are] much more complex than just having or not having a mentor or induction program at the point of career entry” (p. 103). School climate, personal factors such as school/life balance, and teacher preparation can also affect a teacher’s efficacy and persistence in the career (Adoniou, 2013; Hudson, 2012; Morrison, 2013). In addition, the success of mentoring or induction programs is closely related to administrative support, and collaboration. The researchers seek to understand the impact of these factors on a beginning teacher’s persistence in education as a career. To illustrate these potential relationships, the researchers have devised the following conceptual model:

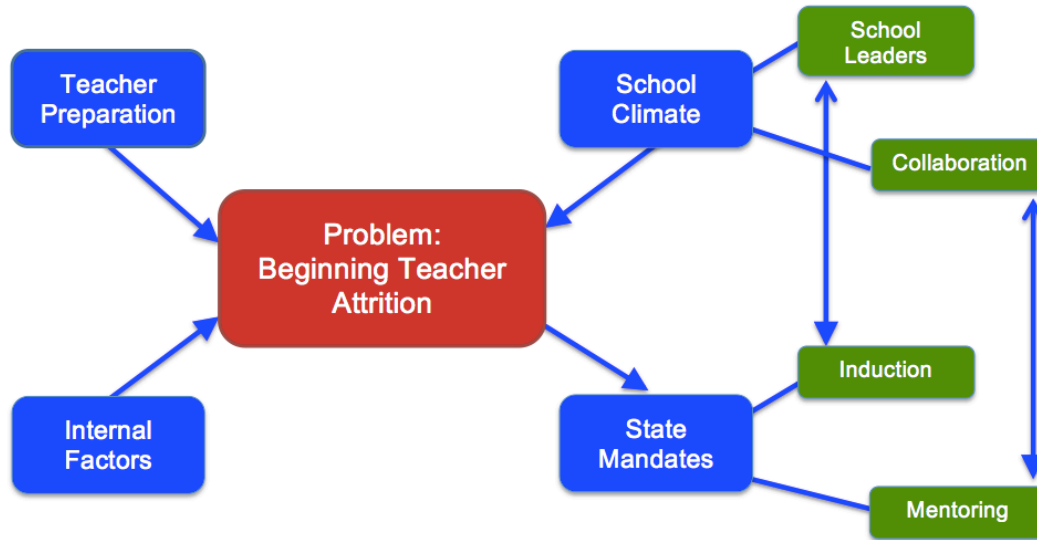


Figure 1. The relationship between beginning teachers and the factors that impact attrition.

In this literature review, the researchers will explore the many challenges facing beginning teachers and the factors that can lead to either attrition or persistence in the career. The challenge then arises when these programs are implemented at different levels, with a variety of school climates, leaders and colleagues. Consequently, it is these factors: school climate, support from school leaders, and collaboration with colleagues that can also lead to beginning teacher attrition. Furthermore, factors in the workplace are not the only elements affecting teachers. A teacher's preparation along with internal factors can also determine a teacher's attrition or persistence. Accordingly, the research suggests that there is a complex relationship between each factor and its impact on new teachers.

Beginning Teacher Attrition

The challenges that new teachers face have a direct impact on their persistence in education as a career (Morrison, 2013). A report from the 2003 study of the National Commission on Teaching and America's Future, found that 46% of beginning teachers leave the classroom by the end of his or her first five years of teaching (as cited in Andrews, Gilbert, &

Martin, 2012). Almost all beginning teachers experience "reality shock" and some form of discouragement and frustration (Turley, Powers, & Nakai, 2006). First-year teachers are required to complete all the tasks that are asked of veteran teachers (Andrews & Quinn, 2004) and are overwhelmed by the demands placed on their emotions, energies, and skills (Turley et.al, 2006). If this frustration leads to attrition, school systems will suffer economic and time losses (Andrews, Gilbert, & Martin, 2012; Maine Department of Education, 2012). Ingersoll and Smith (2004) reported, "one type of cost that is less easily quantifiable includes the negative consequences of high turnover for organizational stability, coherence and morale" (p. 32). Along with improving retention, it is essential to provide beginning teachers with support so that they can quickly become effective practitioners (Andrews and Quinn, 2005). As a result, a teacher's decision to remain in the profession is based on a variety of challenges and factors.

Teachers leave the profession for varying reasons, however, some research suggests that probationary teachers are more likely to stay if they are involved in a comprehensive induction process that includes mentoring as the prime component. The authors of a longitudinal study, *The Beginning Teacher Attrition and Mobility* released an initial set of data from 2007-2009 and showed that out of 1,990 teachers studied, 23% of teachers who did not have a mentor left the profession within the first two years of teaching. This can be compared with the 10% who left within the first two years who were enrolled in a mentoring program (Kaiser, 2011).

State Mandates

As a result of increasing beginning teacher attrition, mandates similar to Maine's Chapter 118 have been implemented across the country. These induction programs often include orientation, observations, peer support, new teacher training, and mentoring (Maine Department

of Education, 2012). In addition, local implementations of these plans have gaps including inconsistent implementation and oversight of other potential impacts (Washburn -Moses, 2010).

Induction. One element in Maine's policy is a comprehensive induction process that includes support not only from the assigned mentor, but also administration, colleagues, and other probationary teachers (Wong, 2002). Induction is a system designed by a school district to gain, support, and retain new teachers (Wong, 2002). This system needs to be a, "comprehensive, multi-year process designed to train and acculturate new teachers in the academic standards and vision of the district" (Wong, 2002, p. 41). This system can consist of a variety of activities that are monitored to ensure a positive impact on student learning. Successful strategies used by exemplary induction programs include: administrative support, welcome centers, pre-school workshops, demonstration classes, networking, and mentoring (Wong 2002).

Induction programs do more than decrease attrition; they also "serve to ameliorate the sense of isolation and lack of support new teachers often feel" (Andrews & Quinn, 2005). In a two-year study of a structured induction program, Turley et al. (2006) reported significant gains in teacher confidence related to teaching content and overall readiness to teach. In addition, new teachers indicated that this induction program "provided them with opportunities to network with new teachers and veteran teachers" (p. 36). Hence, the positive impacts of induction are diverse in supporting new teachers and their relationships with others in the building.

Although there have been successes in the implementation of a comprehensive induction program, there have also been gaps within the research and the results. Fletcher and Strong (2009) reported that even though an induction program was required, about one fifth of the teachers studied reported that they were not involved in any program. This inconsistent implementation of induction programming creates inconsistencies in the research. Another study

contended that the increased induction support did not indicate higher retention among probationary teachers (Glazerman et al., 2010). These inconsistencies demonstrate that having an induction plan in place is not enough. A plan alone cannot retain and support beginning teachers, as true induction is a complex relationship between state mandates and school climate.

Mentoring. One of the most important and prominent components of a successful induction program is mentoring. Mentoring is about building a formal meaningful relationship with another person that emphasizes mutual learning, while providing probationary teachers with a local guide (Ingersoll & Smith, 2004; Salintri, 2005). Although informal mentoring happens through collaborating with peers, friendships, and coaching, there is also planned mentoring that happens through a structured program, like those mandated by states as part of an induction process (Kwan & Lopez-Real 2005). A structured process takes place through purposeful and intentional matching of mentors and mentees, effective observation, reflection, and support (Kwan & Lopez-Real, 2005). Just as teachers differentiate instruction with students, the mentoring process should also be differentiated to address each mentees specific needs (Turley et al. 2006). There are five areas of support that a formal mentoring program can successfully offer: “(a) assistance with instruction and curriculum; (b) personal and emotional support; (c) assistance with support and supplies; (d) information about policies and procedures; and (e) help with classroom management” (Andrews and Quinn, 2005). Whether formal or informal, factors for effective mentoring include: having a mentor in the same field, mentor familiarity with the content area, common planning time, scheduled collaboration with other teachers beyond just the mentor, frequent observations, and goal setting (Cook, 2012; Ingersoll & Smith, 2004). Accordingly, the relationship between the mentor and mentee is diverse and covers areas of need that are wide and varied.

Observation. An effective mentoring program should stress the importance of observation between the mentor and mentee. However, observations are more than just a single classroom visit. Rather, observations are a component of a larger process that includes co-planning lessons and units, pre-conferences, observing and being observed, and post conferences (Andrews and Quinn 2005). Effective observation, of both the mentor and mentee, is essential within an effective mentoring relationship because, “mentors need to support and encourage their trainees, listen to them, empathize, evaluate and reflect with them, organize, be flexible and approachable and offer time and commitment” (Kwan et al. 2005, p. 277). Thus, the observation process can become a framework for pedagogical discussions at the level of classroom practice (Haggarty, Postlethwaite, Diment, & Ellins, 2011). In addition, mentors need to be trained and assigned appropriately so that the relationship between the mentor and the novice teacher is infused with a sense of a learning community (Turley et al. 2006).

