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# A study of novice teachers: Challenges and supports in the first years

Robert D. Fantilli\*, Douglas E. McDougall

Ontario Institute for Studies in Education of the University of Toronto, 252 Bloor Street West, Toronto, ON, Canada M5S 1V6

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#### ABSTRACT

In recent years, it has been reported that an alarming number of teachers are leaving the profession in the first three years after graduation from a pre-service program. This phenomenon is common in North America and it is essential that educators identify the challenges surrounding new teachers and provide supports to assist them. The vast majority of literature surrounding new teacher induction and mentorship support is void of the Canadian context and the novice teacher voice. In this study, Ontario graduates from a two year pre-service program were surveyed and 5 teachers were selected for case studies. Participants found administrative leadership, refining the mentorship selection process, hiring practices, and district-sponsored supports as positive factors necessary for them to grow into the profession.

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# 1. Introduction

Over recent decades high levels of attrition surrounding beginning teachers has been well documented (Shakrani, 2008). Research studies of North American school districts have established that an approximate 40–50% of teachers exit the profession within their first five years (Anderson, 2000; Ingersoll & Smith, 2003; Maciejewski, 2007). Teacher retention problems in many American districts have resulted in a disproportionate number of inexperienced, uncertified and/or under-qualified teachers placed in urban schools across the United States. These inner-city schools serve primarily low-income students, thereby subjecting a large number of students in high-turnover schools to a continuous cycle of ineffective instruction (Shields et al., 2001).

While strong evidence suggests that teacher effectiveness spikes sharply after the first few years in the profession, research shows that many teachers exit prior to attaining this level of expertise (Kain & Singleton, 1996; Worthy, 2005). This trend is particularly troubling in light of the wealth of research suggesting that well-prepared and capable teachers have the largest impact on student achievement (Darling-Hammond, 2000; Wilson, Flodent, & Ferrini-Mundy, 2001). To ensure a quality education to students, school districts must staff schools with highly qualified personnel. However, novice teachers continue to leave the field because of inadequate socialization structures (Joiner & Edwards, 2008).

Almost instantly, a beginning teacher has the same responsibility as a teacher with many years of service. Lortie (1966) coined the phenomenon of the beginning teacher thrown into the deep end to sink or swim as the Robinson Crusoe approach. Despite an elapse of over forty years, the trend in education as it relates to the socialization of new teachers remains a sink or swim mentality (Maciejewski, 2007). Halford (1998) refers to teaching as "the profession that eats its young." New teachers assume the complete duties of a veteran teacher including the instruction and management of a full contingent of students (Worthy, 2005). Clearly, apart from being extremely hectic, the first year is generally the most difficult in a teacher's career. Moreover, new teachers spend a disproportionate amount of time and effort simply to keep their heads above water. Marshall, Fittinghoff, and Cheney (1990) suggest that it is not until they have survived the initial shock of the first year that novices are able to begin to concentrate on the important areas of long-term planning, overall student goals, and individual students' needs.

Beginning teachers in difficult situations often feel like failures. Without adequate supports, only the strongest and most determined teachers succeed (Colbert & Wolfe, 1992). When beginning teachers are left to "sink or swim" without support, the costs to schools and districts are tremendous (David, 2000). In short, the experiences novices encounter upon their transition often results in creative and talented teachers finding their work frustrating, unrewarding and intolerably difficult which ultimately increases their risk of becoming a casualty of the profession.

A number of studies have been conducted to better understand the concerns of novice teachers. Meister and Melnick (2003)

<sup>\*</sup> Corresponding author. Tel.: +1 416 458 1400. E-mail address: rfantilli@oise.utoronto.ca (R.D. Fantilli).

document the experience of 273 first and second year teachers across the United States in effort to better understand this phenomenon. In examining new teachers' perceptions as they transitioned from pre-service to in-service training, three major concerns emerged: managing the behaviour and diverse needs of students, time constraints and workload, and conflict with parents and other adults. Further, a synthesis of over 100 studies on the transition to teaching cited classroom management, discipline, motivating pupils, dealing with individual differences, assessment, relations with parents, classroom organization, insufficient resources and dealing with problems of individual students as the most challenging areas for students (Veenman, 1984, 1987). Still other studies identified setting up the classroom, preparing for the first weeks of school, curriculum expectations, salary and the maintenance of personal sanity as areas which posed the greatest difficulties for beginning teachers (Britt, 1997; Ganser, 1999; Mandel. 2006).

The short-term retention of new teachers at the outset of their career is influenced by the level and quality of support they receive (Joiner & Edwards, 2008). Teacher induction and/or mentorship programs aimed at supporting the novice in his or her transition from student of teaching to teacher of students have become more prevalent during recent years. As such, there are documented benefits to novice teachers' participation in well-designed and well-funded programs which feature quality support and training for carefully selected, qualified mentors (Brock & Grady, 1998; Darling-Hammond, 2003).

The benefits of mentoring for novice teachers include: increased retention rates; substantial professional development, improved self-reflection and problem solving abilities, adoption of the instructional strategies and practice of the mentor, greater levels of confidence and self-esteem, reduced feelings of isolation and increased positive attitudes (Bush & Coleman, 1996; Darling-Hammond, 2003; McIntyre & Hagger, 1996). The research reveals numerous practices which can be adopted by school leaders in order to promote school practices that can effectively induct novices. In addition to building genuine relationships with novice teachers, administrators are encouraged to provide novices with comprehensive orientation programs.

# 2. Purpose of the study

From 2002 to 2005, teachers in Ontario had to successfully complete a written test as a requirement of licensure in becoming a qualified teacher. In 2005, the Ontario government eliminated the Ontario Teacher Qualifying Test (OTQT). They then mandated that, instead of completion of the OTQT, all new teachers will be required to participate in the New Teacher Induction Program (NTIP). This constitutes a major change in the landscape of teacher preparation, certification and training in Ontario, and thus presents a large gap in the existing research surrounding the induction of novice teachers from pre-service to in-service, particularly in the Ontario context.

This study documents the experience of first, second and third year teachers in Ontario. The participants of the study commenced employment with school districts between 2004 and 2006. In light of the substantial changes occurring in terms of induction support for novices over the course of these three years, this study seeks to fill the gaps in the existing literature surrounding the specific experiences of novices in Ontario classrooms as well as to ascertain the perceived level and efficacy of supports available to them. Moreover, this study serves to extract the voice of the novice teacher and chronicle his or her specific experiences in the unique context just prior to and during a transition period of government mandated change to the teacher induction process.

In summary, the purpose of this research study is to investigate novice teachers' experiences as they move from pre-service to inservice. In doing so, this study aims to add the novice teacher voice to existing research and ascertain where and how new teachers require support so that schools, administrators, district boards, the ministry of education, and governing bodies can effectively support the success of newcomers to the profession.

