The ABC's of Mentoring for New Teachers

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ABSTRACT

A mixed methods research design was used in this study to explore how mentoring learning teams in the Coquitlam School District affect the self-efficacy and professional growth of new teachers. This was of high importance to the researchers as new teachers are expected to be capable of assuming the same full-time teaching responsibilities as their senior colleagues, meet the demands of multiple learning abilities and face an uncertain future with regards to their career path without the necessary supports in place to assist and develop them as effective teachers in the profession (Fantilli & McDougall, 2009). Thereby, the study was chosen for its ability to examine the level of significance new teachers place on themes such as professional growth, stress management, sense of belonging, networking, collaboration and instructional strategies. By analyzing these themes the researchers were able to gain insight into how mentoring learning teams influenced the self-efficacy of new teachers over the course of 8 months.

Information was collected and analyzed from an initial and a final questionnaire, with 48 and 34 participants respectively, and from 9 additional interviews. Results from the questions were analyzed and compared using a two tail t-test of unequal variance, while the remainder of the questions were grouped according to their themes and ranked by their order of importance. Professional growth was ranked number one, followed by teacher culture, mentoring supports, and instructional strategies. The data strongly indicated that mentoring was beneficial for the participants and that they valued networking, not feeling alone and sharing stories/experiences. Participants also reported higher feelings of confidence, lower levels of stress and an increased commitment to the profession as a result of belonging to a mentoring learning team.

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Introduction

Today's new teachers face a rapidly changing work environment. They are expected to be capable of assuming the same full-time teaching responsibilities as their senior colleagues, meet the increasing demands of multiple learning abilities and face an uncertain future with regards to their career path without the necessary supports in place to assist and develop them as effective teachers in the profession (Fantilli & McDougall, 2009). Mentorship is a requirement in many professions to support and train those new to the field, including nurses, lawyers and doctors, all of which have clear guidelines as to what one is expected (Ali, 2008; personal communication, Beairsto, Fall 2011 Master's Program). The same cannot be said for teaching. Teaching is among the very few professions that do not require a formal mentoring program in place to assist and develop new teachers. However, an increasing number of school districts in British Columbia have recognized the need for such programs and introduced them through local initiative.

The researchers' intentions were to gather individual perspectives and experiences of new teachers in one such school district who participated in a mentoring learning team to explore themes such as professional growth, stress management, sense of belonging, networking, collaboration and instructional strategies. By analyzing these themes the researchers were able to gain insight into how mentoring learning teams influenced the self-efficacy of new teachers over the course of 8 months. Mentees participated in one, and in some cases two, of the following mentoring learning teams: teachers teaching on call, kindergarten, early primary, intermediate elementary, middle school, secondary, student services or gifted.

Research Problem

To explore how mentoring learning teams affect the self-efficacy and professional growth of new teachers in the Coquitlam School District.

For the purpose of this study it is imperative to define what the researchers mean by selfefficacy, professional growth and new teacher. Self-efficacy is intended to describe one's personal perception of confidence to be successful in their job. Professional growth is a selfactualization that is triggered by the desire to explore, reflect, and commit to developing one's teaching practice through opportunities such as workshops and learning focused conversations with colleagues. It is also critical to define what 'new' teacher means. As a result of a surplus of teachers resulting from a declining student population and financial constraints on school districts, many teachers in Coquitlam cannot anticipate a secure full-time position until what Hargreaves and Fullan (2012) describe as the middle career phase. Teachers are constantly in upheaval for 5 or more years of seniority. As of May 2013, 476 teachers were given layoff notices if they were below 6 years, 3 months seniority (personal email from the Coquitlam Teacher's Association, May 2013). This means that teachers may annually change schools, grades, and teaching loads while having to initiate new collegial relationships. For these reasons, a 'new' teacher is defined for the purposes of this research to be one who satisfies at least one of the following criteria: 0-3 years' experience in teaching, new to school, grade or subject level within the past 3 years. This definition of the new teacher is shared and used by the mentoring learning teams for mentee recruitment. The dynamic and diverse nature of this newness is integral to examining how new teachers desire to be supported and how mentoring learning teams shape their professional growth and self-efficacy. New teachers participate in mentorship programs to enhance their skill sets to scaffold pedagogy from pre-service teaching to an active

teaching role. The purpose of this study is to focus on how experiences in a mentoring learning team influence the self-efficacy and professional growth of new teachers. During their journey, we sought information about what specific skills, behaviours, attributes and mentor roles/responsibilities affected mentorship by following participants of a district mentoring program in Coquitlam from September 2012 to May of 2013.

Justification for Research

The large scale complexity and physical/emotional demands of teaching may lead some new teachers to change their career paths. New teachers may feel frustrated, stressed and overwhelmed as they are expected to fulfill the same responsibilities and duties as experienced teachers (Fantilli & McDougall, 2009). In the researchers' experience, layoff practices, in Coquitlam, have caused new teachers to have to change schools annually and thus not always to be performing teaching duties for which they are qualified (Carr & Obojski personal experience). Since student achievement benefits significantly from capable and well-prepared teachers (Darling-Hammond, 2000), losing these potentially gifted educators or not having the means to give new educators the support they need is detrimental to the quality education that a school district provides. Darling-Hammond (2000) claims that student achievement is significantly impacted by well prepared and capable teachers.

To strengthen the teaching profession and ensure the best educational program for students, new teachers need support in areas such as classroom organization, assessment tools and knowledge, professional development and classroom management strategies. When support is provided by trained mentoring professionals with education and experience in those areas, the short term retention of teachers is positively influenced (Joiner & Edwards, 2008). Carol Bartell (2005, p. 74) describes the importance of having good mentors and mentorship programs as a

means which "can help to shape teaching practice and help teachers become competent and highly successful earlier in their careers." Schwille (2008) also notes that mentors and mentorship programs play a significant role in the development and retention of quality teaching professionals.

Successful mentorship programs generally have overt guidelines, attributes and expectations. Mentors often fulfill numerous roles, such as advisor, coach, counsellor, guide, teacher, supporter, role model, organizer and planner (Ali, 2008). However, Kram's (1985) mentor model claims that a mentor's most important functions are career development and psychosocial support. Career development refers to coaching, exposure to a variety of experiences, protection and challenging duties (Hamlin & Sage, 2011). Pyschosocial support combines counselling, role modelling, friendship, and personal development (Hamlin & Sage, 2011). Additionally, Darling-Hammond (2003) finds that mentoring benefits include increased teacher retention, professional development, improved self-reflection and problem solving, instructional strategies, a boost in confidence and self-esteem and positive attitudes.

Deficiencies in Research

Past research focuses on the benefits of mentorship with much less information available on the nature of the mentorship program (Hellsten, Prytula, Ebanks & Lai, 2009) and how that relates to new teachers' perceptions and experiences. This is particularly the case for British Columbia, for which, according to the researchers' review of the literature and the advice of the Mentoring department at the British Columbia Teachers' Federation, there has been no formal research reported on mentoring in public education. The research in other contexts tends to show how mentor/mentee relationships are as important as the skills gained from the mentorship experience, but there has been little examination of the mentee experience and their perceptions

of mentorship. Although new and experienced teachers understand that mentors and mentorship programs could be beneficial, many in SD43 expressed interest in participating in the mentoring learning teams but few actually did as a result of time constraints, subject irrelevancy, or for personal reasons. The voice of the new teachers themselves is also under represented. This voice needs to be heard to fully appreciate the meaning in their experiences and to pave the way for change to make mentorship meaningful to those who seek it. We believe there is a need to give new teachers a voice to create mentor opportunities that address a mosaic of needs in a complex and dynamic profession and thus to raise the standards of the teaching profession and better support students.

Audience

Through careful examination and exploration of mentee perceptions and experiences, Coquitlam district personnel, administrators and policy makers can deepen their understanding of mentorship and thus able to improve the effectiveness of mentoring learning teams by developing more explicit descriptions of roles and responsibilities. With these in place, teachers who wish to be mentors and new teachers could benefit from formalized models that would help them to enhance their professional growth as well as to improve standards for professional teaching practice. The BCTF Mentoring Program Coordinator, the BC Mentoring Group, Maple Ridge School District #42, Middle Years Focus Group, Coquitlam #43 Mentoring Staff Development team, mentee participants, mentors of the mentorship learning team, educators, universities and colleges, especially those with teacher training programs, may also find our research beneficial for professional development in terms of networking and support for new teachers.

LITERATURE REVIEW

Introduction

The teaching landscape today is drastically different from that of a generation ago. Today the BC economy is plagued by uncertainty, debt and rising health costs that place constraints on public funding on education that is likely to continue (Beairsto, Brayne, Neufeld, Chinnery, & Kitchen, n.d.). As well, across Canada there is a growing disparity between real wages and the cost of living (McIntyre, Walsh, & Connor, 2001). Globalisation and governments' reactionary aims to tighten control over education have transformed teacher roles and responsibilities (Hargreaves, 1994, 2003; Fullan, 2001). New teachers entering the field face a job with increasing responsibilities and corresponding stresses. While school improvements are formulated under the guise to increase professionalism, they also intensify a teacher's workload (Smyth, Hattam, Reid, & Shacklock, 2000). This trend affects the quality of education as "effective schools are created and sustained by effective teachers" (Manuel, 2003, p. 141) and teachers have a difficult time being effective when more is constantly being added to their job description (Darling-Hammond, 2000).