Trust. Trust is also essential in this relationship. One way to protect that trust is to assure the confidentiality of the communications between the mentor and mentee (Cook, 2012). Communication about observations is not for the purpose of evaluation, but rather to provide needed non-evaluative feedback (Andrews, Gilbert & Martin, 2012). Although the principal is often the one matching mentors, the mentor should not be involved in the evaluation of the mentee or report conversations to the principal (Cook, 2012). As the research shows, effective mentoring is a dynamic relationship that must be supported by training and school leaders.

Mentoring can be successful in supporting beginning teachers, however there are also instances in which this relationship breaks down and becomes detrimental to one or both parties. For example, forcing a mentor to be involved in a mentorship program can lead to inadequate support, ineffective communication, and a lack of availability. In addition, if a mentee does not

welcome or seek out support from the mentor, neither will feel successful in their role (Cook, 2012). Other breakdowns happen when the mentor tries to impose their teaching style on the mentee or only focuses on classroom management. Some mentors indicated that once behavior was under control, they stepped back, thereby leaving the beginning teacher without support in curriculum, pedagogy, and other essential areas (Haggarty, et al., 2011). Consequently, there should be supervision of the mentor/mentee relationship to ensure that the relationship does not break down.

School Climate

A second important factor in a teacher's decision to remain in education is the climate of a building or district. It is this climate that is, "crucial to the journey of becoming the teacher they want to become; it is where the beginning teachers decide if they like the final destination" (Adoniou, 2013, p. 56). Positive school climate is comprised of dedication to lifelong learning, personal support, professional support, acceptance of new teachers, collaboration, teamwork, respect, relationships that value equality and democracy and encouragement of new teachers (Adoniou, 2013; Haggarty et. al., 2011; Iordanides & Vryoni, 2013). If elements are absent, a beginning teacher may be defined by the limits of the school culture, which might restrict learning and growth (Haggarty et. al., 2013). Thus, a positive school climate is determined by the relationships between the people in a school building, including school leaders and colleagues.

School Leaders. School leaders, including administrators, are influential to school climate through hiring and support. As the leader of a building, the principal is responsible for selecting qualified new teachers and supporting the mentor relationship (Johnson et al., 2004). In addition, the principal can ultimately be one of the deciding factors in a new teacher's persistence in the career (Washburn -Moses, L. 2010).

As new teachers strive to educate the whole child in their classrooms, so must administration and veteran teachers strive to train the whole teacher so that he or she is efficient, excited about the subject matter, and able to recognize student needs (Womack-Wynne, Dees, Leech, LaPlant, Brockmeier, & Gibson, 2011 p. 7).

In order to train the new teacher as a whole, school leaders need to protect new teachers while encouraging them to take initiatives, to be part of the decision-making process, and to participate in a culture of lifelong learning (Iordanides, & Vryoni, 2013). When school leaders provide new teachers with opportunities to experience success through these avenues, new teachers can build capacity and efficacy in their career (Morrison, 2013). Furthermore, this can result in new teachers feeling confident in taking risks and seeking support from administration and colleagues.

Collaboration. Strong relationships are essential to beginning teachers as they develop a sense of who they are and how they fit in the larger school community. This comes from interactions not only with a mentor, but also other teachers and administration. By creating these strong relationships that include feedback, guidance, debriefing and care, new teachers are able to better understand themselves in the contexts of the profession (Morrison, 2013). Relationships like this are cultivated through collaboration and engagement in professional learning communities that focus on classroom management, lesson planning, parent relations, peer observations and common planning time (Andrews, Gilbert, & Martin, 2012; Morrison, 2013; Wong, 2002). Although these relationships are often embedded in school climate, it is also the role of administration to provide these opportunities for new teachers (Morrison, 2013).

Collaboration and engagement in professional learning communities can have several positive effects on new teachers including improved efficacy and deeper reflections about teaching. During the tumultuous first years in the profession, teachers often have emotional responses to different experiences. Working with veteran teachers can provide guidance and

support in these circumstances, which then builds the capacity of the new teacher (Morrison, 2013). This networking and collaboration can also directly impact teacher retention, “it has been found that teachers remain within a district when they feel strong bonds of connection to a professional learning community that has, at its heart, high quality interpersonal relationships founded on trust and respect” (Wong & Asquith, 2002, p. 45).

When teachers do not have access to strong professional learning communities or opportunities to collaborate with peers, the result may be the confinement of beginning teachers, holding them in a state of survival. This results in professional or social isolation and the manifestation of insecurities, which then translates into a lack of efficacy in the career (Morrison, 2013).

Internal Factors

Regardless of support or school climate, there are times when persistence in the career is related to internal factors. Teacher dissatisfaction may come from an inability to enact their vision of teaching, disillusionment with the profession, frustration with school contexts, or a lack of confidence despite effective support structures (Adoniou, 2013; Morrison, 2013).

One of the biggest internal factors that new teachers face is finding the balance between their personal life and their professional life. Often, balance is achieved by having a personal network for support and a strong professional network of formal or informal mentors out of the structured school day. Although this is an internal challenge for teachers, mentors and school leaders need to be mindful of this challenge; hence workloads should be monitored. Being able to find this balance while alleviating the feelings of guilt may help a beginning teacher in maintaining stamina in the profession (Hudson, 2012).

Teacher Preparation

Another important element in teacher persistence is a new teacher's perceived level of preparation. College teacher preparatory programs exist to set a foundation for teacher success and can facilitate a broader network of support for new teachers. However, success using the latest theory-based teaching during a practicum does not always translate into a successful first year teaching, as school contexts vary (Adoniou, 2013). Furthermore, teachers are faced with circumstances that are not always covered in pre-service training, but could have reasonably been expected to (Adoniou, 2013; Haggarty, et al., 2011; Hudson, 2012). To combat this, universities must not work in isolation from what happens in schools. Rather, they can play an integral role in the relationship between pre-service teachers and professional contexts before and after graduation (Adoniou, 2013).

Not only do complications lie in pre-service teacher training, but also in college graduates finding full time teaching positions. Noted as a complication in the study, Paris (2013) stated, "Graduates who fail to achieve reliable full-time employment (as evidenced in this inquiry) are denied opportunities to practice their craft and consolidate their training... this gap... may have implications for [beginning teacher's] self-efficacy, self-belief, professional optimism and retention in subsequent years" (p. 156). Even if a graduate proved, "effective, reflective and informed" during pre-service teaching, research shows that it does not always translate into an "effective, reflective, and informed classroom teacher" (Adoniou, 2013, p. 54). These inconsistencies, gaps in knowledge, and gaps in employment may affect a beginning teacher's feeling of success in the classroom and ultimately their persistence in the career.

Summary

An alarming percentage of teachers leave the profession within the first five years. Research suggests that the factors leading to new teacher attrition are complex and dynamic. A multitude of factors include the state mandates of induction and mentoring, school climate, administrative support, collaboration, networking, preparation, and internal factors. It is the interplay of these factors that demonstrates the complexities of teacher retention.

State mandates with components of induction and mentoring serve to ameliorate beginning teacher attrition, yet these two components cannot stand alone as they are interwoven with administrative support and collaboration. The impacts of induction, mentoring, administrative support and collaboration are strongly influenced by the umbrella of school climate. Other impacts on new teacher retention that may take place outside school walls are preparation, personal network, professional network, and internal drive. In light of this research, it is imperative for school leaders, mentors, teachers, and pre-service institutions to understand the complex and dynamic relationship between these factors so that beginning teachers may best be supported in persisting in the profession.

Methods

This study was conducted using a mixed-methods approach. The literature that forms the framework for this study is replete with research on the impacts induction and mentoring programs have on teacher retention. Some research shows that attrition rates are higher among probationary teachers who are not involved in a comprehensive induction program when compared with probationary teachers who are a part of this type of programming (Kaiser, 2011). In 1998 the State of Maine implemented Chapter 118 in hopes of increasing probationary teacher retention, saving school districts money, and increasing student achievement (Maine Department

of Education, 2012). There is a gap in knowledge pertaining to the factors to which beginning teachers attribute their persistence. This study sought to answer the following questions: What do teachers in their first five years in rural Maine perceive as the greatest factors that have helped them to remain in education as a career? What do teachers in their first five years in MSAD/RSU 17 and 59 perceive as the greatest factors leading to their persistence in education as a career? What is the perceived impact of induction and mentoring on beginning teachers and their persistence in education as a career? This study is unique in that it offered a small glimpse into the implementation of induction and mentoring programs as mandated by Maine statute.

Site

This study took place in two counties in rural Maine and was comprised of a dual level of inquiry in each county. In order to glean results from a wide variety of teachers, all teachers in Oxford and Somerset counties were recruited for one part of this study. Data analysis was limited to teachers with five or fewer years of teaching experience. The other part of this study focused in on a school district in each county. RSU/MSAD 17 is a school district in Oxford County and RSU/MSAD 59 is a school district in Somerset County. Part two of this study focused on teachers with zero to five total years of teaching and provided more in-depth responses to the research questions. Table 1 displays demographic information for Oxford and Somerset counties, as well as State of Maine totals. Table 2 displays demographic information for RSU/MSAD 17 and RSU/MSAD 59.