#### 3. Statement of the problem

Studies have shown that induction programs assist new teachers in making the transition from pre-service students to teachers. Given the need for the voice of the new teacher in the process of defining what is required for them to meet challenges with success, there is a gap in existing research. The voice of the novice teacher in the Ontario context, with particular reference to the experiences and challenges faced in the first years of teaching, ought to be fundamental in creating or modifying any program or policy that is aimed at mitigating challenges for novices and increasing their opportunity for success in the profession. In essence, understanding the novice teacher reality in a changing landscape in Ontario schools must include the voice of those for whom the changes are being implemented. From this perspective, the underlying research questions for this study were as follows:

- What are the major challenges new teachers face in their first years of teaching?
- 2. What existing supports were available to assist new teachers?
- 3. What supports would have mitigated the challenges they faced as a new teacher?
- 4. What role did induction and mentorship play in their experiences as a new teacher in Ontario?
- 5. How can induction practices and mentorship programs better address the needs of beginning teachers in Ontario?

# 4. Significance of the study

There is a need for research on the effects of mentoring and induction programs on new teachers' experience (Kardos & Johnson, 2007). In particular, there is a need to know the effect of these programs on new teachers' satisfaction, and their sense of efficacy. Through an interpretive and naturalistic approach to the novice teacher's world in transition from pre-service to in-service, the intention of this undertaking is not to merely reproduce the reality faced by novices participating in induction programs in Ontario. Rather, this study aims to incorporate the voice of novice teachers and derive insight and understanding from their experiences to inform policymakers, administrators and other major stakeholders in education.

Given the recent change in the certification process for teachers in Ontario, this study is unique on two fronts. First, given the recent developments in teacher certification, this study explores the perspectives of the novice teacher on issues related to the challenges and supports in place to assist them in their transition from preservice to in-service, with a focus on mentorship. Second, this study adds a Canadian context to the current body of research. The vast majority of published research on novice teachers, mentorship, and induction is primarily conducted in the United States. The contexts for teaching in the United States and Canada have some similarities, but also have many differences. This research undertaking serves to provide a voice for graduates of a teaching program in Ontario who are employed by school boards in Ontario and whose experiences are unique additions to the current body of research. The findings may serve as a stepping stone for future investigation and inquiry.

From the perspective of a newly certified teacher, the knowledge gained from this research may serve administration, school boards, pre-service education institutions, provincial and state teacher organizations, and other educational institutions by laying the foundation for further research into what effective induction and mentorship programs should look like and what supports and training are required in order to facilitate success for new teachers entering the profession.

# 5. Methodology and research design

In this study, a mixed method approach was employed in which both qualitative and quantitative analyses were used to gain the individualized perspectives and thoughts of novice Ontario teachers regarding the challenges faced in their first year(s) of teaching, and regarding the efficacy of supports in place to assist them. In addressing the question *How have challenges and supports influenced your experience as a new teacher?* This study employed the use of an online survey and follow-up interviews to allow the voice of the novice teacher to inform the research. Those interviews formed the basis of individual case studies.

Likert-scale questions and analysis of the online survey represent the quantitative portion of this mixed methods approach, while open-ended survey questions and follow-up interviews represent the qualitative portion in sequential order. The purpose for incorporating this approach to data gathering is to add value to research findings retrieved from the study in a manner that is not supported solely by one form of data (Brewer & Hunter, 1989; Tashakkori & Teddlie, 1998).

Mertens (2003) and Punch (1998) suggest that one of the viable reasons for engaging in mixed methods research is for the purpose of using quantitative data to inform further qualitative study that enables the extension of findings of the former. More specifically, this study employed a mixed methods investigational approach to data gathering for the purpose of garnering statistical, quantitative data and information from a sample population of new teachers in their first years, and then used this sample to identify individual teachers that were able to extend findings through qualitative data.

The use of case study, as derived from follow-up interviews in this research study, aimed to serve as a powerful means for the new teacher voice in Ontario to be heard and to add context to challenges faced in the first years in the profession in light of a changing landscape of teaching in Ontario. The five follow-up interviews are

individual case studies that represent this portion of the research study. According to Stake (1994), a case study is not a method of inquiry but rather it is one of the most common approaches to qualitative research that can be defined by the interest in an individual case. He identifies three variations of a case study as the intrinsic, the instrumental, and the collective. In that the first two variations refer to a particular case, this study employs the collective approach.

With even less intrinsic interest in one particular case, a researcher may jointly study a number of cases in order to investigate a phenomenon, population, or general condition...Individual cases in the collection may or may not be known in advance to manifest some common characteristic. They may be similar or dissimilar, redundancy and variety each important. They are chosen because it is believed that understanding them will lead to better understanding, perhaps better theorizing, about a still larger collection of cases. (Stake, 1994, p. 437)

In essence, it is through the case studies and storied experiences of new teachers in Ontario that the complexity of the challenges faced at the onset to teaching can begin to be better understood.

Moreover, Connelly and Clandinin (1990) note that, "humans are storytelling organisms who, individually and collectively, lead storied lives. Thus, the study of narrative is the study of the ways humans experience the world" (p. 2). It is from this platform that this study proceeded to tell the stories of novice teachers in the new landscape of education in Ontario. The following figure illustrates the research approach employed in this study as described above (Fig. 1).

# 6. Sample

The sample of 86 prospective teacher participants was drawn from graduates (classes 2004–2006) of a two year initial teacher education program at an Ontario university. The program offers students the opportunity to combine theory and practice over a two year period. Students complete 16 courses as part of their initial teacher education and four practicum blocks of approximately 5 weeks each where they gain up to 100% of hands on teaching experience in a classroom setting as they progress from one practicum to the next.

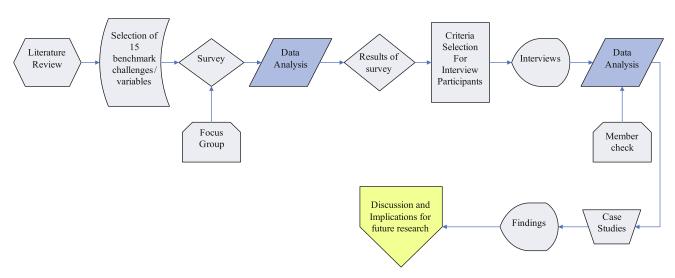


Fig. 1. Methodological approach and research design flow chart.

Teaching assignments of the participants span the primary, junior and intermediate divisions. All participants are certified to teach in Ontario and, at the time of the initial survey, had three years or less teaching experience and taught in a traditional classroom setting. In part, the purpose for choosing participants from this sample of graduate students was to work with a sample of teachers that have had extensive initial teacher education with a considerable amount of practical experience in a classroom setting. The rationale for this component was to mitigate the lack of sufficient pre-service experience as a factor giving rise to the challenges faced by novice teachers.

#### 7. Data collection

Eighty-six graduates of the two ear graduate pre-service teacher education program (2004–2006) were invited via e-mail to participate in an online survey regarding their experiences as a new teacher for the purposes of this graduate research study. The survey was comprised of open-ended questions as well as questions based on a Likert-scale. Moreover, prospective participants were made aware that follow-up face-to-face interviews may be requested and were also informed of the risks and benefits associated with the research study.