As a result of a surplus of teachers resulting from a declining student population and financial constraints on school districts, many teachers cannot anticipate a secure full-time position until at least five years of seniority. For example, as of May 2013 the following seniority cut offs are as follows in these school districts: Coquitlam, 6.3; Mission at 7.2; and Maple Ridge at 6.2 (personal communication from emails from the CTA, MRTA, & Mission layoff notice). Even though teachers within the cut off may be in the mid phase of their teaching career, there are challenges and stresses present with the upheaval of moving job assignments, learning assignments that may not be their area of expertise and trying to become a part of their

new school culture. The number of full time public school teachers has declined by 1204 over the past 4 years and the number of part time teachers has increased by 189 (Beairsto, et. al, n.d.). In regards to current economic trends and instability of the teaching profession in the early years, it is important to create opportunities that encourage collaboration, commitment and support structures for new teachers. Therefore it is not a matter of talking about teacher attrition but rather teacher sustenance.

Behaviours, attitudes, experiences and education of this generation's workers has influenced their perceptions about career and work (Dwyer and Wyn, 2001). Manuel (2003) succinctly states this problem in regards to holding a single career over a lifetime versus the revolving door mentality, where due to a variety of financial and personal reasons has created more of a transient workforce of today's generation. Although there exists no true number for the number of teachers entering and leaving the teaching profession in Canada, Clandinin (2012) states that approximately 40% of education graduates from Alberta universities and colleges leave the profession within the first five years. Within that 40%, 25% of Albertan graduates do not take on positions with Alberta school districts (Clandinin, 2012). While teachers leave for a variety of reasons: medical, maternity leaves, burnout, and a host of personal reasons, resilience is a marker of whether or not one is committed enough to the profession to stay. Clandinin defines resilience as the "ability to cope with stressors that may impact them as teachers" (p. 16, 2012). Beginning teachers who have stayed in the profession had a disposition for hard work and were characterized as persistent (Freedman & Appleman, 2009). As well Haun and Martin (2004) have found that teachers who were committed to the profession were more likely to stay in the profession.

The large scale complexity and physical and emotional demands of teaching lead many new teachers to change their career paths. Significant causes of stress for new teachers fall into four domains: students, parents, teachers and self (Rieg, Pacquette & Chen, 2007). Within these domains are specific issues pertaining to creating lesson plans, handling parental issues and classroom management (Rieg et al, 2007; Manuel, 2003). As well, working conditions such as class size, administrative and collegial support, and availability of resources make a decisive impact on a new teacher's willingness to stay in the profession or not (Darling-Hammond, 2000; Ingersoll, 2001 & 2002; Oliver, 2009). Many new teachers are frustrated, stressed and overwhelmed as they are expected to fulfill the same responsibilities and duties as experienced teachers (Fantilli & McDougall, 2009; Khamis, 2000). Lortie (1975) highlights this still current issue of new teachers ending up in the most challenging or difficult classrooms and school assignments.

New teachers must be helped to create educational communities of support with colleagues and with other adults in the community (Rajuan, Turchin & Zuckermann, 2011) as a means to respond to stresses of isolation, frustration, anxiety and difficult work load (Hellsten et. al, 2009). More specifically, Fantilli and McDougall have found that special needs and classroom management/behaviour issues "had an effect on the contextual challenges beginning teachers face in Ontario" (p. 20, 2009). It is unique to the teaching profession that the "novice assumes all roles and responsibilities of experienced practitioners with no material or other allowances for newness" (Manuel, 2003, p. 145). Bartell (2005) indicates that experiences of a new teacher in their first years of teaching have long term implications for teacher effectiveness, job satisfaction and career length (Hebert & Worthy, 2001). New teachers often experience decreased levels of efficacy when they enter the work force as "reality checks" of the complexities of the job set in

(Tschannen-Moran, A. Hoy & W. Hoy, 1998). Mentoring can provide supports to new teachers, thus increasing their commitment and resiliency to stay in the teaching profession (Tschannen-Moran et al, 1998).

Mentoring

Although mentoring is not a new term, its definition varies and includes many perspectives, thus leading to a lack of consensus about its meaning (McLaughlin, 2010). Even without a consistently accepted definition, "research shows a positive relationship between mentoring, retention, competence, confidence, and personal and professional growth" (Talley V, 2008, p. 331). Salinitri (2005) describes mentoring as the act of:

"creating an enduring and meaningful relationship with another person, with the focus on the quality of that relationship including factors such as mutual respect, willingness to learn from each other, or the use of interpersonal skills. Mentoring is distinguishable from other retention activities because of the emphasis on learning in general and mutual learning in particular." (p.858)

It is a "method by which novice practitioners are taught to adapt and succeed in new professional roles" (DiVitio-Thomas, 1998). Mentoring is "a creative method of promoting professional development that sets in motion the process of self-actualization and growth" (Klein & Dickenson-Hazard, 2000). Mentoring relationships are based on a foundation of voluntary trust and guidance (Tally V, 2008). Carol Bartell (2005) describes the importance of having good mentors and mentorship programs as a means which "can help to shape teaching practice and help teachers become competent and highly successful earlier in their careers" (p. 74). New teachers experience growth in professional development, self-reflection, problem solving skills,

instructional strategies and gain a boost of confidence and self-esteem which makes them feel more competent as teachers (Darling-Hammond, 2003).

Bandura (1997) describes this sense of efficacy as a "belief in one's capabilities to organize and execute the courses of action required to produce given attainments" (p.3). Berman, McLaughlin, Bass, Pauly and Zellman (1977) add that it is "the extent in which the teacher believes he or she has the capacity to affect student performance" (p. 37). When teachers achieve a level of high efficacy, they believe they have more influence over their students' achievement and motivation (Tschannen-Moran et. al, 1998). Tschannen-Moran et. al (1998), explore mastery experience, physiological and emotional states, vicarious experience, and verbal/social persuasion as sources of support and relate mentees' experiences to levels of efficacy. The success or lack thereof, of these supports directly corresponds to a rise or decrease in self efficacy (Tschannen-Moran et al, 1998).

Mentor Programs

Schwille (2008) explains that mentors and mentorship programs play a significant role in the development and sustainment of quality teaching professionals. If these mentorship programs have specific guidelines and expectations and the mentors participate in various roles such as advisor, coach, counsellor, guide, teacher, supporter, role model, organizer and planner (Ali, 2008; Morton-Cooper & Palmer, 2000), this would show an increase in teacher sustainment, and justify that every new teacher would benefit from regimented mentorship programs from highly trained mentors (Ali, 2008). By providing an increasing number of supports, mentorship programs are more effective and specific skills can be targeted to new teachers to help them to grow professionally (Ingersoll & Smith, 2004). Supports with the strongest degree of success by increasing teacher self-efficacy and professional growth include having mentors in the same

teaching field as the mentees (Barrera, Braley & Slate, 2010), common planning time and participating in external teacher networks (Ingersoll & Smith, 2004).

From what has been discussed about current teaching conditions, school districts face a financial conundrum in regards to mentoring programs (Ingersoll & Smith, 2004). Mentoring programs range from an informal one session meeting, to highly structured training programs that could span a couple of years (Ingersoll & Smith, 2004). Mentorship can enhance the effectiveness of new teachers while improving teacher sustainability (Ingersoll & Smith, 2004) while conversely underprepared and unsupported teachers cause a greater financial drain on district resources (Darling-Hammond, 2000). Along with the aforementioned revolving door mentality however, is that financial investments in mentorship programs might be lost as new teachers may leave the profession regardless of the supports they receive (Ingersoll & Strong, 2011). Or as the case in the Coquitlam School District shows, programs such as the mentorship learning team are being cut as a cost saving initiative to get budgets back on track which negates the point that for mentoring to be effective, programs must be well designed and supported (Darling-Hammond, 2003). Due to the professional growth and improved self-efficacy that is often a result of mentoring, teachers are often more competent and effective earlier in their careers at engaging the learner than when they are left to figure it out themselves (Darling-Hammond, 2003).

Theories of Mentorship

Current effective mentorship models are rooted in theories of Vygotsky and Dewey.

Vygotsky's (1986) Guided Participation Framework and Social Constructivist Framework

(Vygotsky, 1978) provide a series of learner supports through scaffolding and learner experience.

Learning is situational in which knowledge is constructed by the learner themselves (Graves,

2010). Guided Participation is a "process through which an experienced practitioner supports a less experienced practitioner to become competent in every day practice" (Anderson, 2011, p. 50). Mentorship as a professional practice follows Dewey's (1938) concept that learning occurs through interactions and personal experience (Schwille, 2008). It is continuous and shapes practical experience (Dewey, 1938; Chitpin, 2011). Personal growth occurs when people reflect on their own experiences by analyzing what ideas, beliefs, and materials are brought to each situation (Schwille, 2008). This framework provides a purpose for learning, reiterates positive outcomes for participation, and helps mentors plan learning activities at their stage of learning (Anderson, 2011).

Feiman-Nemser (2001) have taken classic theory and coined the term Educative mentoring to separate the mentorship of new teachers from other roles of mentorship available in other disciplines (Schwille, 2008). Educative mentoring envelopes Dewey's (1938) Guided Participation Framework where the learner is interacting with their environment and the result is personal growth (Schwille, 2008). Educative Mentoring also draws from Vygotsky's (1978) approach where knowledge is scaffolded on a step by step basis so that the learning becomes ingrained (Schwille, 2008). Mentors should use this knowledge in order to make decisions about how best to guide and support new teachers learning to teach (Schwille, 2008).