Table 1

Demographics by County and State

Location	Population	Median Income	HS Diploma	BA/BS
Oxford	57,833	\$41,434	88.9%	18.2%
Somerset	52,228	\$38,141	87.1%	14.8%

Maine	1,328,361	\$48,219	90.6%	27.3%
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Table 2

Demographics for RSU 17 and RSU 59

District	Per Pupil Expenditures	Student Population	Number of Schools	Graduation Rate AYP (2012-13)	Attendance Rate AYP (2013-14)	Number of Teachers (2013-14)
RSU 17	\$9,836	3,479	10	80.1%	95.1%	269.8
RSU 59	\$11,320	720	3	84.9%	93.7%	65.9

Subjects

This study looked at two rural districts as well as the two rural counties in which they reside. Our participant sample was larger than examining just several teachers (Hudson, 2012), but similar to those studies that sampled a larger population of teachers (Washburn-Moses, 2010). For this study, all teachers (n=1973) in Oxford and Somerset counties were recruited through e-mail addresses as published in the Maine Education Data Management System (MEDMS, 2014), and exclude the second group of participants from RSU/MSAD 17 and RSU/MSAD 59. Responses were elicited from all teachers in the two counties, regardless of years of experience. Data analysis excluded participants with 6 or more years of teaching. The second group of participants were recruited through email addresses obtained by school technology administrators in RSU/MSAD 17 and RSU/MSAD 59. Participation was voluntary and responses were anonymous. Participants could choose to skip questions or stop taking the survey at any time. Demographic data included years, subjects, and grade levels taught.

Procedure

This study began in January of 2015. All potential participants were contacted via email on January 21. A follow-up email was sent to all potential participants, thanking those who had

participated and reminding others of the deadline for all submissions, on February 9. Analysis of the surveys began as they were received. Submissions were not received after February 20. All data analysis was completed by March 25, 2015.

Instruments

The literature suggests a myriad of factors impacting teachers' decision to persist in the profession, including teacher preparation programs, induction, mentoring, school climate, collaboration with colleagues, school leader support, outside networking, and internal factors (Adoniou, 2013; Andrews & Quinn, 2005, Andrews et al. 2012; Cook, 2012; Fletcher & Strong, 2009; Glazerman et al. 2010; Haggarty et al. 2011; Hudson, 2012; Ingersoll & Smith, 2004; Jordanides & Vryoni, 2013; Johnson et al. 2004; Kaiser, 2011; Kwan & Lopez-Real, 2005; Morrison, 2013; Paris, 2013; Sallintri, 2005; Turley et al. 2006; Washburn-Moses, 2010; Womack-Wynne et al. 2011; Wong, 2004). In order to enhance validity, two measures were used: a quantitative survey and a qualitative survey. These surveys were based on an analysis of the literature. The researchers tested measures for validity and reliability by recruiting their classmates in EDU 586 to view and offer feedback on the surveys. All participants were given the same instructions for taking the surveys. For inter-rater reliability on the qualitative survey, the researchers agreed upon a list of codes to analyze the responses. The researchers have had prior experience working together with coding qualitative research data through a group research project at the University of Maine at Farmington.

Quantitative Survey to all teachers in Oxford and Somerset counties. This instrument (Appendix C), created by the researchers, was shared with participating teachers in Oxford and Somerset counties via a Google Forms survey. Participants were asked to respond to demographic questions about the number of years they have been in education, the number of

years they have taught in their school district, and which grades and subjects they teach. Using a five-point Likert scale, yes or no questions, and questions about which factors were the most helpful to them, teachers were asked to respond about their teacher preparation experience, induction and mentoring programs in which they have participated, school climate, collaboration with colleagues, school leader support, outside networking, internal factors, and their intentions to persist in the profession.

Qualitative Survey to teachers in RSU/MSAD 17 and RSU/MSAD 59 who are in their first 5 years of the profession. This instrument (Appendix D), created by the researchers, was shared with participating teachers in RSU/MSAD 17 and RSU/MSAD 59 via a Google Forms survey. Participants were asked to respond to demographic questions about the number of years they have been in education, the number of years they have taught in their school district, and which grades and subjects they teach. Participants were also asked to respond to open-ended questions about their teacher preparation experience, induction and mentoring programs in which they have participated, school climate, collaboration with colleagues, school leader support, outside networking, internal factors, and their intentions to persist in the profession.

Data Analysis

Quantitative survey. The researchers prepared descriptive statistics to provide the context of the study participants. The researchers also prepared inferential statistics using the assignment of mentor as the independent variable. For the rating portion of the survey the researchers did a Pearson's Correlation. The researchers performed *t* tests comparing responses across districts, highlighting different mentoring programs, and levels of implementation. The researchers prepared Pearson's Correlations from the Induction Activities section using frequency tables (Ravid, 2011).

Qualitative Survey. The researchers examine the qualitative survey data by developing codes based on data segments from participant responses. Categories were developed to explain similar codes. Relationships between categories were used to explain patterns. These patterns were used to create a grounded theory narrative (McMillan & Schumacher, 2010).

Limitations

One limitation of this study is that RSU/MSAD 17 is much larger than RSU/MSAD 59, which presented some discrepancies when comparing results. Another limitation is that those teachers who left the profession within their first five years will not be surveyed; their responses could reveal valuable insight into why beginning teachers leave education as a career. Given the available time, resources, and researchers' commitments to their districts, the researchers delimited the quantitative survey to beginning teachers in two counties, and the qualitative survey to beginning teachers in their two districts. For this study it is assumed that participating teachers answered honestly to the survey questions. It was also assumed that the results will be generalizable to other beginning teachers in Maine.

In addition to the limitations it is important to recognize the bias. The researchers are biased to the belief that induction and mentoring programs have a positive impact on teacher retention. The researchers assumed that beginning teachers who have left the profession may not have had adequate support.

Results

The purpose of this small scale, mixed methods study was to explore why beginning teachers persist in the field of education. Specifically, this study sought to answer the following questions:

- What do teachers in their first five years in rural Maine perceive as the greatest factors that have helped them to remain in education as a career?
- What do teachers in their first five years in MSAD/RSU 17 and 59 perceive as the greatest factors leading to their persistence in education as a career?
- What is the perceived impact of induction and mentoring on beginning teachers and their persistence in education as a career?

This study was conducted through a quantitative survey (Appendix C) to all teachers in Somerset and Oxford counties. Data from teachers with 0-5 years teaching experience was analyzed in order to answer the research questions (Appendix G). This study was also conducted through a qualitative survey (Appendix D) to teachers with 0-5 years teaching experience in RSU 17 and RSU 59 (Appendix H).

The intent of this research was to understand the factors to which beginning teachers attribute their persistence in the profession. In order to understand this phenomenon, the research analyzed responses from teachers who planned to persist, who did not plan to persist and those who were unsure. The qualitative survey asked the question, “Do you think you will continue to persist in education as a career? Explain.” to which participants wrote open-ended responses. The quantitative survey asked participants to rate their likelihood to persist in teaching by marking 1-5 on a Likert Scale. A rating of 1-2 indicates no; a rating of 3 indicates unsure; a rating of 4-5 indicates yes. Out of all (n=30) participants, 57% (n=17) indicated that they plan on persisting in the profession, 17% (n=5) did not plan on persisting, 23% (n=7) were unsure, and 3% (n=1) did not respond to this question (Figure 2).