Survey data were reviewed and analyzed to determine the degree of which 15 benchmark variables posed a challenge in their onset to teaching. These data were further analyzed to determine correlations, if any, between the variables. Using analytical software, a factor analysis was conducted to determine which of the fifteen variables corresponded to each other. Finally, information from data collection and analysis formed the basis for a framework for interview questions. The criteria for interview selection were based on responses to questions pertaining to mentorship status and satisfaction with the amount of time participants had to prepare for their first teaching assignment.

In creating the survey, a focus group of three prospective novice teacher participants was formed to provide insight into survey questions and word choice to ensure that the survey would present questions that would allow the voice of the new teacher to be heard without limitation by wording or question format. Based on data retrieved from the survey, a correlation analysis was conducted to determine any relationships among the variables tested. Survey results were summarized, analyzed, and filtered based on a number of variables to ascertain noteworthy information. Results of both quantitative and qualitative data from the survey were used as criteria selection for interview participants as well as to inform interview questions. After analyzing and summarizing qualitative data from interviews, individual case studies were sent back to interview participants as a member check to ensure that individual stories were accurately interpreted and presented in interview data.

#### 8. Data analysis

Quantitative and qualitative survey data collected were analyzed to determine the common challenges that exist among the participants. The survey data were analyzed using correlation, factor analysis, and principal components analyses principles. SPSS was used to assist with the data analysis. This software program was chosen on the basis that it is among the most widely used programs for statistical analysis in the social sciences and its simplicity and ease of use for educational research (AGOCG, 1998).

Correlation analysis was conducted between the fifteen benchmark challenges to measure the strength and direction of the linear relationship between two quantitative variables. As a result of correlation analysis, seven strong positive correlations were identified. However, in effort to gain a deeper understanding of the correlations, further factor analysis was conducted to isolate which main "key" variables affected the fifteen benchmark challenges as a whole. In this regard, SPSS was utilized to conduct factor and principal component analysis.

Factor analysis was employed for the purpose of data reduction or structure detection among the fifteen key variables measured. SPSS factor analysis procedures were required to obtain principal component analysis which revealed four factors that affected all 15 variables and contributed to over 68% of the variance in responses. While four factors contributed to variance in data correlation, definitively identifying the four factors that affected all fifteen variables was difficult due to the fact each variable carries its own unique factors that may or may not influence another variable.

The use of narratives was employed to delve deeper into the reasons why participants reported various challenges and to augment current research in this field by serving as a compliment to existing quantitatively oriented studies. Furthermore, this study aimed to shed light upon novice teachers' perceptions, beliefs and personal narratives of daily experiences and to provide insights into the challenges and supports that novice teachers face.

In employing various forms of data in the research survey process, and in relying upon the analysis of such data to inform qualitative research by means of follow-up interviews, this study benefited from triangulation of data. Particularly relevant to the design of this study is methodological triangulation which involves using more than one method to gather data in studying a problem. In particular, this is evidenced in the collection of data through open-ended survey questions, quantitatively coded Likert-scale questions, and interviews.

The questionnaires were coded after each question was read in its entirety several times to better understand the participants' experiences, thoughts and feelings. The role of language in the questions and data analysis was analyzed for any limitations that are inherent to language as well as the extent to which word choice in the study authentically captured the experiences of participants. In this regard, a focus group of three respondents provided feedback on questions, word choice and the overall design of the survey.

# 9. Results and findings

A total of 54 graduates responded to the online survey, resulting in a response rate of just over 65%. Fifty-two of the fifty-four respondents were female and two were male which is reflective of the disproportionate number of females to males in the two year program. Of the 54 respondents to the survey, 30.8% (16), approximately 27% (14) of participants in the survey were in their second year and approximately 42% (22) of respondents were in their third year of teaching.

Survey questions probed a number of challenges for novice teachers based on 15 challenges identified in the literature as being important in other studies. The 15 challenges identified as part of the survey were hiring practices, classroom management or behaviour issues, report cards, meeting special needs, English as a Second Language, Individualized Education Plans (IEPs), longrange planning, amount of classroom resources, balanced literacy, numeracy, communication with parents, in-service professional development, communicating with colleagues, communicating with administration, salary and wages.

Of those who contributed to these questions, average response rates indicated that 52.1% (24) rated hiring practices and meeting special needs as the most challenging as a novice teacher. The amount of classroom resources was found to be challenging by 40.4% (19) of respondents, 36.9% (17) found Individualized

Education Plans to be challenging, and 34.8% (16) found English as a Second Language to be challenging.

Survey data also revealed the significance of other challenges for new teachers who partook in this research study, such as classroom management (31.2%), salary and wages (31.2%), balanced literacy (25.6%), long-range planning (25.5%), communication with parents (20.8%), and communication with administration (17%).

In analyzing survey data using various questions as filters to isolate variables, two major findings gained noteworthy attention and compelled further review. The amount of time participants reported as having had to prepare for their first teaching assignment was one area that appeared to have influence on the challenges faced. The second filter that called for further inspection was the mentorship relationship beginning teachers had in their first years. The subsequent segments of this paper will devote attention to results derived from these two question filters.

# 10. Mentorship status

When filtered according to mentorship status, survey data revealed that, of the 16 respondents who reported having a formally identified mentor, the amount of classroom resources posed the greatest challenge with 62.5% rating this a 4 or 5 on a five-point Likert-scale question, with five representing "very challenging." The remaining top five challenges for this group of respondents were meeting special needs (50.1%), salary and wages (37.6%), classroom management (31.3%), communication with administration (31.3%), and balanced literacy (31.3%). Most astonishing, however, is that 62.5% of those who reported having a formally identified mentor also reported having given consideration to leaving the profession.

Twenty-four participants reported having an informal mentor from the beginning. For these teachers, meeting special needs was identified as the greatest challenge (54.2%), followed by IEP's (37.5%), ESL (33.3%), amount of classroom resources (33.3%), and classroom management (29.1%). Interestingly, teachers who relied on informal mentors for support found the amount of classroom resources much less challenging. Moreover, classroom management and meeting special needs were fairly equally ranked. This sample of participants was less likely to report having given consideration of leaving the profession (41.7%).

Alternatively, seven participants reported having no mentor. For these respondents, the greatest challenges were identified as hiring practices (71.5%), ESL (57.2%), IEP's (57.2%), communication with parents (57.2%), and salary/wages (57.2%). Although those in this category represent a small portion of those surveyed, the frequency with which they reported their top five challenges is remarkable with over half of the respondents identifying similar challenges. Most striking however, is that of this sample of participants, only 28.6% contemplated leaving the profession as a direct result of the challenges they faced in their teaching experience to that point, while 71.4% of this sample had not. This statistic appears to be more exceptional when compared to the sample of those who reported having formal mentors who, according to survey data, are more likely to leave the profession.