Kajs's (2002) Situational Mentoring Framework is a model that continually adapts, implements, and assesses four key components: mentor selection, training for mentor and mentee, a support team and accountability. Continual reflection on these aspects provides an "effective and efficient sustainable mentoring program" (Kajs, 2002, p.59). Though the common trend is to not make mentor training a requirement, mentors and mentees would participate in extensive professional development for their roles (Kajs, 2002). Important professional

development topics would include mentor knowledge, interpersonal skills, assessment practices, adult learning principals and stages of teacher development (Kajs, 2002). An accountability plan with benchmarks would be implemented in order for mentors and new teachers to reflect and assess self and each other to professionally grow (Kajs, 2002). These theoretical frameworks were important to discuss here as they paint the picture and the context as to where mentoring came from and how it is relevant in the teaching profession today.

Conclusion

When theory is combined with practice, mentoring becomes more effective which is useful when trying to establish experiences that address students' needs (Chitpin, 2011; Anderson, 2011). As such, the roles of a mentor and their training have a significant impact on the development of new teachers. Mentoring requires multiple skills, not limited to, but including coaching, co-teaching, demonstrative teaching, mentoring on the move, debriefing sessions, co-planning, video-taping and writing (Schwille, 2008). Kajs, Alaniz, Willman, Maier, Brott & Gomez (1998) further explain that mentors should have adept interpersonal skills, and be knowledgeable and proficient in all areas a classroom teacher should be in. It is integral that mentors and mentees have clear expectations before being paired as clarity of the mentor-mentee relationship is essential to the success of the new teacher (Kajs, 2002; Kajs et. al, 1998; Barrera et. al, 2010; Hudson, Usak & Savran-Gencer, 2009; Graves, 2010). Results show clear, explicit expectations, ongoing communication and adequate time to meet and discuss are imperative for the development of building positive mentoring relationships (Graves, 2010).

Mentoring is a "complex practice that is dependent on knowledge, skill and judgement" (Schwille, 2008, p. 143). The role of mentorship is two-fold; firstly it provides teaching strategies and resources so that new teachers can gain efficacy and secondly, it teaches how to

take ownership of one's own learning for a life time (Chitpin, 2011). Even though relationships and expectations are paramount to building effective mentoring programs, Hinchliff (1999) indicates that assessment is an essential component to mentorship as a way to grade and measure mentee learning. It is imperative to know if and how learning is occurring and if it is effective to the growth of the mentee (Anderson, 2011). Analyzing a program's methods, systems and processes is a tool that evaluates the effectiveness of a program (Anderson, 2011) and it needs to be evaluated more often to "determine what their degree of efficacy and satisfaction" are (Barrera et al, 2010). Young & Cates (2010) reiterate that there is a positive correlation between satisfaction and success of mentees when participating in effective mentoring programs.

Mentoring provides much needed emotional support and increasing levels of teacher self-efficacy (Odell & Ferraro, 1992; Yayli, 2008). According to Margolis (2008):

"It is hypothesized that mentoring a teaching intern can re-infuse a sense of purpose in these teachers' work, and remind them of how and why they teach as they articulate pedagogical reasoning to a new teacher. They also might learn via the new teacher bringing fresh ideas into the classroom." (p. 164)

When collective efficacy is high, teachers work harder to meet expectations to be successful (Goddard & Goddard, 2001). Building collective efficacy in schools will help raise new teacher efficacy or at least help to maintain it when teachers change schools or programs (Goddard & Goddard, 2001). Although the emphasis might be on developing mentee efficacy and professional development, the benefits derived from a healthy mentee/mentor relationship extend beyond that scope to the profession at large.

METHODOLOGY

Research Design

An explanatory mixed methods research design was used in order to identify attitudes and practices of new teachers. Qualitative observations provided the context in which mentorship was enacted, and helped clarify quantitative statistical relationships and numeric findings (Creswell, 2012). Through a qualitative lens, the study intended to gather individual perspectives and experiences on participating in a mentoring learning team to gauge the effectiveness of the program and provide insight to guide future mentoring learning teams corroborated with the triangulation of quantitative data collected. In order to provide feedback to positively enhance mentoring learning teams of the future, it was expected the attained information would be rich and varied as new teachers interpreted the supports and structures they felt they needed to become more effective teachers.

Attempts were made to maintain the validity and reliability of the study through the use of triangulation of two main sources of data: observational field notes and interviews, and two questionnaires. Member checking at the end of the study was also used to verify the accuracy of the information attained during interviews (Creswell, 2012). As well, incentives were used to encourage participation in the interview component of the study, due to the time commitment given by the participants.

Explanatory Mixed Methods Design

"An explanatory mixed method design consists of first collecting quantitative data and then collecting qualitative data to help explain or elaborate on the quantitative results," (Creswell, 2012, p.566). This method was relevant as it provided a general picture of the

research problem and allowed for the in-depth refinement of qualitative data to further strengthen results, was easier to analyse the data collected, and blended the strengths of one method while neutralizing the weakness of the other (Creswell, 2002). It also allowed the researchers to explore and understand emergent themes in more depth by surveying participants for which the information attained. Additionally, this permitted the researchers to study new teachers and analyze their opinions and experiences surrounding the professional development of mentoring learning teams as a means to provide greater insight into the supports and structures available. This particular topic was obtained through conducting a small sampling of individual interviews. This course of research enhanced our ability to identify new teacher attitudes towards selfefficacy, stress management and professional development at the conclusion of the program. This intended study followed the traditional explanatory mixed methods design by collecting quantitative data initially, analyzing it and then taking a select group of new teachers to conduct individual interviews on to further probe the responses. Data collected from this sample population of new teachers, in which the effect of a mentoring learning team was explored, collectively through their views, is more generalizable than qualitative research alone.

The challenges of using this design were that cohesive trends or themes from this select group of participants may not have emerged, rendering the findings of the effectiveness of the mentoring learning team incomplete. As well, determining the sample size to use could pose a challenge as not only did it depend on the selected participants volunteering to be in the study for an extended length of time, but was also dependent on their continuation and completion of the program. Other challenges in the mixed methods research included the time allotted to conduct and record interviews, the cost for incentives to complete the surveys and interviews, the time spent to proficiently use technology, and issues that are also generally encountered in qualitative

research such as field issues: (for example), site access, developing clear questions, non-response from participants, attrition of participants in the study, the variability of continuation of the mentoring learning teams, determining credibility and validity of data, creating unbiased interview questions, focusing questions; and ethical issues, in which this study was not immune to (Creswell, 2012).

Sample

Participants were chosen through purposeful sampling of new teachers who were participating in a mentoring learning team in Coquitlam. This form of theory/concept sampling was relevant to the study as it was expected that by sampling these particular individuals the researchers would generate a better picture of new teachers' attitudes regarding their sense of efficacy and professional development from participating in the mentoring learning team.

Initially, the researchers presented to all mentees in seminar format explaining the nature of the study, as well as provided a letter to inform them of the study and invited them to participate by filling out a short questionnaire to gain their demographic information, background knowledge on their experiences and willingness to participate in the study. The sample for the study was selected from those new teachers who chose to participate.

To participate in the study 'new' teachers were defined as having at least one of the following criteria: 0-3 years' experience in teaching, new to school, grade or subject level within the past 3 years. The sample size was variable and dependent on the willingness of the participants. The sample size was large enough that proportionate sampling was done to include differences in gender, and teaching level (elementary, middle or secondary). Teachers were selected from all cohorts equally however, this study only identified the teachers as being an elementary, middle and secondary teacher, and not subject specific (i.e. gifted, teacher on call,

student services, mathematics). Furthermore, of those willing to participate, targeted sampling for individual interviews occurred after the completion of all questionnaires and was dependent upon key themes that arose. To thank all those who completed the questionnaires, two participants from each survey round were drawn and received a \$5 gift certificate. For those who also participated in the interview process, a gift certificate of \$5 was given in consideration of their time.

Data Collection

At the beginning of the study, prior to collecting data, the researchers gained permission from the Coquitlam School District and Simon Fraser University. The researchers also received permission from the program supervisor and mentors to present the research proposal to each individual mentoring learning team in the fall of 2012 in order to solicit to possible participants.

Data collection consisted of a baseline questionnaire to screen potential participants in the study and gain consent to contact them. A final questionnaire which was distributed near the end of the mentoring learning team's activities for the year, then provided data from qualified and willing participants. Once the questionnaires were complete, participants who expressed an interest to participate in an individual interview were contacted. The researchers conducted in person, by phone and by electronic file interviews with participants. All interviews were audio recorded and were supplemented with field-notes.

Individual informed consent was obtained from every participant at the beginning of the study. In addition to acquiring individual consent, the participants were informed of all ethical issues of the study including: the right to exit the study at any time, the confidentiality and

anonymity of the information collected, and the storage and handling of the collected data for a specified length of time (2 years after the completion of the study).

Questionnaires

The purpose of collecting data through a questionnaire was to obtain a large quantity of data quickly, with the ability to use web-based questionnaires which could be analyzed easily with the aid of computer software (Creswell, 2012). The value of using a questionnaire is that it allowed the researchers to easily screen for the sample set against the required criteria, and provided a method to quickly identify emerging themes of participants' attitudes and perceptions around mentoring. Through the questionnaires, themes and questions arose that were used later in the individual interviews. Finally, questionnaires provided an efficient way of gathering data from multiple participants, at one period in time.

Some of the disadvantages to using questionnaires were that participants might misinterpret the questions, especially since the researchers were not able to clarify their meaning, in process, as would be possible in an interview questionnaire (Creswell, 2012). Disadvantages of web/email-based questionnaires included a low response rate, as the participants may not feel personally invested in the study or through attrition of participants from the beginning to the end of the study. Other disadvantages of questionnaires in general were that the questions may not be applicable to all participants, and the responses might be difficult to analyze as they were of varying lengths and detail. Responses are also devoid of context, which makes them less informative and more prone to misinterpretation (Creswell, 2012).