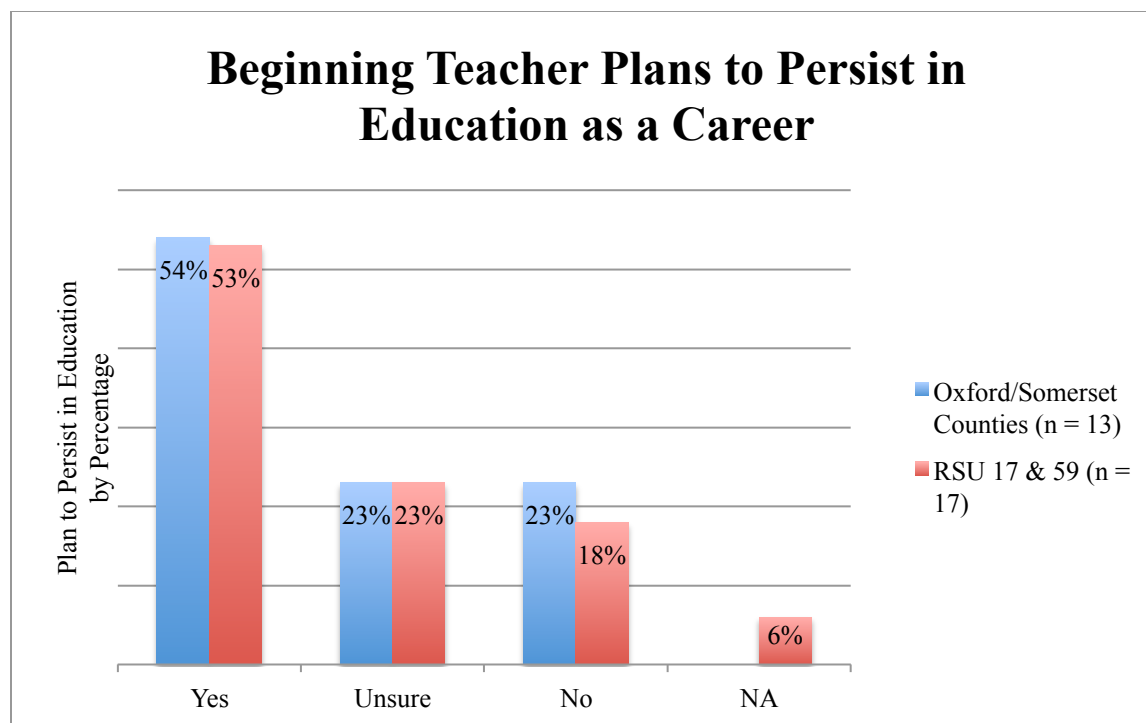


Figure 2. Beginning Teacher Plans to Persist in Education as a Career

Research Question 1

The first research question of this study was: What do teachers in their first five years in rural Maine perceive as the greatest factors that have helped them to remain in education as a career? Three primary categories emerged from an analysis of all participants' perceptions of their own persistence: (a) satisfaction in working with students, (b) collaboration in working with peers, and (c) having an out of school network (Table 3).

Table 3

Most Impactful Factors Influencing Beginning Teachers in Oxford and Somerset Counties to Persist in Education as a Career

	Sum	Mean	Mode	SD	Variance
Satisfaction in working with students	37	2.85	1	2.19	4.81
Collaboration	47	3.62	2	2.02	4.09

Out of school network	56	4.31	5	2.25	5.06
Preparation	58	4.46	4	2.18	4.77
Mentoring	59	4.54	5	2.26	5.10
School Climate	62	4.77	6	1.83	3.36
Administrative Support	66	5.08	4	1.89	3.58
Induction Activities	87	6.69	8	2.06	4.23

Note. Participants ($n = 13$) were asked to rate factors that have had the most impact on their persistence in education as a career, where 1 is the most impactful and 8 is the least impactful. Eight factors were given, including: Satisfaction in working with students, collaboration, out of school network, preparation, mentoring, school climate, administrative support, and district new teacher orientation, meetings.

Satisfaction in working with students. Teachers within their first five years, who planned on persisting in the profession, overwhelmingly attributed their retention in education to satisfaction in working with students (Table 4). When given the opportunity to expound upon factors that impact persistence, one participant noted, “Having a positive impact on young people, and the opportunity to coach sports and have an impact there, as well.”

Table 4

Most Impactful Factors Influencing Beginning Teachers in Oxford and Somerset Counties who Plan on Persisting in Education as a Career

	Sum	Mean	Mode	SD	Variance
Satisfaction in working with students	18	2.57	1	1.72	2.95
Mentoring	23	3.29	1	2.06	4.24
Collaboration	23	3.29	2	2.29	5.24

Out of School Network	33	4.71	#N/A	2.56	6.57
School Climate	34	4.86	3	1.86	3.48
Administrative Support	34	4.86	4	1.57	2.48
Preparation	40	5.71	5	1.70	2.90
Induction Activities	43	6.14	8	2.73	7.48

Note. Participants ($n = 7$) were asked to rate factors that have had the most impact on their persistence in education as a career, where 1 is the most impactful and 8 is the least impactful. Eight factors were given, including: Satisfaction in working with students, collaboration, out of school network, preparation, mentoring, school climate, administrative support, and district new teacher orientation, meetings.

Collaboration.

Out of seventeen participants in RSU 17 and 59, ten noted that teachers collaborated in their building, two noted that collaboration happened occasionally, while four participants shared that collaboration did not happen in their building or with them. Six participants shared that collaboration happened at the grade level. Participant five noted, “Yes, I know for certain that those of us in the K-2 wing work together on projects and ideas quite frequently.” Similarly, participant two collaborated with her grade level along with other teachers in the building,

Yes, all the time! I talk with my team daily as well as the reading teachers that work with my students. I talk to kindergarten teachers. I have book buddies with a third grade classroom. People check in with you to see if you need guidance or support.

Some participants had a different perception of grade level collaboration. Participant eleven articulated, “[collaboration happens] at grade level only - special education is invited but not made to feel welcome in the 4 -6 grades.” In addition, specialists had a different perspective on collaboration. In response to the question, “Do teachers collaborate in your building?” participant eight, a music teacher, answered, “Not with me.” Similarly, participant six elaborated, “This happens more for classroom teachers than specialists. Even so, as a whole, I feel this is

something that could happen more often.” Thus, teachers perceived collaboration as a valuable tool, but not all engaged in collaboration.

Five participants explicitly noted that there is structured time for collaboration through Professional Learning Communities (PLC) and common planning time. Participant nine noted, “We have monthly PLCs where we are required to collaborate.” Participant fifteen had a positive perception of this type of collaboration, “Yes. I am grateful for my PLC. We meet weekly.” Participant ten shared that common planning time is built in, “Twice a week we have team meetings for ~40 minutes. In these meetings we discuss any concerns and plan activities students will participate in during our whole-day, once a week, project-based learning day.”

Some teachers have time for collaboration built in, other participants expressed that time is a need. “A second challenge would be collaborating with teachers from other departments who I do not see on a daily basis,” shared participant three. Participant five added, “Some more planning periods or collaboration periods would be helpful.” Additionally, participant twelve noted, “[We collaborate] at times. Not like we should due to time!” Thus, participants had positive perceptions of organized collaboration and perceived that more time is needed.

Although participants noted that collaboration occurs, this did not necessarily translate into a factor that impacted persistence. A paired-samples *t*-test was conducted to compare in two counties (Oxford and Somerset) and two districts (RSU/MSAD 17 and 59) the impact (one is the most impactful factor, while eight is the least impactful factor) of collaboration on beginning teacher plans to persist in education as a career. There was a significant difference in the scores for two counties ($M = 3.62$, $SD = 2.02$) and two districts ($M = 5.06$, $SD = 2.28$); $t(29) = 1.80$, $p = < 0.10$. This result indicates that teachers in RSU/MSAD 17 and 59 did not rate

collaboration as impactful to their persistence in education, compared to teachers in Oxford and Somerset counties.

Out of school network. Out of seventeen participants who responded from RSU 17 and 59, thirteen answered the question, “Do you have a supportive out-of-school network? How has this impacted your teaching?” Ten participants shared that they do, while one noted an in-school support system. One participant, who was not planning to persist in the career, noted that they do not have an out of school support system, while participant eight shared, “I did in my previous state, but in Maine it has been harder to connect with other teachers in my subject area [music].” Three participants note that they have other teachers in their out of school network. Participant fourteen noted, “Yes with friends in other districts and graduate course classmates. Gives a different perspective and new learning.” Participant six added,

I am still in contact with one of my mentor teachers from student teaching and I love being able to bounce ideas off of him. I also am in contact with teachers who teach my subject matter in other nearby school districts.

Participant ten shared,

There are quite a few teachers in my out-of-school network and they are very supportive of me personally and professionally. They have given me many ideas about problem-solving situations at school, and have even let me borrow equipment and materials I have needed for projects at school.

Four out of the ten participants explained that their out of school network consists of family support. Participant two articulated,

Yes, my friends and family are very supportive! They know the stress that first year teachers faces as well as the out of pocket expenses. My family has helped cut a plethora of supplies and helped me in my classroom on the weekend. It also helps that one of my supporters works in the school district.

Similarly, participant fifteen expressed, “I have a supportive family which makes a big difference. There are days when I am gone for 12 hours, with an average of 9 hours. If I didn't

have them, there is no way I could do this job.” Therefore most teachers expressed perceptions of support from an out of school network.

Research Question 2

The second research question in this study was: What do teachers in their first five years in MSAD/RSU 17 and 59 perceive as the greatest factors leading to their persistence in education as a career? Three primary categories emerged from participants’ perceptions of their own persistence: (a) satisfaction in working with students, (b) administrative support, and (c) mentoring (Table 5).

Table 5

Most Impactful Factors Influencing Beginning Teachers in RSUs 17 and 59 to Persist in Education as a Career

	Sum	Mean	Mode	SD	Variance
Satisfaction in working with students	46	2.71	1.00	2.08	4.35
Administrative Support	67	3.94	4.00	2.11	4.43
Mentoring	70	4.12	2.00	1.90	3.61
School Climate	72	4.24	3.00	2.05	4.19
Induction Activities	85	5.00	5.00	2.45	6.00
Collaboration	86	5.06	5.00	2.28	5.18
Preparation	87	5.12	7.00	2.23	4.99
Out of school network	88	5.18	5.00	1.91	3.65

Note. Participants ($n = 17$) were asked to rate factors that have had the most impact on their persistence in education as a career, where 1 is the most impactful and 8 is the least impactful. Eight factors were given, including: Satisfaction in working with students, collaboration, out of school network, preparation, mentoring, school climate, administrative support, and district new teacher orientation, meetings.