Holistically, regardless of mentorship experience, meeting special needs was common in the top five challenges. Interestingly, however, communication with parents was one of the top challenges for those who had no formal mentor and not for those with formal or informal mentorship. The following chart illustrates the top challenges for new teacher participants based on mentorship status (Fig. 2).

While these results exposed valid challenges for novice teachers, analysis of how and why such variables posed a challenge in relation to mentorship status necessitated further research and thus informed follow-up interview questions.

#### 11. Ample time to prepare

Having had ample time to prepare for the first teaching assignment is the second filter that revealed noteworthy attention. Twenty-two respondents indicated having had ample time to prepare. The most challenging area for this sample of participants was that of meeting special needs where 40.9% of respondents found this to be "challenging" or "very challenging." Classroom management, IEPs, and the amount of classroom resources were equally ranked as a challenge by 36.3% of this category of participants. Long-range planning was the fifth most challenging aspect for 23.8% of those who reported having had ample time to prepare for their first teaching assignment. Among this group of teachers, 45.5% answered "yes" to having given consideration to leaving the profession.

Conversely, 20 participants disclosed that they did not have ample time to prepare for their first teaching assignment, while two participants in this category chose not to rank the 15 challenges. The remaining 18, in agreement with their counterparts who reported having had ample time to prepare, noted that meeting special needs was the most challenging (64.7%). Salary and wages was challenging for 50% of these participants, while amount of classroom resources was challenging for 44.4% of respondents. ESL and balanced literacy were the fourth and fifth most challenging of the 15 challenges for 41.1% and 33.4% of respondents respectively.

Contrary to those who reported having had ample time to prepare for their first teaching assignment, 55.6% of this sample reported having given consideration to leaving the profession. Meeting special needs was a top concern for all new teachers, regardless of the type of mentorship they had. While the amount of classroom resources was also reported as a top challenge and not mitigated by the amount of time to prepare, salary and wages was unique as a challenge to those for whom preparation time was a concern. The following chart illustrates the top challenges for new teacher participants based on their time to prepare for their first teaching assignment (Fig. 3).

Clearly, the needs and sources of inspiration for newcomers vary. While new teachers reported numerous avenues of support, it is remarkable that almost half (46.8% or 22/47) of respondents reported they have thought of leaving the profession as a direct result of the challenges faced as a new teacher. Teacher attrition is a reality in the profession that requires attention. Leaving the profession is one approach on the spectrum of dealing with challenging circumstances for new teachers. As noted earlier, some beginners internalize feelings of guilt or inadequacy, others may devote countless hours to compensate for lack of preparation time while sacrificing personal and family life, and others handle the difficulties they face in alternate ways.

Survey participants were asked to share their comments on their response to a question about leaving the profession. All 22 respondents who reported having thought of leaving the profession had a comment to share. One teacher, revealing that she has yet to make up her mind on the issue commented that she was "going to give it one more year" before making up her mind (First Year Teacher; Survey, April 24, 2007). A third year teacher echoed this sentiment noting that she was "not leaving the profession immediately, but entertaining the possibility of leaving in the future" (Survey, April, 27, 2007). Overall, there are a range of teacher comments on challenges that lead them to want to contemplate leaving the profession. They include issues that range from student

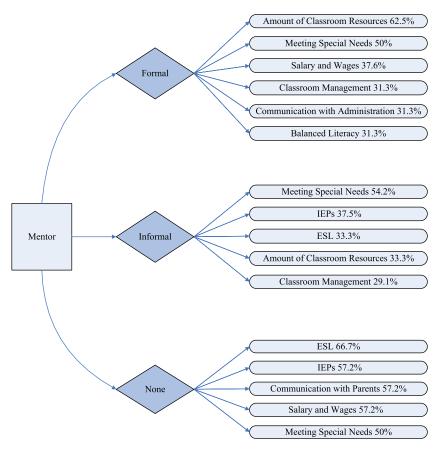


Fig. 2. Flow chart analysis of main challenges faced by new teachers based on mentorship status.

behaviour, to parents, to a lack of administrative support, to salary issues, to politics and span across the various mentoring relationships (formal, informal, or none) and across years of experience from one to three.

Aiming to conduct further analysis to inform interview questions, the data were analyzed and correlated with respect to the 15 challenges to determine any parallels among them. Given that the 15 challenges assessed in the survey were rated on a five-point

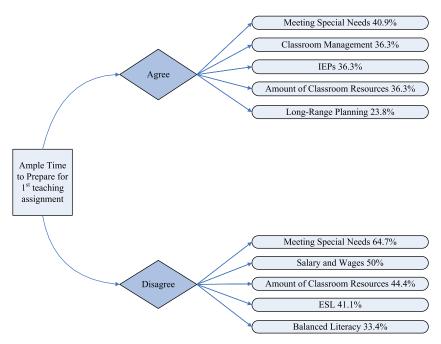


Fig. 3. Flow chart analysis of main challenges faced by new teachers based on time to prepare for first teaching assignment.

Likert-scale, a correlation analysis using predictive analytics software (SPSS) to determine the degree to which there was a relationship among the variables was conducted. Factor analysis was used to measure the strength and direction of the linear relationship between two quantitative variables where the relationship "r" is given a value between negative 1 and positive 1 inclusive. If an r's value is -1, there is a perfect negative correlation. If it falls between -1 and -0.5, there is a strong negative correlation; 0 indicates no correlation; between 0 and 0.5, is a weak positive correlation; between 0.5 and 1 denotes a strong positive correlation and 1 denotes a perfect positive correlation. Using SPSS, correlation among all these variables revealed the following significant strong correlations:

- strong positive correlation between reporting challenges with classroom management/behaviour issues and challenges with IEP's (0.630)
- strong positive correlation between reporting challenges with classroom management/behaviour issues and communication with parents (0.596)
- strong positive correlation between reporting challenges with report cards and long-range planning (0.733)
- strong positive correlation between reporting challenges with meeting special needs and IEP's (0.574)
- strong positive correlation between reporting challenges with IEP's and communication with parents (0.602)
- strong positive correlation between reporting challenges with communication with parents and communication with colleagues (0.655)
- strong positive correlation between reporting challenges with communication with colleagues and communication with administration (0.646)

Based on the results from correlation calculations, and to gain a deeper understanding of which "key" variables affect the fifteen challenges, SPSS was used to conduct further analysis; specifically, principal component analysis. Principal component analysis explained the pattern of correlations within the set of 15 challenges. This analysis assisted in identifying a small number of factors that contributed to over 68% of the variance observed in the larger set or factor analysis.

According to the exploratory factor and principal component analysis, there are four factors or principal components which have an effect on all 15 challenges. However, in reality, it is difficult to definitively identify the four factors without consideration of external factors that may affect relationships between challenges. Therefore, further probing was necessitated on the factors that affect all 15 challenges. This was approached in a two-step process. First, principal component analysis revealed that four factors contributed to over 68% of the variance of the data in reference to the 15 challenges. In conjunction with qualitative responses to open-ended questions, the correlation and principal component analysis supported a re-analysis of data to identify the following 5 themes among the benchmark variables: hiring practices, special needs, communication, teaching practice, salary and wages.

