

**THE EFFECTS OF A MENTORING PROGRAM ON TEACHER RETENTION
RATES AT TASHKENT INTERNATIONAL SCHOOL**

A Record of Study

by

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ABSTRACT

Teacher retention has become a focus of many schools and school systems in recent years. The United States, United Kingdom, and Australia have grappled with increasing attrition rates among new teachers. International schools experience similar rates to varying degrees. There are similarities among countries and international schools with respect to why teachers leave schools or the teaching profession.

The high monetary cost of teacher attrition and the upheaval in school culture and curriculum development warrant further investigation into teacher attrition prevention strategies. This study explored the effectiveness of a mentoring program for newly hired teachers at Tashkent International School (TIS). By investigating first whether the TIS program has achieved its intended outcome and, second, by determining characteristics of the program that have best achieved this goal, the study showed a clear path forward regarding mentoring that may inform similar international schools as they consider strategies to manage teacher retention.

The purpose of this mixed method study was to examine the effects of a mentoring program on school-related factors that affect teacher retention rates in an international school. Eight teachers employed at Tashkent International School from kindergarten to grade 5 who participated in a mentoring program were surveyed, interviewed, and observed in weekly meetings. The data collected were analyzed according to themes grouped as early intervention, a supportive communal culture, and distributive leadership. New teacher survey results and interviews indicated that the

mentoring program positively affected teachers' perceptions of the school's collaborative culture and the level of support provided by the school. Data collected from mentor-teacher surveys and interviews indicated that lead teachers benefitted from leadership opportunities. Observation data reflected a focus on student work in meetings and a questioning/coaching model used by mentors.

While the study revealed these positive aspects of the program, analysis also revealed areas of possible improvements. These areas include formalizing responsibilities of lead teachers and providing ongoing training to increase the lead teacher capacity as mentor. The results of this study suggest that international schools should consider adopting a new teacher mentoring program as a teacher retention strategy.

DEDICATION

To my husband Brett, whose encouragement and support throughout my record of study and all of life's challenges have given me strength to work diligently to pursue my dreams.

To my children, Devon, Rocco, Anthony, and Natalia, who have shown patience and independence that allowed me to work long hours over the past four years to complete this program. I hope that I have embodied our family trait of perseverance and that my example will inspire you to work hard to achieve your goals.

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NOMENCLATURE

AOS	American Overseas Schools
CEESA	Central Eastern European School Association
CIS	Council of International Schools
DP	Diploma Program
EARCOS	East Asian Regional Conference of Overseas Schools
IBO	International Baccalaureate Organization
IRB	Institutional Review Board
ITMS	International Teacher Mobility Survey
MTS	Mentor Teacher Survey
MYP	Middle Years Program
NCES	National Center for Educational Statistics
NEASA	Near East Asian Schools Association
NEASC	New England Association of Schools and Colleges
PYP	Primary Years Program
SASS	Schools and Staffing Survey
TFS	Teacher Follow-up Survey
TIS	Tashkent International School

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CHAPTER I

INTRODUCTION AND LITERATURE REVIEW

Teacher retention has become a concern in many schools in the United States, United Kingdom, and Australia. Teachers have left the field at alarming rates in certain districts, and nationwide attrition rates and their resulting consequences have come to the attention of policy makers. A 2004-05 survey on teacher attrition and mobility found that 10% of public school teachers younger than age 30 left teaching. Of private school teachers of the same age, 20% left the profession (Marvel, Lyter, Peltola, Strizek, & Morton, 2006).

Teacher retention at international schools, defined as schools which recruit teachers from countries other than the host country, have followed a similar pattern and face the same challenges. Every year, leaders in overseas schools face the challenge of recruiting enough teachers to fill classrooms for the following August and, even with concerted time and money spent on recruiting, shortages persist in overseas schools (Keeling, 2010). To assist school leaders, recent studies on teacher retention in international schools have examined multiple factors affecting attrition rates and have recommended further research into this area (Odland, 2007). The average attrition rate in schools in Southeast Asia was 17% from 2006 to 2009, with some schools experiencing a turnover rate as high as 60% (Mancusco, Roberts, & White, 2010). High attrition rates have proved costly as school leaders spend considerable time and resources recruiting and training new teachers.