When analyzing only teachers who explicitly plan on persisting, a fourth category emerges: school climate (Table 6).

Table 6

Most Impactful Factors Influencing Beginning Teachers in RSUs 17 and 59 who Plan on Persisting in Education as a Career

	Sum	Mean	Mode	SD	Variance
Satisfaction in working with students	20	2	1	1.92	3.69
Administrative Support	30	3	2	1.66	2.75
School Climate	32	4	3	1.81	3.28
Mentoring	38	4	3	1.72	2.94
Collaboration	42	5	5	2.29	5.25
Induction Activities	50	6	6	2.19	4.78
Preparation	50	6	8	2.30	5.28
Out of School Network	52	6	7	1.64	2.69

Note. Participants ($n = 9$) were asked to rate factors that have had the most impact on their persistence in education as a career, where 1 is the most impactful and 8 is the least impactful. Eight factors were given, including: Satisfaction in working with students, collaboration, out of school network, preparation, mentoring, school climate, administrative support, and district new teacher orientation, meetings. Missing data for "Mentoring" and "Induction Activities" was substituted with the mean of total scores three times, thus exceeding 15% (3/17) to equal 22% substitution. The researchers acknowledge that this percentage could alter the statistical findings (George & Mallery, 2001, as quoted in Creswell, 2012 p. 182).

Satisfaction in working with students. Out of ten teachers in RSU 17 and RSU 59 who indicated that they plan on persisting in education as a career, seven specifically attributed their satisfaction in working with students. Participant three noted, "Yes. It is something I am passionate about and enjoy doing. I look forward to going to work everyday." Participant four continued to go beyond just working with students, "Yes. I love the students, the community, the

schedule, my colleagues, and would like to get involved in coaching.” Additionally, participant nine contended that making a difference makes all the difference,

Yes. Despite the challenges and frustrations, I love what I do and understand how incredibly important it is. I believe education is an important tool for social justice, and arts education especially is important in this regard. I get an enormous amount of satisfaction out of seeing students grow as musicians and individuals and feel that I am making the world a better place through my work.

To the same extent participant 13, a teacher who is unsure of persistence, shared that even making the difference with one student is motivating,

I would like to continue, but there are times where I consider not because of my challenging class. I know that not all classes are this challenging, but when I am constantly being disrespected, it does not always seem like it is worthwhile. The thing that is keeping me going is the fact that I know I am getting to at least one student in that room in a positive way.

Despite the challenges that beginning teachers face, satisfaction in working with students was the primary factor in beginning teacher persistence.

Administrative Support. Out of the ten participants who indicated that they plan on persisting in the career, all ten expressed feeling supported by administration. Participant three noted, “Administrative support is great. They all have open door policies and are there to answer questions and help when needed. They encourage collaboration among all teachers.” In addition, participant five stated, “Very supportive. When they called to offer the position, they were quick to explain all the opportunities they wanted for their newest staff. They gave specific examples of how I would be supported through the early years.” Participant six added, “In general, administration is supportive in helping me accomplish tasks when I ask for help. There are sometimes things that do not work to the benefit of my practice, but they do try their best to make the necessary changes, so that I can be more effective.”

Even the teachers who were unsure about persisting had positive things to say about administrators; specifically, 75% had positive comments. Participant 10 stated, “Our in-school administrators are very supportive.” Participants 13 and 15 were particularly glowing about their administrators:

I don't have any complaints about our administrators. They seem to support whatever we do if we can justify our reasons for it. At the same time, they don't hesitate to say something if they need to make some corrections. They push us to become better teachers.

They also stated, “I am getting a lot of support from my administrators with my challenging class this year - I honestly don't know how I would be able to handle my tough class without my principal.”

Although most participants who were unsure of their persistence, not all were positive about their administrators, not all expressed complete satisfaction. Participant 13 noted, “I feel like I could have an actual assigned mentor, since right now I am going around to other places for advice.” In addition, participant 14, who was unsure of persistence, was particularly critical of administration. In response to the question, “How supportive are your administrators (in terms of your practice, teacher collaboration, new teachers taking initiative, etc.?)” the participant shared, “I believe them to be supportive in all of these ways but seem to know very little about curriculum and what it is that is actually going on in the classrooms.” The participant continued in a different question, “Administration can seem disconnected to many staff members and seem to have little awareness of what is happening in classrooms.” In fact, this participant cited lack of administrative support as a potential factor in not persisting, “Possibly [I will persist], but maybe not, because of the lack of support coming from admin and colleagues.”

Lastly, there were two participants who noted that they did not plan on persisting in the profession and one who did not respond to the question. The two who do not plan to persist had split responses. While one noted, “new principal is supportive” the other responded, “[administration is] not very [supportive].” The teacher who did not note persistence shared, “I feel as though many middle/high school teachers have much more planning time than we do in elementary schools...so no, I don't feel supported.” As demonstrated by these responses, teacher persistence was greatly affected by the perceived administrative support.

Mentoring. Participants who took the qualitative survey perceived mentoring to be the third most impactful factor in their persistence (Table 5). Participants who planned on persisting perceived it to be the fourth most impactful factor (Table 6). This data is not replete with the open-ended responses to questions about mentoring. Only five out of seventeen participants noted that they had a mentor, and only three of those participants noted positive experiences. Participant five noted, “Yes, and she has been a wonderful support this year. Working with a mentor teacher gives me someone to go to for advice and ideas. I feel very well supported by her.” Meanwhile, participant eleven shared, “Mentor were not helpful.” Ten participants never received a mentor, yet three of those participants shared that they had help from grade level teams or other teachers. Participant three wrote,

I have not officially been assigned a mentor. However, I work very closely with another teacher in the building who teaches the same program as myself. It has been very helpful to bounce ideas off each other, lesson plan together, and co-teach many classes.

Thus, the quantitative data was not consistent with the qualitative data about teacher perceptions of mentoring and their persistence in the career.

Research Question 3

The third research question in this study was: What is the perceived impact of induction and mentoring on beginning teachers and their persistence in education as a career? Three primary categories emerged from participant's perceptions of induction: (a) school culture (b) networking and peer observations (Table 7) and (c) pitfalls of induction. Two primary categories emerged for the perceived effectiveness of mentoring: (a) general support and (b) pitfalls of mentoring.

Table 7

Perceived Impact of Usefulness of Induction Activities for Oxford and Somerset Counties and RSUs 17 and 59

	Sum	Mean	Mode	SD	Variance
Networking with Other Teachers	55	1.83	1	1.392	1.94
Peer Observations	80	2.67	2	1.322	1.75
Pre-School Workshops	114	3.80	4	1.095	1.20
District Classes	114	3.80	4	1.584	2.51
District New Teacher Orientation	128	4.27	4	1.484	2.20
New Teacher Meetings	124	4.13	5	1.383	1.91

Note. Participants were asked to rate each induction activity in terms of its usefulness to them as an educator, where 1 is the most useful and 8 is the least useful.

Induction. Out of seventeen participants, fifteen answered the question, “How have the induction activities impacted your teaching or your perception of the teaching career?” Thirteen of the participants had positive perceptions about the impact of induction, while six of the thirteen also had negative perceptions. Two participants had negative perceptions of the induction process.

School Culture. Five participants noted that induction was most impactful in terms of acclimating new teachers to the school expectations and district’s culture. Two participants

found the information disseminated through induction to be helpful. Participant two noted, “They have helped me to understand the major new events for new teachers such as grades, conference, and the start of the school year... I have also learned about the expectations of the school district.” Participant fifteen added,

They have been helpful coming into the district. It's given me some background as to how this district does things. There are not a lot of opportunities to get that information all at once. It's not all written down someplace, so we depend on hearing it in meetings.

More than distributing information, induction activities seemed to help teachers become acclimated, and a part of a district’s vision. Participant three expressed, “Induction activities have given me a sense of what the school stands for. They have also highlighted topics for me to focus on in the school year.” Participant five highlighted the culture of a team, “They reminded me that we are a team. The old phrase it takes a village to raise a child rings true. When we pool our experiences and ideas we are more successful at teaching.” Participant seven articulated,

It was stated at our district new teacher orientation that, "Each student carries a backpack to school each day whether it's literal or figurative. We have no idea as their teacher what they carry with them in their backpacks from their home life, social life, and personal life. We need to be sensitive to each student as an individual and start each day with a clean slate." This has helped me start each day fresh with every student and to respect them for the individual they are.