"Salary and wages" was removed from the list of themes as dissatisfaction or challenges reported that relate to this theme would not likely be mitigated by supports in place to assist novices such as mentorship. In essence, remuneration is a fixed and independent variable and therefore this category was separated to inform interview questions and provide insight and information for those for whom teacher compensation is within their control (ie. policymakers, unions, government). Diagram 3 below illustrates the categorization of the fifteen challenges into the 5 themes (Fig. 4):

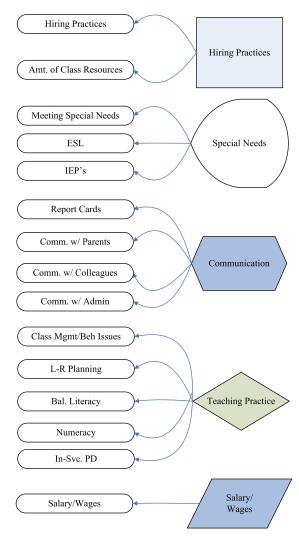


Fig. 4. Thematic of 15 benchmark challenges post factor analysis.

- 1. **Hiring practices**: Amount of classroom resources;
- Special needs: Meeting special needs, Individualized Education Plans:
- 3. **Communication**: Report cards, communication with parents, communication with colleagues, communication with administration
- Teaching Practice: Classroom management/behaviour issues, long-range planning, balanced literacy, numeracy, in-service professional development
- 5. **Salary and Wages**: Second, given that the sample size was not greater, and noting the multi-faceted nature of the challenges faced, informing the interview process was key to gaining an understanding of the stories behind the challenges. Overall, survey results led to the need for follow-up interviews and insight into specific challenges as they relate to new teachers' consideration of leaving the profession in their first years. Moreover, given that the majority of those who reported having a formally identified mentor reported considering leaving the profession, the need for the context of the novice voice in this area became glaringly apparent. Acknowledging the small sample size, and in effort to avoid false assumptions based on the data, interview participants were later asked to provide detailed accounts of their challenges with mentorship as well as other challenges reported which are detailed through the case studies in the second part of this section below.

Taking into consideration that many of the challenges reported by survey participants were multi-faceted and bore an impact on other areas of personal or professional life, the requirement for follow-up interviews became an essential part of the study in order to exfoliate the specific needs of new teachers, regardless of their mentorship experience, to learn how to best support them in succeeding in the profession.

# 12. Case studies

The following section summarizes the qualitative data acquired via interviews with 5 teachers with one to three years of teaching experience. Interview participants were selected using the aforementioned survey data results, namely the two filters used in analyzing survey data: mentorship status (formal, informal, or none) and whether they reported having had ample time or no time to prepare for their first teaching assignment. Each case is presented in the order in which participants graduated from their two year pre-service teaching program.

#### 13. The case of Daniel: the first three years

A teacher surveyed in his third year, qualified to teach at the junior and intermediate levels (Grades 4–10), Daniel reports having had varied experiences and indicates that feelings of isolation and discouragement were a reality for him at the beginning of his teaching career. He cites a school culture that contradicted his philosophy of education and ideal vision of the profession that are at the root of his new teacher experience which he terms "the ugly side of teaching." Plagued by the constant contemplation of leaving the profession, Daniel's first year of teaching is best described as having poor leadership, a lack of quality mentorship, an absence of teaching resources, a need for accountability, frustration, and dependence.

In his first year, Daniel noted that poor leadership in dealing with even the smallest issues crippled the school culture and hindered him tremendously in his growth as a new teacher. He observed that the lack of accountability arose from poor administration, bred laziness, and stifled collaboration to the detriment of students. In short, Daniel's negative experiences in his first year permeated all aspects of the profession. He concedes that, had he had the guarantee of another job, he wouldn't have hesitated to quit his teaching career.

Daniel had a mentor selected for him on the part of administration. His mentorship experience was in comparable to his experience as a whole at inception of his in-service teaching. Lacking what Daniel perceived as a lack of qualification to successfully meet the demands of what a mentor should be, Daniel questioned the motivation of his mentor to volunteer for the position in the first place. Through this experience, Daniel advises that "older, experienced teachers" have countless resources and information that is helpful to the beginner and that refining the mentor selection process would ensure strong mentor candidates who are organized professionals with sound teaching practice and a wealth of classroom experience. Strikingly, Daniel's experience has motivated him to entertain being a future mentor so that he could prevent newcomers to the profession from enduring similar hardships.

Compounding Daniel's challenges was a lack of resource support to aid him in meeting the special needs of students in his class, meeting cumbersome curriculum demands, and classroom management. Daniel reports receiving no programming support for those students who needed it the most for which he felt helpless and guilty. Moreover, this, combined with the challenge of navigating and gaining familiarity with curriculum, translated into

difficulty in communicating with parents and establishing a rapport with students to define a classroom management style.

Internalizing his frustration, and with no basis for comparison, Daniel assumed his first year experiences were typical. This changed when, in his second year, the administration changed and was "all over [staff] getting them back in line." Daniel describes the shift in administrative leadership as so stark that it made him redefine his short- and long-term goals. The increased accountability of all staff members in the school gave Daniel a sense that responsibilities were clearly defined roles and responsibilities were overseen by administration.

In reflecting on his novice teacher experience, Daniel cites district offered unit plans, early grade assignments in conjunction with grade-specific summer institutes, and an effective administration that values divisional and grade planning as top priorities as elements for the successful induction and mentorship of beginning teachers.

# 14. The case of Valerie: the first three years

Reflecting on her first years of teaching Valerie recalls feelings of isolation and an understanding of clinical depression. Valerie graduated her pre-service program with certification at the primary and junior levels (Grades K-6). At the onset of her inservice teaching experience Valerie was the only grade 1 teacher in the school which contributed to her "isolation." Her vision of teaching was shattered by the reality of the myriad of challenges she encountered in her first school.

A lack of additional resource teacher support for special needs students, having an assigned mentor with whom she had no relational foundation personally nor professionally, placed in a community with a homogeneous demographic with which she was not familiar, being the only new teacher in a school with a culture that did not openly share resources, concepts, nor skills, a lack of training on report card systems and how to interpret them to parents, and being moved to a new school due to low seniority and declining student enrolment are many of the factors that contributed to her desire to leave the profession in her first year. Starting her second year of teaching in a new school, Valerie carried a year's worth of bad experiences with her. However, her negative outlook on the profession eased with the realization that she would be teaching the same grade a second time in conjunction with four other grade one teaching partners. Valerie partook in weekly grade one team meetings, divisional meetings and enjoyed the benefit of having a resource teacher whose services were accessible and shared among her team so that every child's needs were serviced.