The researchers facilitated the scope of the study in person to all possible participants and to obtain permission to contact them via email to complete the first questionnaire. That initial interaction with the participants allowed the researchers to remind them of the purpose of the

study and their rights to withdraw at any time, as well as allowing the researchers to select those matching the study criteria to complete the final questionnaire and participate in the interview process. The researchers also used a variety of closed and open ended questions as a way to acquire useful information to triangulate data.

Individual Interviews

Individual interviews were conducted on a small sample of participants, to follow up on key trends that emerged from the information collected from the questionnaires. By administering individual interviews and collecting data through both audio recording and field-notes, the researchers were able to form trusting relationships (Creswell, 2007), thus encouraging the participants to provide deeper, more honest personable responses and explanations. It also gave the researchers the opportunity to probe further using more specific questions in order to elicit more information, especially when the participant was unsure of the interpretation of the question. By obtaining responses from multiple interviews, the researchers collected many perspectives on the same issue and used multiple sources of data to triangulate and confirm emerging themes (Creswell, 2007). This was advantageous to the researchers as it enabled the participants to provide detailed personal information about their attitudes and experiences (Creswell, 2012). As a result the researchers then categorized the data into a thematic analysis to provide a deeper understanding of the emergent themes.

While the interview process had many advantages, the researchers had to be aware of certain disadvantages and limitations. The primary disadvantage was that by administering individual interviews, transcribing the data and then analyzing the information obtained was extremely time consuming (Creswell, 2012). The validity of the data analysis may be questioned as it is presented through the researchers' own interpretation of the data set. Moreover, the data

may have been deceptive if the interviewee responded with what the researchers wanted to hear rather than their honest opinions. The researchers' presence may have affected how the interviewee responded, and the interviewee may not have clearly articulated the meaning of their responses. Additionally, the data may be deceptive if the interviewee responded with what the researchers wanted to hear rather than their honest opinions. Other disadvantages included the need to use equipment that could fail and the skill required to re-focus the interviewee on the main topic, from time to time to monitor and respond to the overall atmosphere if there were emotional outbursts or nervous tension, and to appropriately handle the associated conversation with the participants in order to simultaneously maintain an instrumental focus and appropriately friendly rapport (Creswell, 2012).

Despite these challenges, individual interviews were found to be an effective method for data collection. New teachers who participated in the study were interviewed with the aid of an interview protocol to help both the researchers and the interviewee stay focused and to allow the researcher to record observational notes in addition to the audio recording. This ensured that all interviews proceeded accordingly, and that similar amounts of data were obtained from each interviewee (Creswell, 2007). Interview sessions began with a reminder about the purpose of the study to gain an understanding of how new teachers' efficacy and professional development were influenced through mentoring learning teams. Participants were reminded that the interview was completely voluntary and confidential and their responses were recorded as participants numbered from P01 through P09 so as to maintain anonymity. The interview format was semi-structured, asking open-ended questions to help keep the interview focused on the topic and allowing for the new teachers to have ample time to respond and the flexibility to elaborate on their responses as needed. The interview length varied between participants, but was expected to

take about an hour of their time. After the interview, participants were thanked for their time and mailed a \$5 gift card to a local coffee shop.

Instruments

This study used two types of instruments to collect data during the course of the program. The first was a questionnaire to gather demographic information to be used as a screening tool to select the sample of the study and to set a grounding point for the participants' current attitudes of mentoring. It was also used to assign ID values to participants' identities to ensure that the data collected remained anonymous. A final questionnaire was used for the purpose of collecting research data to compare against the first questionnaire. The following describe the instruments in more detail.

- Screening Instrument and Initial Attitudes: These provided an Introduction to the
 research and an invitation to participate in the study. A demographic questionnaire was
 included to screen participants to match the sample criterion, as well as to obtain
 information regarding participants' initial perceptions, intentions and attitudes for
 participating in mentoring learning teams.
- 2. Data Collection Instruments: A final questionnaire, using categorical and descriptive elements, was also administered near the end of the learning team's activities for the year, along with individual interviews (each interview session took approximately one hour). Questions considered for use were those that the researchers adapted from prior studies. The questionnaires used in the study as a screening tool and to acquire background information are found in Appendix A and the final questionnaire which was adapted from a similar study done by Barbara A. McCarthy (2010) is found in Appendix B. Appendix

C contains the interview questions, some of which were adapted from McCarthy (2010), Richardson (2003), Russell & Russell (2011) and Hellsten et. al (2009). The purpose of these questions is to obtain a deeper understanding of what new teachers experience by participating in a mentoring learning team.

Limitations

While the researchers used a mixed methods design to overcome most of the limitations specific to either quantitative or qualitative research alone, some still applied. There were some technical problems that involved login difficulties to access the questionnaire, web browsers or internet access timing out and extra effort was required to ensure the confidentiality and anonymity of the participants as a result of the specific procedures used.

Time constraints for this study limited the amount of data that could be collected and analyzed to that of the new teacher experience, and further to that of only the new teachers participating in the mentoring learning teams. Data collected also does not include the perspectives of the mentor to see if there was an association between mentor and mentee perspectives and experiences.

The study's validity and reliability may also have been compromised by bias in the collection of the qualitative portion of data. In particular, participants' responses may not truly reflect their beliefs and the fear that their reflections could have personal or professional repercussions. It is also possible that there may have been differences with the way each researcher conducted their interviews, and the clarity of the questions asked. The study may also have been compromised by the participants' individual interpretations of the questionnaires and interview questions, as well as the interpretation of said responses by the researchers. The

participant sample itself may have been limited or skewed by potential participants' time constraints and varying levels of commitment to the mentoring learning team process.

The effects of these potential limitations were mitigated by triangulating the data and piloting the questions with non-participating colleagues and family members to ensure clarity.

Ethics

Ethics approval was obtained from Simon Fraser University, the Coquitlam school board and program advisors prior to conducting the study. All school names and participants' names have been kept confidential and pseudonyms used their place. Consent forms, outlining the purpose of the study, the role of participants and their right to withdraw or refrain from any part of the study, were obtained before the initial questionnaire and these conditions were reiterated again before the subsequent questionnaire and the interview process. The consent form also informed the participants that their participation or lack thereof would not have any effect on themselves at their respective schools or participation in the mentoring learning team.

DATA ANALYSIS AND DISCUSSION

The questionnaires given to participants had two identical questions (Figure 1 and 2 respectively) pertaining to levels of confidence and levels of stress in both the initial survey and the final survey. The researchers' intentions were to use these questions in particular to gather data from the participants to be used to identify areas of significant change for confidence and stress of new teachers who participated in mentoring learning teams around the following themes: classroom management, lesson planning, parent communication, teaching instruction, stress management, time management, and meeting student needs. The initial questionnaire was sent to 61 participants in October 2012, who had originally expressed interest in the study. Of those, 48 completed the survey to give us our baseline information. The final questionnaire was then sent to those 48 in April 2013, which only 33 completed with an additional 1 partially completed. The final number of participants who completed the study was 55.7% of our original sample population, including the partially completed questionnaire. By nature of a questionnaire, dropout rates were expected due to factors such as time commitments or withdrawing from the study. The combination of these factors as well as the closure of a learning team may have contributed to attrition in the study. As a result of the unequal sample sizes, the researchers had to conduct a two tail t-test on the matrix questions in order to analyze for significance.

Figure 1. asks: Please refer to the categories listed below and check the bullet that corresponds to your current level of confidence for each one: Classroom management, lesson planning, parent communication, teaching instruction, stress management and time management, and meeting student needs. Participants were asked to check their level of confidence according to the following Likert scale: Very ineffective (1), Ineffective (2), Neutral (3), Effective (4) and Very effective (5). This question (Figure 1.) was designed to measure the

self-efficacy of new teachers. Of particular interest was to determine if there were any changes in self-perception by participants in mentoring learning teams over the course of the school year. Because the sample sizes were unequal, the researchers conducted a two tail t-test on the first and second questions to test for significant differences between the October and April data. P-values equal to or less than 0.05 show significant changes occurred over the course of the year, meaning that the accuracy of the responses indicated that there was real perceived change for the participants. For confidence this indicates that low p-values relate to increased confidence over the year; for stress, low p-values indicated decreased level of stress. The researchers additionally increased the p-value threshold to 0.10, to indicate that those between p-value 0.05 and 0.10 resulted in changes that were slightly significant given the small sample size. Conversely, high p-values indicate that the accuracy of the responses was so wide spread that concrete change could not be determined, or was therefore not significant.

Classroom management at p-value = 0.03, showed a very high significance for confidence growth. Lesson planning and time management indicated change that was slightly significant at p-values of 0.09 and 0.10 respectively. All other themes showed no significant change for the confidence levels of the participants, though Figure 3. shows an upward trend of the perceived confidence levels across all themes. The statistically significant improvement in participants' confidence in their classroom management strategies is important because this is precisely what new teachers identified as their first priority when asked about the skills they wish to develop over the course of their mentoring learning team. This seems to indicate that mentors were sensitive to mentee needs and provided relevant supports for classroom management content and skills.

Reported confidence in lesson planning and time management skills showed improvement that were slightly significant on the t-test and were also prominent as themes in the open ended responses on the questionnaires. One participant noted that "there never seems to be enough time" and another "I would like to learn how to schedule and manage my time and learn how to manage my time for unit planning." The similar levels of improvement in confidence concerning lesson planning and time management are interesting as there is a close relationship between the two because of the significant time spent, particularly by new teachers, on developing and planning instruction. Time management and planning are key skills when developing units, organizing and prioritizing learning outcomes, and scheduling and prioritizing tasks. Interviewer P04 responded that they got the most out of learning about "transitions and organizing groups and activities."