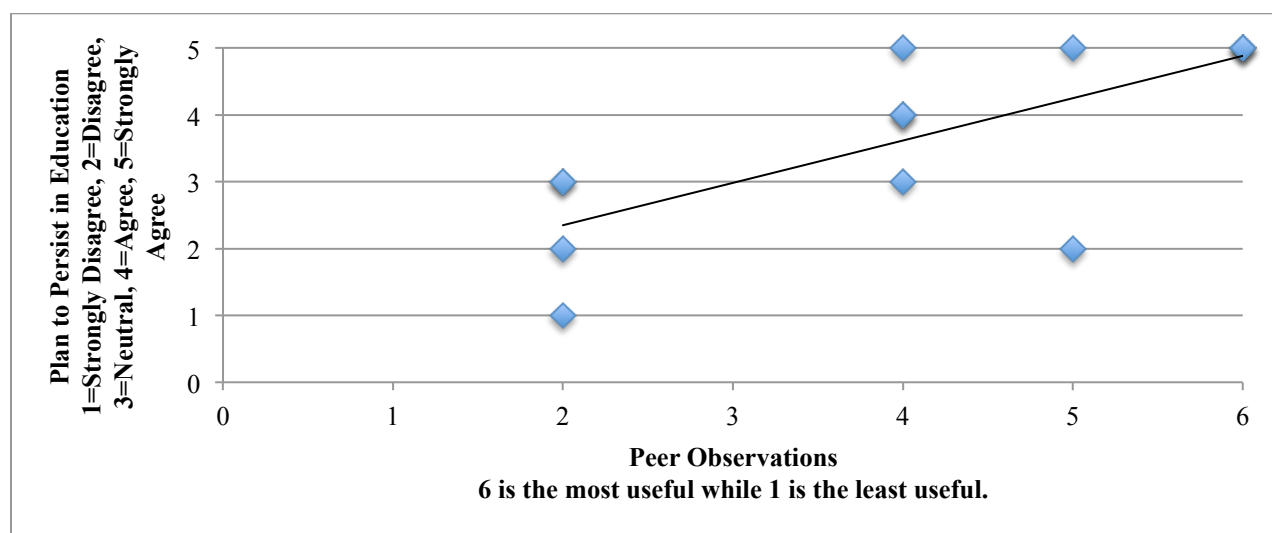
Thus, the perception was that induction activities were beneficial in terms of emphasizing a school or district’s vision and culture.

Networking and peer observations. Nine participants identified networking as a positive impact of induction. Six of those teachers planned on persisting in the career, while two were unsure and one did not plan on persisting. Participant two noted, “[Induction leaders] have also helped me meet other teachers outside of the school that I work in.” Participant fourteen added, “The most beneficial is the colleague discussion and networking.” Participant seventeen

articulated that networking impacted her perceptions of herself as a teacher, “I feel that the experiences and the troubles that I am having is not something that I am alone in.”

Three participants noted that networking and peer observations are the two most impactful factors of induction. Participant nine shared, “Networking with teachers and peer observations are invaluable and don’t take much time. Those helped me and continue to help me immensely.” Participant 16 articulated, “Observing and connecting with peers have been the most helpful.” Participant 10 added, “Observing and networking with other teachers has been the most useful induction activities as a newer teacher.”

Along with the three participants that noted networking and peer observations as the most impactful factors of induction, one other participant shared the positive impact of peer observations. “The peer observation process not only provides feedback, but also helps give a low pressure practice round for when administrators come in for evaluation,” shared participant six. In addition to the written responses from participants, there was a direct correlation between the usefulness of peer observations and the plan to persist in education as a profession (Figure 3).



$$r = 0.72 \quad p < .01$$

Figure 3. Correlation between Usefulness of Peer Observations and Plans to Persist in Education for Oxford and Somerset Counties

Pitfalls of induction. Although thirteen out of fifteen participants who responded to the question rating induction activities had positive perceptions about induction, six of those participants had negative perceptions, two participants had completely negative perceptions about induction and two participants noted that there weren't induction activities. Participant eleven shared, "Not much at the time I started, I was left on my own to figure out paperwork and other district assignments." Interestingly, one participant noted that induction was helpful in their first district, while their current district was lacking, "In my first district, I had new teacher meetings and a mentor teacher and found my first year teaching to be more successful than when moving to a new district in my second year," shared participant 9. Some participants found induction to be unhelpful and irrelevant. Participant six wrote, "Where I do not teach a core subject area, I do not always find district classes/workshops to be relevant to what I teach." Two participants noted negative impacts on their perception of the teaching career. Participant ten contended,

Teacher workshops are meaningless and have only negatively impacted my perception of [my] teaching career. The content covered in these meetings rarely ever applies to what I do in my classroom. I was hired two weeks into the school year, my first year teaching so I missed the district new teacher orientation.

Lastly, there was one participant who had a different perspective on the induction activities. "The courses and meetings have been overwhelming," shared participant sixteen. Therefore participants perceived networking and peer observations to be the most impactful factors of induction along with acclimating to school culture, although the overall perceptions of induction activities were mixed.

Mentoring. Although the mentoring data were inconsistent concerning the impact on persistence, there was a perception that mentoring is helpful and impactful. For instance, two

participants noted that they wished they had a mentor. Participant sixteen shared, “I was so sad that I did not get one.” Participant nine went a step further to share how other staff members are utilized when a mentor is lacking,

No. I think that having a mentor teacher would be a meaningful experience that would shape my teaching career positively. I wish that I could have had a mentor teacher. I'm lucky to have coworkers who have stepped up to help when needed.”

Other participants found a way to be supported without a formal mentor. Participant thirteen noted, “I haven't officially been assigned a mentor, but I feel like I can go to anyone in my grade level and ask for advice.” Participant seventeen added, “No [I wasn't assigned a mentor], I have a great teacher that I work with and the staff at my school is very willing to help when I ask questions.” One participant went outside the district to find support, “I am still in contact with one of my mentor teachers from student teaching and I love being able to bounce ideas off of him,” shared participant six. Therefore teachers who did not have a mentor perceived that mentors are impactful and have found ways to be supported.

Two participants noted that they had positive mentorship experiences in the past, but perceive that to be lacking in their current district. Participant six shared,

I did have a mentor during my first 2 years of teaching. Her positive attitude and love of children was extremely inspiring during my early years of teaching. It was also nice to have someone to tell you that certain struggles you might be having are normal and receive suggestions on what might alleviate the situation.

In addition, participant fifteen noted, “I have not been assigned a mentor in this district. I worked closely with one for my first two years of teaching. I met with her every week. She observed me 3 times a year for 2 years. I think that's lacking here.” Only one participant wrote that they currently have a mentor with whom they have a positive relationship: participant two,

I have two mentors. They are both extremely helpful. I talk with them on a daily basis. We check in about how the day has gone. We share resources and discuss what lessons need to be taught next. They make it so I do not have to reinvent the wheel for everything I do.

Therefore, participants perceive that formal mentor relationships could be helpful, despite inconsistencies in formally assigned mentors.

Discussion

Through an examination of the perceptions of beginning teachers, the present study findings revealed insights to the factors concerning beginning teacher persistence as satisfaction in working with students, support systems, induction and mentoring. We discuss key findings from a beginning teacher perspective and discuss the implications for practice and future research.

As the researchers presented in the literature review, persistence in education is the result of a complex set of factors. Through this research, two additional factors, home support and satisfaction in working with students, emerged and are illustrated in Figure 4.

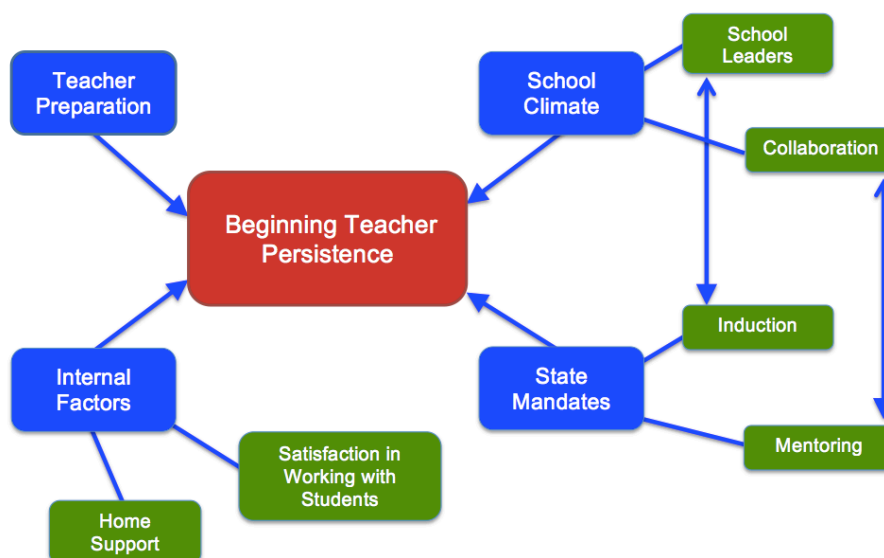


Figure 4. The relationship between beginning teachers and the factors that impact persistence.

Three primary elements emerged as the most significant in this study (a) satisfaction with students, (b) support systems, and (c) induction and mentoring. Each of these elements is comprised of the green factors shown in Figure 3. Through the complex relationship between these factors, the researchers examine the greatest impacts on teacher persistence in the profession.