Valerie's second year was characterized by a team approach to teaching. She observed that having a school administrator who valued leadership contributed to a collaborative school culture in which teacher colleagues were comfortable sharing ideas, resources, and planning strategies. Valerie also valued the empowerment her principal had forwarded her in selecting her mentor. Selecting a colleague with whom she had already begun a working relationship with, and who was teaching the same grade, formed the underpinning of a fruitful mentorship experience that continues to date.

Valerie's experiences have allowed her to better understand what was essential for her to be successful as a new teacher. More time to develop a proficiency with report cards, training to gain a comfort level with teaching music, drama, and physical education and communicating with parents, teacher autonomy in creating and following team meeting agendas, a greater role in mentor selection, and resource support to satisfy student needs are elements she views as cornerstones for success.

#### 15. The case of Cathy: the first two years

Surveyed in her second year of teaching, Cathy's story reveals a myriad of challenges that characterize the inception of her teaching career. She graduated from her pre-service education program in 2005 with certification at the junior and intermediate levels (Grades 4–10) when the OTQT was eliminated and NTIP had not yet been rolled out. Therefore, Cathy had no formal mentorship. Receiving her Grade 6 class teaching assignment, which included nine students for whom Individualized Education Plans needed to be implemented, and in conjunction with the fact that provincial testing is to be administered in Grade 6, Cathy was immediately overwhelmed.

Knowing that she was not adequately prepared by her preservice program nor her board for the year ahead, Cathy contemplated leaving the profession many times. She felt that the onerous workload was not recognized financially or by her school administration. In fact, having received a Grade 6 class, the added burden of alternative planning and reporting for special needs students, provincial standardized testing, being new to the community, having no formal experience communicating with parents via reports or otherwise, Cathy felt her admin had given her one of the most difficult teaching assignments as compared to more experienced colleagues. This was not the teaching experience she had envisioned but was partly motivated by her drive to succeed and the intrinsic reward of making a difference for many students.

Cathy's frustration in her first year of teaching stemmed from a feeling that her lack of preparedness led her to disadvantage the special needs students by widening the gap between where they were academically and where they should be relative to their grade level. She felt that those with special needs should have been with a more experienced teacher who could better handle the multiple demands of her class. Cathy's struggle with assessment and evaluation aggravated the issue. Not knowing how to assess special needs students and not having completed reports before her first term of teaching, she found herself feeling inadequate and a failure to her students.

In conjunction with the aforementioned hurdles faced in her first two years, Cathy had a growing apprehension toward and conflict with her administration which led her to transfer out to a new school for her third year. Given the limited contact with administration, the increase in anxiety that went along with conflict, and nowhere to turn in terms of a formal mentor for advice, Cathy felt alone. She cites having no grade teaching partner, ill-timed and financially cumbersome in-service professional development workshops, poor leadership on the part of administration in cultivating a school culture that welcomes and supports new teachers, a need for increased practical assignments at the pre-service level, and no formal mentorship program as the reasons for which she felt she was not a good teacher in her first year.

Cathy found relatives, colleagues, and fellow graduates of her pre-service program to be a great source of informal support who in union with experience, and have enabled her to see progress in her teaching practice and confidence level. However, she indicates that having a qualified formal mentor in her school who could foresee upcoming challenges and answer questions at any time would have been a great source of comfort practically and emotionally. As a direct result of her experiences, Cathy advises that administrators play a more active role in selecting a pool of qualified mentors from which new teachers can select to work with would be beneficial for newcomers to the profession. She also notes that release days with a mentor would have also been instrumental in her development as a teacher and to achieving success.

#### 16. The case of Connie: the first two years

Connie's story reveals feelings of uncertainty, confusion, and frustration. Having graduated at the time when the Ontario Teacher Qualifying Test (OTQT) was eliminated and the New Teacher Induction Program (NTIP) had yet to be rolled out, Connie slipped through the cracks of a system that failed to provide some form of mentorship or induction at the district or ministry level. She graduated from her pre-service program with certification at the primary and junior levels (Grades K-6).

Learning of her teaching assignment approximately two weeks prior to the start of the school year, Connie struggled with not having enough time to attend to the physical set-up of her classroom, obtain and organize resources, secure student materials, familiarize herself with the curriculum, and adequately prepare herself for the first week of school. Combined with learning her board's electronic e-mail system, reading up on and filling in paperwork pertaining to her hiring and benefits, and purchasing a myriad of sundry items needed for her class out of her own pocket, Connie soon realized she was in a "sink or swim" setting.

Fortunate to be hired to a school where she had fulfilled one of her pre-service teaching practicum placements, Connie felt comfortable asking questions of her former Associate Teacher and now teacher colleague when necessary. Informal mentorship for Connie was a lifeline of knowledge in a sea of challenge. While struggling with assessment, communication with parents, and long-range planning, Connie often called upon her informal mentor to provide the necessary practical information she needed to be successful. She realized that her pre-service education program would have better prepared her with the valuable tools necessary by focusing less on theory and more on practical assignments that reflected her new reality.

Pondering her experiences as a new teacher, Connie views her first two years as being particularly challenging, in part due to having a split grade assignment two years in a row. This led to feelings of inadequacy that translated into challenges communicating with parents at interview time. Although she recognizes her principal, whom she followed in her second year to a new school, as having been extremely supportive, compassionate, understanding, and approachable, she felt she had to prove herself by taking on the more challenging teaching assignment without expressing reservations.

Connie's story sheds light on challenges with perceived judgement on the part of older more experienced staff, who instead of acting as informal mentors, viewed new teachers as not as valuable. This led her to believe that experienced staff were inapproachable, and for fear of making what was perceived as inadequacy, a reality she avoided them. She therefore, either sought help from her informal mentor, or "sank," as she recalls, amidst challenges pertaining to special needs students.

Overall, Connie views her experience as a novice teacher as very challenging and frustrating. Now at the onset of her third year of teaching (2007–2008), Connie finds herself acting as a formal mentor for a teacher colleague who is in his second year of teaching. She voices that she did not have much choice in the matter as the more experienced teachers did not want to take on the challenge and her colleague felt comfortable leaning on her for support. The fact that a third year teacher, she admits, can act as a formal mentor when they themselves are still new to the profession is a sign of what is still wrong with formalized mentoring systems.

#### 17. The case of Laura: the first year

Having graduated her pre-service program with certification at the primary and junior levels (Grades K-6), Laura's experience as a new teacher in her first year can be characterized, in part, as a "survive and thrive" encounter. Prior to entering in-service teaching, she recalls the hiring process as a frustrating experience that did not recognize her two year pre-service degree as a competitive advantage. Ultimately tackling the hurdle of the hiring process, Laura admits that she was unclear of her responsibilities as a teacher and was not comfortable with asserting herself confidently in her role. More importantly, this affected her when she encountered situations that involved resource support staff and more importantly, the major stakeholders in education, namely parents.