Figure 2. asks *Please refer to the categories listed below and check the bullet that* corresponds to your current level of stress for each one: Classroom management, lesson planning, parent communication, teaching instruction, stress management and time management, and meeting student needs. Participants were asked to indicate their level of stress using the following Likert scale: Very low stress (1), Low stress (2), Moderate stress (3), High stress (4) and Very high stress (5). This question utilizes the same themes but instead measures for levels of stress. While no theme showed statistically significant change according to the t-test, there was a common trend throughout that showed a slight decrease in stress levels across the categories except for meeting student need, lesson planning and parent communication which actually increased somewhat.

It is very interesting to look at the mean measures of stress in (Figure 4.) that reflects levels of new teacher stress from the first questionnaire taken in the Fall of 2012 to the second

questionnaire which was completed in April of 2013. The high level of significance for classroom management seems to reflect an interesting dynamic between confidence and stress. The mean of new teacher stress for classroom management was at 2.79 after the first questionnaire. Data collected in April of 2013 indicates an overall slight decrease in stress at a mean of 2.53. Even though it was not statistically significant, when analyzing the mean levels of stress across each theme, classroom management shows the highest levels of stress reduction at -0.26. Therefore, there seems to be a relationship between confidence and stress levels. How much of an effect one has on the other is not known, but Figure 4. suggests that higher levels of efficacy and confidence might correspond to less stress. As new teachers became more proficient and confident in their abilities, they may experience less stress or be able to cope with it better.

Time management stress levels show a very slight change, from 2.94 to 2.91 and lesson planning stress levels show a slight increase from 2.68 to 2.76. Stress around teaching instruction decreased from 2.4 to 2.35 and stress management from 2.74 to 2.68. There were very slight increases in stress for parent communication from 2.66 to 2.73 and meeting student needs, from 2.91 to 3.06. While lesson planning, parent communication and student needs show a slight increase in stress levels, the t-test showed no statistically significant changes. Overall, the data seems to show that the stress levels of new teachers did not change significantly.

While the levels of change were less than what the researchers were expecting, it is worth noting that in the researchers' personal experience, stress tends naturally to increase throughout a school year. Thus, although three out of the four themes showed only slight increases in stress (i.e., lesson planning, parent communication and meeting student needs), it would be interesting to explore whether the time of year for the final questionnaire had an impact on new teacher responses using a control group that was not part of the mentoring process. New teachers are

teachers would be getting ready to start end of year testing and paperwork at the time of the second questionnaire. It would also be interesting to explore whether the open nature of the mentoring learning team, which resulted in mentees coming and going from the program at any given time, had an impact on the results. Additionally, it is not known how many new teachers were currently on a job assignment or may have started a new assignment over the course of the study, but either of these factors could have an affect both confidence and stress levels.

Interviews and open-ended responses further explored the nature of stress and how participating in a mentoring learning team could help maintain or even decrease stress. Most participants indicated the importance of feeling heard and knowing that they "were not alone". Just having a means of communication between meetings seemed to give rise to feelings of having a "support network". Comparing the data results from the t-test with the interviews and open-ended responses, suggests that the mentoring learning teams were able to maintain or slightly decrease stress as a result of the supportive and safe environment they provided for new teachers. Having a safe place to share stories and a place to meet each month seems to have helped to break down feelings of isolation. The majority of the participants mentioned in their open-ended responses as well as in the interviews that they appreciated the expertise and time the mentors gave them. As well, many noted that the meeting space provided a safe environment for sharing, advice, resource sharing and developing relationships with colleagues. Specific quotes indicative of this are those such as "a place to collaborate with peers and share ideas," P07 said "Sometimes teaching can feel private or competitive. This learning team turned it over so that we were sharing resources and committed time to succeed as a group in the district. Giving people the time and the opportunity to do that is impressive."

Rank Ordered Themes

The quantitative data from the final questionnaire was themed in order to compare it with the response to the questions in Figures 1 and 2. The questions were grouped and ranked by theme from greatest to least importance as shown in Tables 1-4. They were also compared to reported levels of confidence and stress on the aforementioned Figures 1 and 2. The responses for these questions (*strongly agree/agree*) were totalled and averaged by percent in order to determine the importance of each theme from the participants' perspective. The themes from greatest to least importance are: professional growth and wellbeing (88.3%), teacher culture (82.1%), mentoring support (80.2%), and finally teaching instruction (69.1%). The qualitative data found in the open ended questions; *Questionnaire 1, Question 3 and 4, Questionnaire 2, Questions 44, 45 and 47* was used to determine skills new teachers were hoping to develop, what they did develop, ineffective and effective supports as well as any additional comments participants were willing to share.

Professional Development and Personal Well-being

Table 1 further probes into feelings of well-being and the growth of professional development of new teachers participating in the mentoring learning teams. Overall the results (an average of strongly agree/agree responses) seem to indicate that mentoring positively affected the personal well-being and professional development of new teachers. 79% indicated decreased stress at work, 94% that mentoring assisted their commitment to perform quality work, 91% that mentoring deepened their commitment to teaching, 91% that mentoring helped with their ability to see their own professional growth, 89% that mentoring helped reflect on their practice, 74% thought that it helped with professional development opportunities and 100% responded that mentoring is a vital part of a teacher's professional growth.

The question that does not align with the rest of the responses is in *Question 32* where participants were asked to respond as to whether *Mentoring assisted me in meeting with school administrators to discuss issues related to my own professional needs* at 18%. It is possible that participants responded in a literal way to this question, meaning that mentors acted as physical support to meeting and forming relationships with administrators. Even though mentors ran each of the learning teams, in very few circumstances were mentors situated in their mentees' schools to be able to assist in meeting with administrators. Additionally, there was a large number of TTOC's participating in the mentoring learning teams who did not have a school that they belonged, therefore diminishing the importance of this questions and its relationship with mentoring. As a result of these limitations the researchers decided to remove this question so that it did not factor into the ranking of this theme, thereby changing the average of those who strongly agree/agree from 79.5% to 88.3%, ranking it as the top importance for the participants.

As new teachers and teachers teaching on call (TTOCs), networking and participating in professional development outside of one's school may pose challenges. This is especially true for TTOCs as they do not have a classroom of their own. Participation in mentoring learning teams provided opportunities for teachers to engage and network with colleagues across the district at least once a month. In the words of one participant, P07, "mentorship brings people together that otherwise might not meet." More importantly, new teachers developed a heightened sense of reflective practice and an awareness of their own professional development. Comments extracted from mentee interviews further substantiate this claim. P07 shared that mentoring made me "think about professional development from people who care about teaching. They're inspiring, hard-working, and I learn a lot from them." P02 stated that "being involved has made me more motivated and inspired to try and do new things: a personal education blog and presenting

workshops, and to share new ideas." As well, participating in the mentoring learning teams "reinforced reflective practice." Additionally, P08 responded that mentoring helped them develop a "commitment to professional development and a sense of responsibility to keep up your end of the deal." Even though all teachers who were interviewed stated that they were already committed to teaching, a shared sentiment amongst them was that mentoring further 'deepened their commitment'.

It is interesting to note that 79% of new teachers answered with either a strongly agree/agree response to the question that mentoring decreased stress at work. This seems to corroborate the data from the stress comparison tests between questionnaires 1 and 2. Although there were no significant changes in stress levels, stress levels virtually no change or decreased, the greatest being for classroom management. All interviewees, except for one, were able to form a close relationship with their mentors. Mentors were viewed as master teachers who were inspiring. P04 states that even though there were only 2 mentors in their learning team they are "both very understanding people care about other people and want to inspire good teaching. They are proud of their abilities as a teacher, and are politically aware and proud of profession." Additionally, all interviews, except for one, felt that their mentors were not just master teachers, but trained as mentors. New teachers face heavy time investments in the beginning phases of their careers as they build a repertoire of resources, units, classroom management strategies and assessment practices. While helping provide these supports, it seems as if mentoring learning teams have additionally had a positive affect on developing a selfawareness of professional growth, reflective practice and commitment to teaching.

Teacher Culture

The trend of the responses points to positive benefits of building teacher culture (sense of belonging) with mentoring. With the increase of confidence in instructional strategies it made sense that participants reported a high level of functioning in the culture of the classroom at 91.4%. Specific questions referring to culture are numbered five through eight are in the second questionnaire. Question 5 pertains to classroom culture had an averaged strongly agree/agree of 91.4%, question 6 dealt with school culture with an averaged response of 77%, question 7 was district culture at 92% and question 8 dealt with feeling a part of the culture of the teaching profession averaged a response of 100%. Question 11 garnered an averaged response of 79% as is dealt with breaking down feelings of professional isolation. These seem to indicate that the mentoring learning teams helped new teachers break down feelings of professional isolation and helped to develop a greater sense of belonging.

Items 9 and 40 had the lowest response averages at 24% and 54% respectively. Item 9 asked whether mentoring helped new teachers get to know their administrators. The low response rate might have reflected a misinterpretation of the question. New teachers might have responded in a literal way, meaning that mentors would have served as a physical presence in introducing or initiating contact with their administrators. This would not have been possible as the mentors for the learning teams were not situated within the home school of the mentees. Another possibility is that the TTOCs, who made up 7/33 participants in the second questionnaire, would not have had a home school and might have answered in the negative due to the nature of their job. This is further supported by P04: The *biggest challenge is not being known by admin and therefore not supported as much as a full time staff member. If problems*

occur, especially behavioural, I don't feel that the support is the same. TOCs are notoriously targeted by kids.