Factor 1: Satisfaction with Students

Despite the many challenges that new teachers face in their careers, tables 3, 4, 5 and 6 demonstrate that teacher persistence is directly tied to the satisfaction that new teachers feel in working with students. In fact, 70% of new teachers in RSU 17 and 59 directly attribute their persistence to this factor, without prompting from a specific question. Thus this is a key factor in new teachers persisting in the profession.

Factor 2: Support Systems

Home support.

Every teacher in RSU 17 and 59, who planned on persisting in the career, expressed that they have a supportive out of school network with other professionals or family. These support systems are essential to teacher success, with one participant even noting that making it through the year would not be possible without her family. Although many teachers expressed that they have yet to achieve a school-life balance, having an out of school network can aid with achieving this (Hudson, 2012). Thus, an out of school network impacts persistence in the career.

Professional support.

Although participants shared that they have opportunities to collaborate with other teachers, the perceptions of these experiences varied widely. In addition, the two surveys were

contradictory in terms of the impact of collaboration on new teacher persistence. Despite this, collaboration is successful when it is embedded in strong relationships with grade level teams and in professional learning communities. Professional learning communities with new teachers should focus on classroom management, lesson planning, parent relations, peer observations and classroom planning (Andrews, Gilbert, & Martin, 2012; Morrison, 2013; Wong, 2002). When collaboration is successful, new teachers are more likely to persist in the profession.

Administrator support is essential to new teachers feeling successful in their practice and persisting in the profession. Every participant from RSU 17 and 59 who plan to persist in the profession expressed satisfaction in administrative support. Participants perceived that effective support takes place in the form of helping with classroom management, facilitating collaboration, having an open door policy, transparency in the available supports, and answering questions when new teachers ask for help. When school leaders provide new teachers with opportunities to experience success, new teachers can build capacity and efficacy in their career (Morrison, 2013).

Factor 3: Induction and Mentoring

In 2008 Maine revised Chapter 118 to align with the research surrounding induction and mentoring with the goal of reducing beginning teacher attrition (Maine Department of Education, 2012). Whereas districts in Maine are required to have a plan on file, not all districts are following this plan. This is evident by the ten participants who never received a mentor in their first years of teaching. Therefore, the researchers found that in Maine a state mandated program does not translate into consistent implementation, a pattern in the literature on the topic (Cook, 2007; Fletcher & Strong, 2009; Washburn-Moses, 2010). There are also inconsistencies in the

type of induction activities offered to new teachers. While some experienced orientation, new teacher meetings, district classes, and peer observations, others did not.

Induction has the potential to be impactful to new teachers in terms of acclimating them to the culture of the district, networking, and observing peers. Additionally, an induction program can gain, support, and retain new teachers for a school district (Wong, 2002). However, school leaders must be mindful of their audience during induction activities and be sure to provide support for all teachers. If school leaders are not mindful of specialized areas like music and special education, they run the risk of isolating new teachers and potentially losing them from the district. The findings from this study agreed with Wong (2002) that administrative support, networking, and mentoring are all elements of successful induction programs.

According to the data collected in this study, peer observation and networking are the most impactful factors of the induction programs in RSU 17 and 59. The researchers agree with others who have suggested that observations can become a framework for pedagogical discussions at the level of classroom practice (Haggarty et.al, 2011) and can affect new teacher perceptions of their own teaching (Turley et al., 2006). New teachers feel supported and affirmed when they know that they are not alone in the struggles of teaching (Andrews & Quinn, 2005). Networking and peer observations can alleviate this feeling of isolation and can offer new teachers support and strategies for success.

An important component in an induction program is mentoring, however less than 30% of new teachers surveyed in RSU 17 and 59 report having a mentor in their first years teaching. However, there is a strong perception amongst new teachers that mentoring is a critical factor in new teacher persistence. Many of these teachers wished for a mentor and found ways to receive informal mentoring through collaborating with peers and networking. Although this is a type of

mentoring (Kwan & Lopez-Real 2005), it is not consistent with research based best practices such as having a mentor in the same field, mentor familiarity with the content area, common planning time, scheduled collaboration with other teachers beyond just the mentor, frequent observations, and goal setting (Cook, 2012; Ingersoll & Smith, 2004). Although these practices are not being utilized, over 55% of new teachers surveyed plan on persisting in the career, while 23% are still unsure.

Implications for Practice

The implications from this study are primarily directed at school leaders who both interpret and implement state mandates along with those who immediately supervise and support new teachers. Administrators must strive to find balance between supporting new teachers while protecting them (Iordanides, & Vryoni, 2013) so that they may develop their craft and ameliorate feeling overwhelmed (Turley et.al, 2006). As the leader of a building, the principal is responsible for selecting qualified new teachers (Johnson et al., 2004). School leaders must ensure that new teachers are genuine in their career path and find satisfaction in working with students. Additionally school leaders must build time for collaboration between new and veteran teachers. This may include building common planning time into the schedule, supporting professional learning communities in areas of need. Along with time for collaboration, school leaders must facilitate informal or formal mentoring relationships that include time for planning, peer observations and reflection.

Future Research

From this study, a need for future research in the areas of collaboration, administrator perceptions, and state mandated induction and mentoring arose. Future research would be necessary to identify the areas of collaboration that new teachers find to be the most beneficial to

their teaching and persistence in the profession. Additionally, analyzing administrator perceptions of successful support strategies for new teachers may help to connect new teacher perceptions with administrative practices. With inconsistencies in induction and mentoring implementation and the differences between formal and informal mentoring, more research needs to be done to assess the impact of these factors on teachers in rural Maine.

Conclusions

Of the thirty participants in this study who are in the first five years of the profession, only 57% note that they will persist in the profession. It is the 23% of teachers that are unsure of persistence in the career that will determine the overall attrition rate of the population. Conceivably, this group could choose to leave the profession, causing the attrition rate to be 43%, close to the 46% national attrition rate (as cited in Andrews, Gilbert, & Martin, 2012). Although some of the factors affecting teacher persistence are out of school leaders' control, like satisfaction in working with students and having an out of school network, leaders do have control over some impacts. It is the responsibility of school leaders to assess their current practices and align them with the best practices in supporting new teachers: provide support to teachers through an open door policy, answer questions, and help with classroom management. Purposeful induction activities include networking opportunities and peer observations; facilitating a mentor relationship, whether formal or informal, that is effective in meeting the new teacher's needs; and facilitates collaboration through grade level meetings, common planning time, and professional learning communities. By doing this, school leaders can keep teachers in classroom; these same teachers who persist primarily for the satisfaction that they feel in working with students.

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Appendix A

Dear Classroom Teacher,

You are being invited to participate in a research project being conducted by Laurie Catanese (laurie.rodrique@maine.edu) and Samuel Harper (lee.harper@msad59.org) as a part of the graduate program at the University of Maine Farmington. Johanna Prince, Interim Director of Graduate Programs in Education is the supervising instructor. The purpose of the research is to understand why teachers in rural Maine persist in the teaching career and to understand the extent to which mentoring and induction are a factor. If you decide to participate, you will take the survey linked below and your identity will be anonymous.

Risks

- There is the possibility that you may be uncomfortable with some questions, and you are free to skip any questions you do not wish to answer.
- The time and inconvenience of the survey may be risks of participating in the study.

Benefits

There are no direct benefits to you from participating in the study. However, as a participant you may enjoy sharing your perceptions of mentoring, induction, and persisting in the teaching career.

Confidentiality

This research is being conducted under the direct supervision of the course instructor. Your identity will not be known to any of the researchers.

Voluntary

Participation is voluntary. If you choose to take part in this study, you may stop at any time. You may skip any questions you do not wish to answer.

I understand the purpose of this research and the procedures to be followed. I understand that at no time will my identity be revealed. I understand that participation is voluntary, and that I may withdraw at any time without penalty. I also recognize that I may skip any questions I don't wish to respond to. Results of this research may be shared in class, in publications, or in verbal presentations. If I have any concerns or inquiries about my rights as a subject or the manner in which this research is conducted, I understand that I can contact Johanna Prince (207) 778-7066 or johanna.prince@maine.edu, advisor on this study.

By clicking the link below and taking the survey I fully understand the above and give my consent to serve as a subject in this research.

(If you would like a summary of the results, please make the request of the researcher at the contact given above).

Appendix B

Dear Rick Colpits /Todd LeRoy,

Our names are Laurie Catanese and Samuel Harper and we are graduate students at the University of Maine Farmington. We are interested in conducting a research study during the spring semester of 2015. We will be collecting data in January-April and presenting our research to our peers in an open symposium. We are interested in understanding why beginning teachers persist in education as a career, and whether or not induction and mentoring were factors in their decision to remain in the classroom.

We would like to send out an electronic survey by email to all teachers who have taught for 5 years or less in RSU/MSAD 17 and RSU/MSAD 59. By clicking on a link in the email, teachers will agree to give consent to participate in the survey. Participation is voluntary and participants can stop taking the survey at any time.