Laura acknowledges that time is a constant challenge that permeates her personal and professional life. On a personal level, Laura stated that she had no time for her boyfriend as she found herself planning every night for the next day as she was in a "survive today and at the end of the day you'll worry about tomorrow" mode which became overwhelming. Combined with time management constraints, Laura found arranging her school timetable and class schedule to be a time consuming burden that was aggravated by the "curriculum crunch." Although Laura endured planning and delivering lessons, she felt that in conjunction with all the administrative duties, teaching was challenging.

Laura encountered challenges on two fronts in communicating with parents. Preparing for interviews was a challenge that was mitigated by the mock interview questions her mentor prepared her with that enabled her to "see the big picture." What she did not feel prepared for was aggressive parent behaviour for which she had to draw upon the support of her principal to deal with.

While she appreciated administration support in difficult parent situations, she was troubled by the fact that her principal allowed a parent of a student in the school to be a resource teacher in her classroom. Having received a new student functioning at a pre-kindergarten level in Grade two who required special needs support to meet those needs, Laura felt uncomfortable working with a parent resource teacher who she felt was unmotivated in the role. Consequently, Laura felt obligated to compensate for the resource teacher which added to her onerous teaching responsibilities and challenges.

Laura attributes much of her "survival" to informal mentors and largely to her mentor and teaching partner. Having no idea what to do regarding the everyday organization of duties or how to handle the "little stuff," she found following the lead of her experienced team teaching partner instrumental. Laura credits her mentorship experience for enabling her to maintain a positive outlook on the teaching profession as a first year teacher. While she admits having contemplated leaving the profession, she notes that she never did so seriously, and because of the intrinsic rewards reaped, she did not find herself dreading to go to work.

Autonomy in mentor selection was key for Laura. In retrospect, she realizes that the team teaching scenario with her mentor was far more beneficial than focused mentorship days because it was more authentic learning. While she appreciated the predetermined mentorship release dates to take additional time to copy resources and ask questions, she found it even more rewarding to be able to draw upon mentor support through many challenges as they arose "in the field."

# 18. Major findings

The major findings for the study are organized according to each of the original questions that guided the study.

- 1. What are the major challenges new teachers face in their first years of teaching?
  - 1. District hiring practices, specifically in terms of late-placements, and the assignment of difficult and challenging

- positions created formidable challenges for novice teachers upon entry to the classroom.
- Adequately differentiating instruction to meet the needs of exceptional students posed significant challenges for all novice teachers studied. Challenges in meeting special needs resulted in feelings of failure and stress for the novice stemming primarily from minimal and/or inadequate inschool supports and a lack of experience/training specific to the various exceptionalities encountered upon entry to the classroom.
- 3. Stemming from sentiments of insecurity, inexperience and lack of preparation, communication with parents is a daunting challenge for all novice teachers studied. Difficulties reporting about student progress and dealing with parents in general are exacerbated for novices in communities characterized by vocal and/or demanding parent groups.
- 4. In addition to determining that new teachers dedicate an excessive amount of time to meet the demands of the profession, the study found that other issues related to time management, including the planning and organizing of daily and long-term schedules, as well as the practicalities and subjectivities inherent to assessment, served as major challenges in the teaching practice of beginning teachers. New teachers assigned to positions without grade partners cited increased difficulties in classroom planning and management.
- New teachers attributed numerous challenges including behaviour management and parental communication in their beginning years which they attributed to the absence of effective and supportive leadership.
- 6. Participants reported increased feelings of anxiety and stress associated with constantly seeking alternate sources of guidance and/or assistance from teacher colleagues due to the absence of a qualified mentor.
- 2. What existing supports were available to assist new teachers?
- Collaboration with experienced colleagues via grade and divisional teams, team teaching and informal mentorship relations emerged from interviews a major influence in support of novice teacher development.
- Having a school principal who promoted a collaborative school culture and resource model, was open to questions, and at the disposal of new teachers, was cited by participants as being among the most effective supports in their first years of teaching.
- 3. What supports would have mitigated the challenges faced as a new teacher?
  - New teachers reported the need for pre-service programs to be enhanced to include increased exposure to practical tasks that prove most difficult for teachers at the beginning of their career.
  - 2. New teachers reported the need for a wealth of district-sponsored support and professional development opportunities geared specifically to the needs of beginning teachers that include subject-specific workshops prior to and throughout the year, release time for grade/divisional planning and/or classroom observations, specialized support of in-school resource personnel, and access to subject-specific resources.
  - 3. Respondents expressed the need for district hiring practices to be refined such that new teachers are hired and assigned to grades with ample time to gain familiarity with the school and curriculum, set-up and organize their classroom, and plan their first week.
- 4. What role did induction and mentorship play in experiences as a new teacher in Ontario?

- 1. Participants who were involved in the mentor selection process reported yielding benefits from the relationship. These findings suggest that mentee involvement in the selection of a mentor contributes to the overall success of the mentoring relationship.
- 2. Issues surrounding mentor qualifications and their motivations to serve in the role of mentor emerged among the interviewees who were dissatisfied with their mentoring relationship.
- 5. How can induction practices and mentorship programs better address the needs of beginning teachers in Ontario?
  - 1. Participants expressed the need for qualified mentors who are organized professionals with sound teaching practices. They further reported their preference to select to work with an experienced teacher with whom they have a comfort level, are compatible with, or have a foundation from which to build a successful mentoring relationship.
  - 2. Novice teacher participants also expressed the need for increased time to work with mentors in order to focus attention on the wide variety of individualized needs. Expanding the number of release days allocated to mentees to draw upon mentor supports was reported as a priority for the novice teachers, specifically to facilitate mentor–mentee collaboration and develop the essential knowledge and skills in key areas such as planning, programming, assessment, special education, and reporting.

# 19. Implications for further research

Upon consideration of the findings in this research, a number of areas emerged which could benefit from future research exploration:

# 20. Administrator role

Valuable insights on how to best train administrators to be effective leaders in the mentorship process as a valuable component of induction practices could be explored. A gap in research may be addressed by conducting research that seeks to gain insights from new teachers' perceptions of the influence of the administrator role on their experiences as a beginning teacher, as well as insights from administrators on their perceptions of what new teachers require to meet in-service needs with success. Moreover, insight into administrators' perceptions with reference to what they themselves need as leaders to best effect change in the landscape of new teachers' entry into the profession warrants further exploration. Best practices can also be explored to ascertain what exemplary administrators do that leads to the successful integration of new teachers in their respective schools and the profession.

#### 21. Mentor selection

Future consideration should be given to the importance of mentee input in the mentor selection process. A comparative analysis on the outcomes of mentor relationships that included or excluded mentee input would provide additional valuable information for the literature and assist in refining best practices for mentor selection. District mentor selection processes and mentor criteria can be explored to determine best practices.

#### 22. Hiring practices

An exploratory study focusing on district hiring practices and the extent to which they are perceived to influence the outcomes of novice teachers would provide additional information of value to district boards. This information, with specific reference to best practices can inform the development of hiring and induction procedures that serve the immediate needs of the new teachers upon initiation to the profession.