For these reasons the researchers decided to omit question 9 from factoring into the overall ranking of the theme. Item 40 asked whether mentoring helped teachers feel a part of their school. While item 6 asked about school culture and had a 77% positive response rate, the language of item 40 was re-worded to ask about the feeling a apart of the school and had a positive averaged response of 54%. The data seems to suggest that the results might have been lower as a result of TTOCs or new teachers who might have recently gotten a job assignment. TTOCs do not have a home school, and therefore would most likely not feel any affinity to any school. Similarly those in new job assignments might not have settled in or cracked the culture of their new school. The positive, however, in light of fewer participants who strongly agreed/agreed, the overall sense of belonging in the culture of the school district had a response of 92%. As well, the averaged strongly agree/agree response for feeling a part of the teaching profession is 100%. This would strongly indicate that mentoring learning teams heightened the commitment and sense of belonging to the mentees. This support network provided a safe environment in which mentees sought advice and made personal connections. It seems that stress levels are positively influenced by an increased sense of belonging as feelings of isolation are broken down and that being surrounded by people who are living the same thing as me is comfort in itself. These supports in themselves are examples of stress coping mechanisms: bouncing ideas off each other, seeking advice, sharing stories and finding solace in personal relationships.

While new teachers usually feel stress in new job assignments, it usually revolves around job competency and acceptance as an equal colleague and not as a 'temp'. This is more

significantly felt for TTOCs as they are the most disenfranchised group in regards to being active members of a particular school culture. Some open ended responses from the first questionnaire and from the interviews shed some light on feelings of isolation and associated stressors of new teachers.

- P07: Sometimes teaching can feel private or competitive. It (mentoring) turned it over so that we shared resources and committed time to succeed as a group in the district. Giving people that time and the opportunity to do that is impressive.
- I was able to find others who were in similar situations and not feel so alone in my struggles as a new teacher.
- As a teacher on call the main benefit of mentoring is to gain a sense of belonging that is not apparent when travelling from school to school.
- P06: In Coquitlam I felt welcome in some schools, but sad going into the lunch room that no one would talk to you. Saying "hi" was really great, but TOCs are an 'other' and so people didn't really talk to you or make you feel welcome.
- P03: As a TOC there is no belonging. The mentoring group provides a staff room where there is a place to bounce ideas off of. Some people reach out but generally not. The biggest challenges are collegial relations at a new school. Trying to connect is important but can be difficult, some cultures are great and others you are on your own.

Regardless of having an assignment or not, the networking of teachers across SD43 increased the sense of belonging; and the ability to talk, share and build relationships in a safe environment lead to a more inclusive culture within the district. To reiterate, the supports found in the mentoring learning teams seemed to mitigate some of the stresses found in the teaching environment. This is more significantly seen in the open-ended responses of our TTOC participants as a result of the nature of their job and not having a 'staffroom' of their own to be cultured into.

Mentoring Relationships

Mentoring supports was the second strongest theme with a strongly agree/agree response average of 80.2%. These questions explored the dynamic of mentee and mentor relationships and how they possibly affected mentees' experiences. Questions 34, 35, 37 and 38 garnered strong affirmation from mentees, ranging from an 87% to 100% agreement average. Question 17 indicates the lowest average at 53%. When the mentoring learning teams received their budgets for the 2012/2013 school year, each participant was given 3 release days as professional development to meet and either observe their mentor or have their mentor observe them. Due to growing financial challenges early in 2013, SD43 stopped and further professional development to cut spending. As a result the 53% average response rate may indicate a number of mentees who may have desired to use the professional development days as observational time, but were no longer able to as a result of budget constraints. Question 33 asked participants if My mentor was concerned/interested about my family/home life. Even though the averaged strongly agree/agree response was only 57%, this is offset by Questions 35, 37 and 38. This 57% seems to reflect a mentor – mentee relationship that was deeper in nature if there was concern demonstrated for one's personal life. This could be seen as positive that over half of the mentees surveyed were able to form a deeper intimacy with their mentor. Question 38 which asked if Mentoring provided me with a person I could use as a sounding board and confidante had an averaged 87% strongly agree/agree response. Although mentees might not have formed deep relationships with their mentors, this response seems to demonstrate that the majority of mentee - mentor relationships were positive and supportive. The general agreement of mentor as confidante suggests a relationship that is based on respect, trust and care.

These responses seem to indicate that new teachers felt that the relationships they developed with their mentors had positive affects on their wellbeing and growth. P03 indicated that their "mentor is caring and I know that she cares about my journey and is personally invested. She gives me her time and shows commitment and so I want to show it back." This statement suggests that the relationship between mentor and mentee is one that is invested into by both parties. The mentor commits their time in an effort to invest in the success of their beginner colleagues. This young teacher acknowledges that and as a result of their relationship with their mentor, pushes to raise their own expectations in order to make their mentor proud.

This data also seems to corroborate the data results gathered from the confidence and stress t-test and questionnaire comparisons. Confidence may reflect the growing proficiency in which teachers feel that they are capable of tackling challenges and their own teaching as a result of having learned skills and strategies from participating in the mentor learning teams.

Teaching Instructional Strategies

The rank order for the sub themes of instructional strategies are as follows: teaching instruction 86%, assessment strategies 76.7%, lesson planning 75%, classroom management 68.5%, parent communication 64%, meeting student needs 62.2%, and time management 47%. Item 15 asked it *mentoring helped me relate lessons to real-life situations of students* averaged a 47% strongly agree/agree response. This may indicate that this might not have been a well discussed them or could have been addressed on a mentee by mentee basis if it was an issue. As well, item 31 had a low averaged strongly agree/agree response of 45%. This question asked if *mentoring helped me maintain an attractive and appropriate classroom setting for students*. This could suggest that even though this item may not have been discussed as a group topic, it might have come up for individual mentees in one-on-one discussions or through observing different

teaching environments. Item 25 mentoring gave me feedback about time management for noninstructional use with an average response of 30% who strongly agree/agree, point to the likely scenario where mentors and mentees used their time in their meetings for learning focused discussions that were more inclined to provide support in professional growth. The remainder of the items lend support about the importance of these themes from the perspective of the mentees. Furthermore, the prevalence and the importance of these themes from the mentee perspective align with what the researchers were expecting to find, in regards to areas in need of support by new teachers. Triangulating the data from the stress and confidence t-tests, the data suggests that mentoring has a positive effect on the proficiency and confidence of new teachers. In the confidence t-test, classroom management had a very high level of significance for an increase in confidence levels from the first questionnaire to the second. Similarly, even though the stress ttest presented no significant change, the questionnaires and interviews support that with an increase of confidence, stress levels were more manageable as mentees gained more skills, built support networks and in the words of one participant I was able to focus on my teaching without worrying about little things and I learned to look at the big picture.

CONCLUSION

In summary, the study supported the researchers' thoughts about how mentoring encouraged the growth of confidence and skills of new teachers who participated in these learning teams. This study explored those participating in mentoring learning teams in the Coquitlam School District to find out if self-efficacy and professional growth were affected by their involvement in the program. While having positive effects, the range of themes that were perceived as important by mentees were more diverse than what the researchers had expected. These themes included professional growth and wellbeing, teacher culture, mentoring supports, and teaching instructional strategies.

Mentoring is not a new concept and the literature supports that mentoring learning teams in education are beneficial to the success of new teachers. While expectations of the study were that it would support previous research, the researchers did not expect how strongly the participants felt about the program; with one going as far as stating that "mentoring is essential for the development of teachers." The thematic benefits of mentoring were evident in the findings with a high level of significance in confidence for classroom management, and slight significance for lesson planning and time management. Further support was found by looking at the responses to stress levels associated with the same themes. Numerous participants indicated that the skills they hoped to develop and the challenges that they were hoping to receive support for were classroom management skills, planning/scheduling and time management. As well, participants indicated that the mentoring learning teams covered topics generated by the mentees in order to make meetings and support relevant. Though none of the findings proved to have any significant changes to stress, this inferred that mentoring enabled mentees to maintain and

manage their stress regardless of the situation or time of year (i.e. report card writing, parent communication, new positions).

Emergent themes arose during the interviews and open-ended questions surrounding networking, collaboration and a sense of belonging also support the literature in which new teachers often have high anxiety, doubt their abilities and feel isolated in the profession. All of the participants in this study had the opportunity to use collaborative and observational time with their mentors. Those that utilized this opportunity strongly advocated for its benefits however, it was not built into the schedule for all participants and therefore was not as effective as it could have been. Subsequently, there was a budget amendment in January which froze the remainder of the funds for the collaborative piece of the mentoring learning teams which prevented some of the participants from using that observational time.

Another recurring trend from the participants was that in general, the mentoring learning teams were best viewed as a networking environment where individuals could count on the support of likeminded individuals, hold learning focused conversations, gather resources and share ideas. All participants indicated that mentoring is a vital part of a teacher's professional growth. The majority of participants also indicated that mentoring assisted them in their ability to perform quality work, deepened their commitment to teaching and helped with their ability to see their own professional growth. As important is that mentoring learning teams created safe environments in which teachers could share, collaborate, set goals, reflect, network and have professional learning focused conversations. This resulting supportive network enhanced and strengthened teacher culture, especially for TTOCs who are the most disenfranchised group in regards to a sense of belonging due to the very nature of their job.

Through the exploration and results of this study, mentoring learning teams positively increased participants' feelings of confidence, improved self-efficacy and deepened their commitment to the teaching profession. Furthermore, professional growth and wellbeing, and the culture in which one works, proved to be the themes that participants perceived as most important. Words that mentees used to capture their experiences included "comfortable", "camaraderie", "self-confidence", "honest reflection", "inspiring", "more hopeful", "collaborative", and "support network". Mentors were seen as confidentes, sounding boards, and as people who genuinely cared about the new teachers they were working with. In conclusion, mentoring helped new teachers enhance their own repertoire of instructional strategies, build professional and collaborative support networks, and motivated new teachers to become more invested in their own professional growth.