Organizational conditions and salary are the most important predictors of teacher turnover (Mancusco et al., 2010). Many schools—particularly smaller, developing schools—are not financially equipped to provide salaries that compete with larger, more established schools. Therefore, the focus lies in improving the organizational conditions (Odland, 2007). Mentoring programs are a potential way to focus on issues with organizational conditions and thus address specific aspects of teaching that lead to teacher attrition (Smith & Ingersoll, 2004).

Problem

The varied emphases of studies and the wide range of differences in implementation and setting of mentoring programs have created the need for further study (Ingersoll & Kralik, 2004). Additional studies that can clearly delineate success rates of specific mentoring program features and strategies are needed. There has been a call for further research to determine what specific mentoring experiences influence teachers to stay in the field (Smith & Ingersoll, 2004).

There is also a need to study the effects of retention and the practices employed to improve retention as they relate to the organization. Ingersoll (2001a) suggested that teacher turnover was an important issue because of its connection to performance of the overall organization. He argued that developing teacher retention strategies required considering how these strategies might affect all levels of the organization, not merely the individual teachers. He contended that teacher turnover was affected by the atmosphere and environment of the schools in which they worked (Ingersoll, 2001a).

Further research is needed to assess the impact of mentoring programs on the effectiveness of school organizations (Ingersoll, 2001a).

Mentoring relationships differ and a positive relationship extends beyond professional duties. A good mentor is a guide, supporter, friend, advocate, and role model (Pitton, 2006). Ultimately, the support needed by new teachers depends on a complex set of elements, including initial teacher preparation, challenges of the teaching context, and individual teacher experiences and dispositions (Wilkinson, 2009). Considering the diversity of teachers in international schools, mentoring programs may provide a differentiated approach to new teacher support that fosters collaboration, teacher job satisfaction, and ultimately, better teacher retention rates. Further study is needed to clearly determine whether mentoring programs directly affect retention rates.

Purpose Statement

The purpose of this study was to understand the impact of a teacher mentoring program on teacher retention. Tashkent International School (TIS) implemented a Lead Teacher program with a focus on new teacher mentoring intended to reduce teacher attrition rates. Within this program, the lead teacher acted in a mentoring capacity and held a leadership position within the school. Specific aspects of both a new teacher's experience in a mentoring program and a lead teacher's experience in a leadership and mentoring role at TIS were studied to determine key aspects of the program that possibly had a positive effect on teacher morale and performance.

The primary goal of the lead teacher program at TIS is to mentor new teachers. It is a formal mentoring program as described by Pitton (2006), which provides structured support for new teachers. The program was introduced after a recommendation from the New England Association of Schools and Colleges/Council of International Schools (NEASC/CIS) accreditation team to address the issue of teacher turnover. A secondary goal of the program is to provide a venue for teacher leadership, which may positively impact a returning teacher's decision to further renew the contract.

Central Questions

Central questions of this study were:

- Does the mentoring program for newly hired teachers at TIS affect teacher morale and the culture within the school?
- Does the mentoring program affect teacher retention rates?
- What components of the mentoring program for newly hired teachers affect retention rates?

Literature Review

Early Intervention

Mentoring programs have been paired with new teacher induction as an early intervention to improve retention rates. Induction programs are often short-term approaches to new teacher support, while mentoring provides sustained support. Both of these approaches have been shown to be beneficial (Pitton, 2006). Several studies

showed that first year teachers who participated in both mentoring and group induction programs were less likely to elect to move to other schools or leave teaching altogether (Smith & Ingersoll, 2004). In a meta-analysis of 15 empirical studies, Ingersoll and Strong (2011) examined the effects of induction and mentoring on novice teachers. Ingersoll and Strong's review of these studies is categorized into three sections, based upon the outcomes of the studies reviewed. These sections are: a) teachers' job satisfaction, commitment, retention, and turnover, b) teachers' classroom teaching practices and pedagogical methods, and c) student achievement" (Ingersoll & Strong, 2011, pg. 11). The review also looked at the factors that affected job satisfaction. These included administrative support for mentoring, the development of a collaborative culture, and perceived instructional improvement (Ingersoll & Strong, 2011).