We will not share identifiable data about specific teachers, students, parents or others involved in the study. If you have any questions about the research, you may contact the principal investigators, Laurie Catanese, Oxford Hills Middle School, (207) 578-1080, laurie.rodrique@maine.edu, or Samuel Harper, Madison Junior High School, (207) 431-4827, lee.harper@msad59.org. You may also reach the faculty advisor on this study at (207) 778-7066 or johanna.prince@maine.edu.

Thank you for considering our request to conduct research,
Laurie Catanese and Samuel Harper

I have reviewed Laurie Catanese and Samuel Harper's research plan for "Why Beginning Teachers Persist in the Profession and the Impact of Induction and Mentoring." I give my consent to conduct this research during the spring semester of 2015. I am aware that I can review the data and discuss the research project at any point during the research. I may also ask to view the report at the end of the study.

Date

Name

Position in District

Appendix C

Quantitative Survey

How many years have you been a classroom teacher?

- 1
- 2
- 3
- 4
- 5
- 6-10
- 11-15
- 16-20
- 21+

How many years have you been in your current district?

- 1
- 2
- 3
- 4
- 5
- 6-10
- 11-15
- 16-20
- 21+

What grade(s) do you teach/have you taught (check all that apply)?

- K
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

What subject(s) do you teach/have you taught (check all that apply)?

- Language Arts
- Math
- Science
- Social Studies
- Special Education
- Art
- Music

Physical Education
 Health
 Other _____

Rate each induction activity in terms of its usefulness to you as an educator, 1 is the most useful while 6 is the least useful. Indicate N/A for activities you have not participated in.

____ District New Teacher Orientation
 ____ New Teacher Meetings
 ____ Peer Observations
 ____ Pre-School Workshops
 ____ District Classes
 ____ Networking with Other Teachers

I was assigned a mentor for my first year of teaching in my district.
 yes/no

Please rate the following statements on the following scale:

1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree

My college and/or university training prepared me for teaching

1 2 3 4 5

My mentoring experience was supportive and helped me to feel successful.

1 2 3 4 5

The school climate in my building is positive.

1 2 3 4 5

I am encouraged to share my ideas with my peers and to take initiatives.

1 2 3 4 5

Teacher relationships in my building are positive.

1 2 3 4 5

Administration is supportive of teachers.

1 2 3 4 5

Parents are supportive of teachers' efforts.

1 2 3 4 5

Students in my school are engaged in learning.

1 2 3 4 5

I enjoy working with students

1 2 3 4 5

I have a supportive out-of-school network

1 2 3 4 5

I feel as though I have achieved a balance between my school life and my personal life.

1 2 3 4 5

I plan to stay in education as a career.

1 2 3 4 5

Please rate the following factors as they have impacted your persistence in teaching. One is the most impactful factor. Please indicate N/A for areas not applicable to you.

- _____ Induction Activities (District New Teacher Orientation, New Teacher Meetings, etc.)
- _____ Mentoring
- _____ School Climate
- _____ Administrative Support
- _____ Collaboration
- _____ Satisfaction in working with students
- _____ Preparation
- _____ Out of school network
- _____ Other _____

Appendix D

Qualitative Survey

How many years have you been a classroom teacher?

- 0
- 1
- 2
- 3
- 4
- 5

How many years have you been teaching in your current district?

- 0
- 1
- 2
- 3
- 4
- 5

What grade(s) do you teach/have you taught (check all that apply)?

- K
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

What subject(s) do you teach (check all that apply)?

- Language Arts
- Math
- Science
- Social Studies
- Special Education
- Art
- Music
- Physical Education
- Health
- Other _____

Rate each induction activity in terms of its usefulness to you as an educator, one is the most useful while six is the least useful. Indicate N/A for activities you have not participated in.

- _____ District New Teacher Orientation
- _____ New Teacher Meetings
- _____ Peer Observations
- _____ Pre-School Workshops
- _____ District Classes
- _____ Networking with Other Teachers

How have the induction activities impacted your teaching or your perception of the teaching career?

Have you been assigned a mentor? How does this relationship impact your teaching and/or perception of the teaching career?

Describe the school climate in your building.

Do teachers collaborate in your building?

How supportive are your administrators (in terms of your practice, teacher collaboration, new teachers taking initiative, etc.?)

Do you have a supportive out-of-school network? How has this impacted your teaching?

Do you feel your undergraduate work adequately prepared you for the teaching profession? Explain.

Do you feel as though you have achieved a balance between your professional life and your personal life? Explain.

What are the two biggest challenges you have faced in your career?

Did/Do you feel supported in facing these challenges? How?

Please rate the following factors as they have impacted your persistence in teaching. One is the most impactful factor while eight is the least impactful. Please indicate N/A for areas not applicable to you.

- _____ Induction Activities (District New Teacher Orientation, New Teacher Meetings, etc.)
- _____ Mentoring
- _____ School Climate
- _____ Administrative Support
- _____ Collaboration
- _____ Satisfaction in working with students
- _____ Preparation
- _____ Out of school network
- _____ Other _____

Comments:

Is there anything your district could have done/could do to better support you?

Do you think you will continue to persist in an education as a career? Explain.

Appendix E

Dear Todd LeRoy,

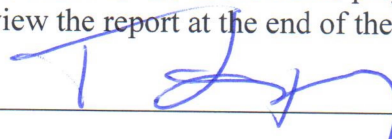
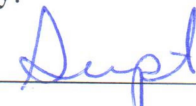
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We will not share identifiable data about specific teachers, students, parents or others involved in the study. If you have any questions about the research, you may contact the principal investigators, Laurie Catanese, Oxford Hills Middle School, (207) 578-1080, *laurie.rodrique@maine.edu*, or Samuel Harper, Madison Junior High School, (207) 431-4827, *lee.harper@msad59.org*. You may also reach the faculty advisor on this study at (207) 778-7066 or *johanna.prince@maine.edu*.

Thank you for considering our request to conduct research,
Laurie Catanese and Samuel Harper

I have reviewed Laurie Catanese and Samuel Harper's research plan for "Why Beginning Teachers Persist in the Profession and the Impact of Induction and Mentoring." I give my consent to conduct this research during the Spring semester of 2015. I am aware that I can review the data and discuss the research project at any point during the research. I may also ask to view the report at the end of the study.

11/12/14		
Date	Name	Position in District

Appendix F

Dear Mr. Colpitts

NOV 13 2014

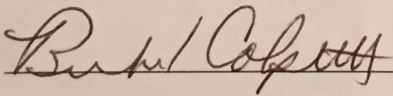
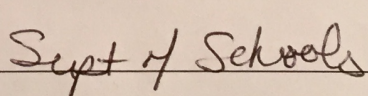
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11/13/14		
Date	Signature	Position in District

Appendix G*Quantitative Survey Participant Teaching Roles and Years in Education*

Participant	Years in Education	Years in Current District	Grade Levels Taught	Subject Areas Taught
1	1	1	2	Language Arts, Math, Science, Social Studies
2	1	1	7, 8	Social Studies
3	1	1	9, 10	Science
4	1	1	10, 11, 12	Language Arts
5	1	1	K	Language Arts, Math
6	1	1	9, 10, 11, 12	Math
7	1	1	2	Language Arts, Math, Science, Social Studies, Special Education, Health
8	1	4	7, 8, 9, 10, 11, 12	Language Arts
9	2	1	9	Social Studies
10	2	2	9, 10, 11, 12	Language Arts
11	2	2	11, 12	Career and Technical Education
12	5	4	7, 8, 9, 10, 11, 12	Language Arts, Social Studies
13	5	5	K, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	Language Arts, French

Appendix H*Qualitative Survey Participant Teaching Roles and Years in Education*

Participant	Years in Education	Years in Current District	Grade Levels Taught	Subject Areas Taught
1	5	5	K, 1, 2, 3, 4, 5, 6	Language Arts, Math, Science, Social Studies, Special Education
2	1	1	1	Language Arts, Math, Science, Social Studies
3	2	2	9, 10	Special Education
4	1	1	9	Math
5	1	1	2	Language Arts, Math, Science, Social Studies, Health
6	4	4		Music
7	3	3	9, 10, 11	Special Education
8	4	1	K, 1, 2, 3, 4, 5, 6, 7, 8	Music
9	3	2	3, 4	Language Arts, Math, Science, Social Studies, Special Education
10	4	4	7, 8	Science, Social Studies
11	5	5	K, 1, 2, 3, 4, 5, 6	Language Arts, Math, Science, Social Studies, Special Education
12	3	3	2	Language Arts, Math, Science, Social Studies
13	1	1	5, 6	Math, Science, Engineering, Technology
14	5	5	5, 6	Language Arts, Math, Science, Social Studies, Health

15	4	1	K, 1, 3	Language Arts, Math, Science, Social Studies
16	1	1	K, 1, 2, 3, 4, 5, 6	Language Arts, Math, Science, Social Studies, Special Education
17	1	3	2	Language Arts, Math, Science, Social Studies, Special Education