RECOMMENDATIONS

The researchers are confident in recommending the following to new teachers, the Coquitlam School District and Board as well as the skill development sector, the BCTF – mentoring division.

New Teachers

Join available mentoring learning teams at new stages in their career, especially if they are TTOCs. The relationships formed and the supports available, as indicated in the findings, were perceived as invaluable by mentees. Committing to the experience strongly suggests that new teachers attend meetings, share questions for inquiry and be willing to share personal experiences. Mentees should set up a learning plan with achievable goals with mentors to encourage reflection on their teaching practice in order to track professional growth.

Coquitlam School District, School Board and skill development sector.

Encourage mentoring learning teams for new teachers and those experiencing new environments regularly. Even though many participants made a concerted effort to attend meetings, some indicated the following: meetings were not frequent enough as issues needing support rose and fell in the weeks between meetings, the time slotted for meetings didn't always work, and the desire for a social media piece to connect everyone for the weeks between meetings. As secondary schools are working with having site based mentors, it would be opportune to start a similar program in elementary and middle schools to formalize mentoring in the district. As well, some mentoring learning teams were too large in the sense that not all mentees got to share or participate at meetings. Breaking down large mentoring learning teams

into smaller sub groups would help with mentor-mentee ratio and may draw in more new teachers if offered on different days.

Structure more formalized mentoring learning teams with continual and upgraded training for mentors. Provide each participant with 2 days in which to have shared classroom observation and discussion with a mentor. Establish criteria for mentor/mentee pairing. Require all new teachers to participate in a mentoring learning team for the first 2-3 years of their career with the opportunity to voluntarily join a learning team when changing positions later in their career.

BCTF – mentoring division

To build on the existing mentoring pilot project and design a required and formalized mentoring framework that can be used in all districts across BC to establish a provincial standard of mentoring to raise the standards of the teaching profession.

FURTHER AREAS OF INQUIRY

Further inquiry can be made based on some of the finding of this study. The researchers feel if the following areas are explored, it would strengthen BC's unique educational stance through mentoring, aiming to raise the ceiling on the teaching profession.

- Conduct a study on the structure of mentoring programs in regards to organization of meetings, mentor-mentee ratio and mentor-mentee pairing to explore whether that has an affect on learning
- Conduct a study on the effectiveness of site based mentorship vs. learning team models in
 Coquitlam to determine if one program is more beneficial to the other
- Explore the mentor perspective and see what similarities and differences arise compared to the mentee views
- Explore whether the time of year for the final questionnaire had an impact on new teacher responses using a control group that was not part of the mentoring process
- It would also be interesting to explore whether the open nature of the mentoring learning team, which resulted in mentees coming and going from the program at any given time, had an impact on the results.
- Conduct this study with a group of new teachers who are not participating in mentoring learning teams in order to have more generalizable findings

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FIGURES AND TABLES

Figure 1. Significance of Confidence

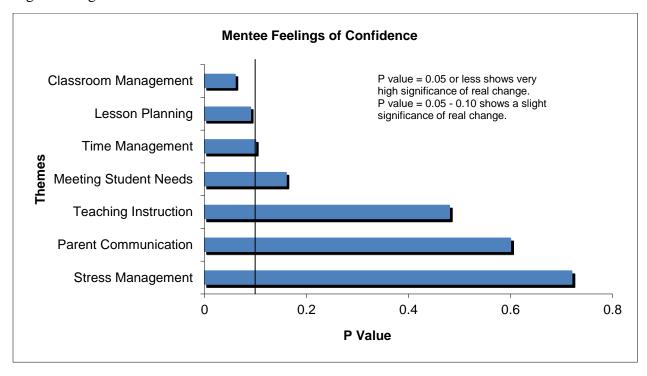


Figure 2. Significance of Stress

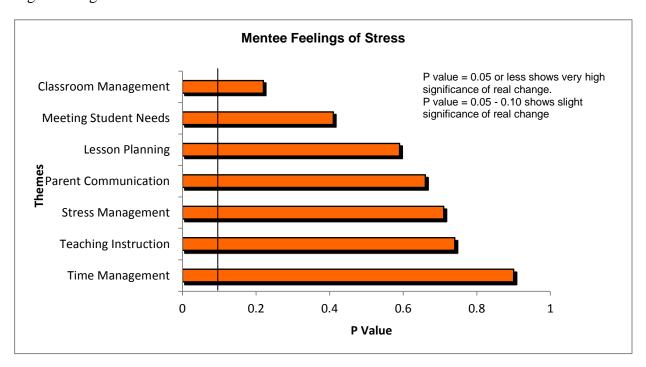


Figure 3. Confidence T-Test

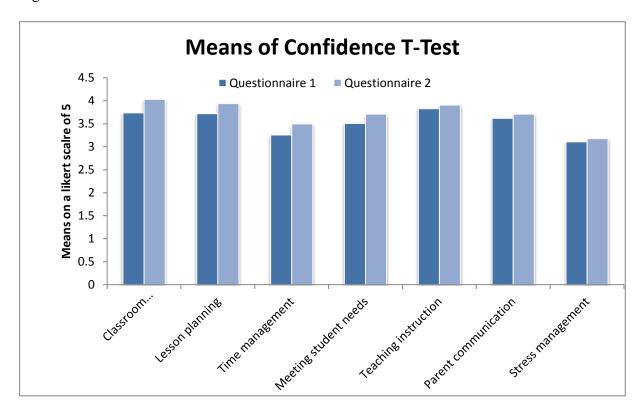
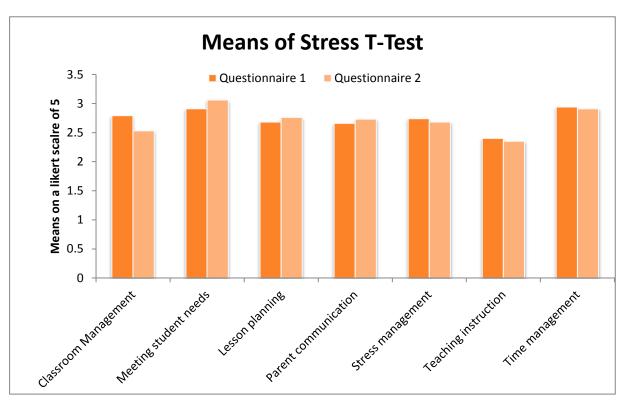


Figure 4. Stress T-Test



Tables in Thematic Order of Importance: Ranked by the participants average response of agree/strongly agree

Table 1. Responses for Professional Development and Personal Wellbeing

Item	Type of Support	Percentage of strongly agree/agree responses					
18	Mentoring provided opportunities to attend workshops, classes, meeting of conferences to help with some aspect of my teaching.	74.0%					
24							
32							
36	Mentoring decreased my stress at work.	79.0%					
39	Mentoring assisted me with the commitment to perform quality work.	94.0%					
41	Mentoring gave me to see my own professional growth.	91.0%					
42	Mentoring deepened my commitment to teaching.	91.0%					
43	Mentoring is a vital part of a teacher's professional growth.	100.0%					
	Total	636.0%					
	Average of strongly agree/agree responses	79.5%					
	Total (question 32 omitted)*	618.0%					
	Average of strongly agree/agree responses (question 32 omitted)*	88.3%					

Table 2. Responses for Teacher Culture

Item	Type of Support	Percentage of strongly agree/agree responses
5	Mentoring helped me function in the culture of the classroom	91.0%
6	Mentoring helped me function in the culture of the school	77.0%
7	Mentoring helped me function in the culture of the district	92.0%
8	Mentoring helped me function in the culture of the profession	100.0%
9	Mentoring helped me get to know the administrators in my school	24.0%*
11	Mentoring helped me break down my feelings of professional isolation in the new work setting	79.0%
40	Mentoring made me feel a part of the school	54.0%
	Total	517.0%
	Average of strongly agree/agree responses	73.9%
	Total (question 9 omitted)*	493.0%
	Average of <i>strongly agree/agree</i> responses (question 9 omitted)*	82.1%

Table 3. Responses for Mentoring Support

Item	Type of Support	Percentage of strongly agree/agree responses
17	Mentoring provided opportunities for my mentor to observe my instruction for the purpose of helping me become a more effective teacher.	53.0%
33	My mentor was concerned/interested about my family/home life	57.0%
34	Mentoring gave me the opportunity to meet with fellow mentees to discuss common concerns or to solve common problems	100.0%
35	Mentoring provided me with encouragement in the face of minor failures	91.0%
37	Mentoring gave me emotional support as a teacher	93.0%
38	Mentoring provided me with a person I could use as a sounding board and confidante.	87.0%
·	Total	481.0%
	Average of strongly agree/agree responses	80.2%

Table 4. Responses for Teaching Instruction Strategies

Item	Type of Support	Percentage of strongly agree/agree responses
10 20 23	Teaching Instruction Mentoring helped me develop contact with student focused instruction. gave me feedback about improving instruction. gave me feedback about effective teaching practices that I have found useful.	89.0% 74.0% 95.0% Subtotal 86%
12 14 28	Assessment Strategies helped me learn to monitor the progress of my students helped me to respond to student performance	71.0% 77.0% 82.0% Subtotal 76.7%
13 15 16 19 31	Meeting Student Needs helped me to support students who were demonstrating efforts to learn helped me relate lessons to real-life situations of students helped me assess student progress by promoting engagement gave me information about meeting the individual needs of studentshelped me maintain an attractive and appropriate classroom setting	74.0% 47.0% 71.0% 74.0% 45.0% Subtotal 62.2%
21 22	Lesson Planning Mentoring gave me feedback about gathering teaching resources Mentoring gave me feedback about developing lesson plans	82.0% 68.0% Subtotal 75%
25 30	Time Management Mentoring gave me feedback about time management for non-instructional tasks helps manage the learning environment by effectively using instructional time	30.0% 64.0% Subtotal 47%
26 27	Classroom Management Mentoring gave me feedback about classroom management Mentoring gave me feedback about managing challenging student behaviours	76.0% 61.0% Subtotal 68.5
29	Parent Communication Mentoring gave me feedback about communicating with parents Total	64.0% 1244.0%
	Average of strongly agree/agree responses	69.1%