# 23. Suggestions and considerations for induction and mentorship programs

Based on the findings of this study of new teacher challenges and supports, the following suggestions can be made to new teachers, administrators, and district boards to better inform induction and mentorship programs and practices, including Ontario's recently implemented New Teacher Induction Program:

- 1. District hiring practices must be refined and adapted such that new teachers are hired and assigned to grades with ample time to gain familiarity with the school and curriculum, set-up and organize their classroom, and plan their first weeks.
- 2. Leadership training for school principals is necessary to prepare them to effectively promote the creation of a collaborative school culture and resource model where leaders are at the disposal of new teachers. Training should encompass best practices for mentor selection, team teaching, grade partnering and divisional leadership teams.
- 3. Mentor training and qualification is imperative to successfully meet the multiple and complex demands of the role of mentor. Districts must fund multiple days of mentor training that encompasses effective coaching, observation, and mentee feedback strategies so as to ensure that new teacher challenges are adequately supported and addressed.
- 4. Expanded levels of support offered by induction and mentorship programs are central to successful initiation to the teaching profession. Supports are best provided through a wealth of district-sponsored support and professional development opportunities geared specifically to the needs of new teachers that include: subject-specific workshops prior to and throughout the year, release time for grade/divisional planning and/or classroom observations, specialized support of in-school resource personnel, and access to subject-specific resources. Moreover, increased release time from the classroom to facilitate mentor-mentee collaboration and develop the essential knowledge and skills in key areas such as planning, programming, assessment, special education, and reporting is essential in order that leadership avenues can address individualized needs.

# References

Advisory Group on Computer Graphics. (1998). Online. Retrieved 2007-05-10 from. http://www.agocg.ac.uk/cdroot.htm.

Anderson, T. (Spring 2000). New teacher–mentor project: moving teachers into the second millennium. In: Schoolwide North-west, Vols. 4–5. Portland, OR: Northwest Regional Educational Laboratory.

Brewer, J., & Hunter, A. (1989). Multimethod research: A synthesis of styles. Newbury Park, NJ: Sage.

Britt, P. (1997). Perceptions of beginning teachers: novice teachers reflection upon their beginning experiences. Paper presented at the Annual meeting of the Mid-South, Educational research Association, Memphis, TN. November, 1997.

Brock, B. L., & Grady, M. L. (1998). Beginning teacher induction programs: the role of the principal. *Clearing House*, 71(3), 179–183.

Bush, T., & Coleman, M. (1996). Professional development for heads: the role of mentoring. *Journal of Educational Administration*, 33(5), 60–73.

- Colbert, J. A., & Wolfe, D. E. (1992). Surviving in urban schools: a collaborative model for a beginning teacher support system. Journal of Teacher Education, 43(3), 193-199.
- Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. Educational Researcher, 19(5), 2-14.
- Darling-Hammond, L. (2000). Solving the dilemmas of teacher supply, demand, and quality. New York: National Commission on Teaching and America's Future.
- Darling-Hammond, L. (2003). Keeping good teachers: why it matters what leaders can do. Education Leadership, 60(8), 7-13.
- David, T. (2000). Teaching mentoring benefits all around. Kappa Delta Phi Record, 36(3), 134-136.
- Ganser, T. (1999). Reconsidering the relevance of Veenman's (1984) meta analysis of the perceived problems of beginning teachers. Paper Presented at the American Educational Research Association. April 23, 199.
- Halford, J. (1998). Easing the way for new teachers. Educational Leadership, 55(5),
- Ingersoll, R. M., & Smith, T. (2003). The wrong solution to the teacher shortage. Educational Leadership, 60(8), 30-33.
- Joiner, S., & Edwards, J. (May 2008). Novice teachers: where are they going and why don't they stay? Journal of Cross Disciplinary Perspectives in Education, 1(1), 36-43.
- Kain, J. F., & Singleton, K. (1996). Equality of educational opportunity revisited. New England Economic Review, May/June, 87-111.
- Kardos, S. M., & Johnson, S. M. (2007). On their own and presumed expert: New teachers' experience with their colleagues. Teachers College Record, 109(9), 2083-2106 "http://www.tcrecord.org/Home.asp" http://www.tcrecord.org ID Number: 12812, Date Accessed: 7/3/2008 2:22:07
- Lortie, D. C. (1966). Teacher socialization: The Robinson Crusoe model. In The real world of the beginning teacher. Washington, DC. National Commission on Teacher Education and Professional Standards (ERIC Document Reproduction Service No. ED 030 616)
- Maciejewski, J. (2007). Supporting new teachers: are induction programs worth the cost? District Administration, 43(9), 48–52.
  McIntyre, D., & Hagger, H. (Eds.). (1996). Mentors in schools: Developing the profes-
- sion of teaching. London: David Fulton.

- Mandel, S. (2006). What new teachers really need. Educational Leadership, March, 66-69.
- Marshall, P., Fittinghoff, S., & Cheney, C. (1990). Beginning teacher developmental stages: implications for creating collaborative internship programs. Teacher Education Quarterly 25-35.
- Meister, D. G., & Melnick, S. (Winter 2003). National new teacher study: beginning teachers concerns. Action in Teacher Education, 24(4), 87-94.
- Mertens, D. M. (2003). Mixed methods and the politics of human research: the transformative-emancipatory perspective. In A. Tashakkori, & C. Teddlie (Eds.), Handbook of mixed methods in social and behavioral research (pp. 135-164). Thousand Oaks, CA: Sage.
- Punch, K. F. (1998). Introduction to social research: Quantitative and qualitative approaches. Thousand Oaks, CA: Sage.
- Shakrani, S. (2008). Teacher turnover: Costly crisis, solvable problem. Michigan State University, College of Education.
- Shields, P. M., Humphrey, D. C., Wechsler, M. E., Riehl, L. M., Tiffany-Morales, J., Woodworth, K., et al. (2001). The status of the teaching profession, 2001. Santa Cruz, CA: The Center for the Future of Teaching and Learning.
- Stake, R. E. (1994). Case studies. In N. K. Denzin, & Y. S. Lincoln (Eds.), Handbook of qualitative research (pp. 236-247). Thousand Oaks, CA: Sage.
- Tashakkori, A., & Teddlie, C. (1998). Mixed methodology: Combining qualitative and quantitative approaches. Thousand Oaks, CA: Sage.
- Veenman, S. (1984). Perceived problems of beginning teachers. Review of Educational Research, 54(2), 143-178.
- Veenman, S. (1987). On becoming a teacher: an analysis of initial training. Paper presented at the Conference on education of the World Basque Congress. (ERIC Document Reproduction Service No. Ed 312 231).
- Wilson, S., Flodent, & Ferrini-Mundy, J. (2001). Teacher preparation research: current knowledge, gasp and recommendations. Seattle, WA: University of Washington, Center for the Study of Teaching & Policy.
- Worthy, J. (2005). It didn't have to be so hard: the first years of teaching in an urban school. International Journal of Qualitative Studies in Education, 18(3), 379-398.