APPENDICES

Appendix A: Initial Mentoring Questionnaire

1.	Are you male or female?*
	C male C female
2.	How many years of teaching experience do you presently have?*
	O 0-1
	° ₁₋₂
	° 2-3
	O 3-4
	O 4-5
	Other, please specify
3.	Primarily, what level do you teach at?*
	elementary middle secondary
4.	What grade and subject are you currently teaching?* Enter at least 2 responses.
	Grade level(s):
	Subject(s):
5.	How did you hear about the district mentoring program?*
	C email C colleague
	Other (please specify below)
6.	What are your reasons for participating in this program?* (Check all that apply)

	Classroom Management
	Lesson Planning
	Parent Communication
	Teaching Instruction
	Stress Management
	Time Management
	Meeting Student Needs
	Other, please specify
(Che	nin the last 3 years, what changes have you experienced in your teaching career?* ck all that apply) Select at least 1 response.
	New School District
	New Subject Area
	New School
	New Grade Level
	New Teacher (0-3 years teaching experience)
	None of the Above
8. Did	these changes influence your decision to participate in a mentoring program?* Yes No
	many mentors are there in your specific learning team?*
0	1
0	2
0	3
0	4+ (Please specify)
10. Hav (If y	ve you participated in this or any other mentoring program before?* ves, please describe your experience)
0	Yes

\bigcirc	
	No

- 11. Have you received any mentoring in an informal manner in the past; if so, was it helpful?* (Please type N/A if not applicable to you)
- 12. Please refer to the categories listed below and check the bullet that corresponds to your current level of confidence for each one.*

	Very Ineffective	Ineffective	Neutral	Effective	Very Effective
Classroom Management	0	0	0	0	0
Lesson Planning	0	0	0	0	0
Parent Communication	0	0	0	0	0
Teaching Instruction	0	0	0	0	0
Stress Management	0	0	0	0	0
Time Management	0	0	0	0	0
Meeting Student Needs	0	0	0	0	0

13. Please refer to the categories listed below and check the bullet that corresponds to your current level of stress for each one.*

	Very Low Stress	Low Stress	Moderate Stress	High Stress	Very High Stress
Classroom Management	0	0	0	0	0
Lesson Planning	0	0	0	0	0
Parent Communication	0	0	0	0	0
Teaching Instruction	0	0	0	0	0
Stress Management	0	0	0	0	0
Time Management	0	0	0	0	0
Meeting Student Needs	0	0	0	0	0

- 14. If there are any additional categories of stress that were not listed in the above question please comment here and indicate your levels of stress using the previous scale.*

 (Please type N/A if not applicable to you)
- 15. What supports or skills are you hoping to develop or enhance from participating in this mentoring program?*

Appendix B: Final Mentoring Questionnaire

1.	Please refer to the categories listed below and check the bullet that corresponds to your current
	level of confidence for each one.*

	Very Ineffective	Ineffective	Neutral	Effective	Very Effective
Classroom Management	0	0	0	0	0
Lesson Planning	0	0	0	0	0
Parent Communication	0	0	0	0	0
Teaching Instruction	0	0	0	0	0
Stress Management	0	0	0	0	0
Time Management	0	0	0	0	0
Meeting Student Needs	0	0	0	0	0

2. Please refer to the categories listed below and check the bullet that corresponds to your current level of stress for each one.*

	Very Low Stress	Low Stress	Moderate Stress	High Stress	Very High Stress
Classroom Management	0	0	0	0	0
Lesson Planning	0	0	0	0	0
Parent Communication	0	0	0	0	0
Teaching Instruction	0	0	0	0	0
Stress Management	0	0	0	0	0
Time Management	0	0	0	0	0
Meeting Student Needs	0	0	0	0	0

- 3. If there are any additional categories of stress that were not listed in the above question please comment here and indicate your levels of stress using the previous scale.*

 (Please type N/A if not applicable to you)
- 4. What supports or skills did you develop or enhance from participating in this mentoring program?*

5.	Mentoring helped me function in the culture of the classroom.*
6.	Mentoring helped me function in the culture of the school.*
7.	Mentoring helped me function in the culture of the district.*
8.	Mentoring helped me function in the culture of the profession.*
9.	Mentoring helped me get to know the administrators in my school.*
10.	Mentoring helped me develop content with student focused instruction.*
11.	Mentoring helped me break down my feelings of professional isolation in the new work setting.*
12.	Mentoring helped me learn to monitor the progress of my students.*
13.	Mentoring helped me to support students who were demonstrating efforts to learn.*
14.	Mentoring helped me to respond to student performance.*
15.	Mentoring helped me relate lessons to real-life situations of students.*
16.	Mentoring helped me assess student progress by promoting engagement of most of my students most of the time.*
17.	Mentoring provided opportunities for my mentor to observe my instruction for the purpose of helping me become a more effective teacher.*
18.	Mentoring provided opportunities to attend workshops, classes, meeting or conferences to help with some aspect of my teaching.*
19	Mentoring gave me information about meeting the individual needs of students *

20.	Mentoring gave me feedback about improving instruction.*
21.	Mentoring gave me feedback about gathering teaching resources.*
22.	Mentoring gave me feedback about developing lesson plans.*
23.	Mentoring gave me feedback about effective teaching practices that I have found useful.*
24.	Mentoring gave me feedback about my own reflective thinking about teaching.*
25.	Mentoring gave me feedback about time management for non-instructional tasks.*
26.	Mentoring gave me feedback about classroom management.*
27.	Mentoring gave me feedback about managing challenging student behaviours.*
28.	Mentoring gave me feedback about completing paperwork such as report cards.*
29.	Mentoring gave me feedback about communicating with parents.*
30.	Mentoring helped me manage the learning environment by effectively using instructional time.*
31.	Mentoring helped me maintain an attractive and appropriate classroom setting for students.*
32.	Mentoring assisted me in meeting with school administrators to discuss issues related to meeting my own professional needs.*
33.	My mentor was concerned/interested about my family/home life.*
34.	Mentoring gave the opportunity to meet with fellow mentees to discuss common concerns or to solve common problems.*

35.	Mentoring provided me with encouragement in the face of minor failures.*
36.	Mentoring decreased my stress at work.*
37.	Mentoring gave me emotional support as a teacher.*
38.	Mentoring provided me with a person I could use as a sounding board and confidante.*
39.	Mentoring assisted me with the commitment to perform quality work.*
40.	Mentoring made me feel a part of the school.*
41.	Mentoring helped me to see my own professional growth.*
42.	Mentoring deepened my commitment to teaching.*
43.	Mentoring is a vital part of a teacher's professional growth.*
44.	My mentoring experience was most effective when* Please complete the above statement.
45.	My mentoring experience was least effective when* Please complete the above statement.
46.	Are you willing to participate in an interview/focus group to help us further examine mentoring themes?* Interview/focus groups will take place in mid April. Any one who participants will be entered in a draw for additional Starbucks giftcards. Yes No
47.	If you have any additional comments about your mentoring experience, please write them here.

Appendix C: Interview Questions

- 1. Start off by telling us your current teaching assignment, how long you have had this position, your seniority in SD 43 and how long you have been in the teaching (private, public, international, ttoc, etc)
- 2. Tell us about some of the challenges you have experienced as a new teacher (new = 0-3 years teaching, or new subject, or new district, or new school, or new grade).
- 3. How has this 'newness' posed challenges in regards to feeling a sense of belonging in your school and/or in SD43?
- 4. Tell us how your sense of belonging has or has not grown as a result of participating as a mentee in the mentoring team?
- 5. a. What prompted you to join the district mentoring learning team?
 - b. How did you choose your particular mentoring group?
- c. Did the group meet regularly, how often has the group met and how often have you been able to attend
- 6. What are some of the most important skills and attitudes you've developed as a result of the mentoring learning team?
- 7. Were there skills or attitudes you were hoping to develop but didn't?
- 8. How did the structure of the mentoring learning team support your learning?
- 9. Was there anything about the structure of the learning team that impeded your own learning?
- 10. a. Did you feel that your mentor was knowledgeable and skilful as a mentor?
- b. Was it defined to you what the roles & responsibilities of the Mentors and Mentees were? (mentor =explained as colleague, coach, supporter, facilitator, etc) (mentee as = student, colleague, and committed to team)
 - c. If not, would explicit definitions have helped your understanding of expectations?
- 11. How did your mentor relationship affect your experience and learning by being involved in a mentoring team?
- 12. a. Did you have regularly scheduled meeting times with your mentor to discuss your growth and goals?
 - b. If not, would you have found this helpful? Explain

- c. What was your mentor/mentee ratio, and how did the ratio size affect your experience?
- 13. How effective was the mentoring learning team in determining whether or not it influenced your commitment and/or philosophy of teaching?
- 14. As a participant in the mentoring learning teams are there any changes or considerations that in your opinion might make it more valuable to future mentees?
- 15. Is there anything you would like to add that was not asked about the mentoring program itself or your experiences with it?