Switzerland, France, New Zealand, Japan, and China have acknowledged the benefits of mentoring and induction programs by providing funding to programs that offer mentoring support to all teachers within the first two years of entering the profession (Hudson, Beutel, & Hudson, 2007). Mentoring and induction programs have been acknowledged and institutionalized in many U.S. school districts through funding and personnel resources. In the 1999-2000 school year, close to 80% of U.S. teachers reported participating in an induction or mentoring program (Smith & Ingersoll, 2004). The combination of induction and mentoring programs has become a focus as a strategy for retaining first year teacher worldwide.

Supportive Communal Culture

Researchers obtain greater insights into reasons for teacher attrition by widening the lens of analysis to include school conditions. More specifically, Ingersoll (2001a) claimed researchers must examine teachers' perceptions of the culture in a given school, including leadership style, professional empowerment, and working conditions. Educational leaders have recognized that feelings of isolation hinder job satisfaction, and some programs have worked to redesign the school organizational structure with the goal of increasing collaboration and reducing the feeling of isolation that many new teachers experience (Fallon & Barnett, 2009). A communal environment often serves as a safety net for new teachers in need of assistance.

The most important factor in a teacher's experience is access to effective leaders and supportive colleagues (Ji, 2012). This is particularly true for new teachers, who experience stresses beyond the classroom teaching environment. Beginning teaching has been viewed as a time of uncertainty when new demands and new expectations must be faced (O'Brien, 2009). Mentoring provides an avenue for mutual support, where both mentors and protégés can share their ideas and perspectives on teaching (Hargreaves & Fullan, 2000). In one study, schools with well-supported mentoring programs and ongoing interactions that focused on student learning created a culture of mutual growth that benefitted the school community (Long, 2009). Mentoring programs have been demonstrated to have the capability of fostering a communal culture that in turn leads to an increase in job satisfaction (Smith & Ingersoll, 2004).

The climate, ethos, and culture of a school have been correlated to teacher job satisfaction (Glover, & Coleman, 2005). Organizational conditions, including an inclusive school culture and the perception of supportive leadership, have been shown to be important predictors of teacher turnover in international schools (Mancusco et al., 2010). A study of teacher resilience highlighted the importance of a school community that provides support and a collaborative environment that promotes teachers' self-efficacy (Ji, 2012). Collaboration in mentoring relationships has fostered a communal culture in schools, which has been linked to increased teacher retention in international schools.

Distributive Leadership

One important factor identified in teacher retention in international schools was the use of distributive leadership (Mancusco et al., 2010). The implementation of a mentoring program with first-year teachers was shown to shift a school's culture from a hierarchical to a more communal environment, one in which collaborative engagement "developed democratic cultures of learning and risk taking" (Given, Kuh, Mardell, Twombly, & Redditt, 2010, p. 37). When mentoring was fixed within school operations, and when participants were focused on learning together, teachers had the opportunity to be proactive catalysts of change within the organization (Waterman & Ye, 2011). The shift created by mentoring programs that allowed teachers to feel empowered and a part of a democratic culture could be viewed as distributive leadership.

Instructional Improvement

Mentoring studies have revealed that instructional improvement can be attributed to a collaborative culture within schools. Long-term retention of employees in any profession has seemed no longer feasible in a professionally mobile generation, therefore retention is only one desired outcome of mentoring and induction. Other important outcomes of interest have been student achievement and development of good teaching practices (Strong, 2005). Mentoring and coaching have been viewed as two techniques that foster collaboration, and schools with higher retention rates made this a priority by creating flexible schedules to provide release time for peer coaches and beginning teachers (Greiner & Smith, 2006). Creating on-the-job learning opportunities produced a direct change in instructional practices (Parise & Spillane, 2009). Active participation in school reform and instructional improvement has fostered change in how teachers view the profession.

Mentoring programs provide a venue for both new and mentor teachers to actively reflect upon their practice and explore new ways to improve instruction (Pitton, 2006). In the past, views and declared experience of many school practitioners and beginning teachers conflicted with the concept of teachers as researchers (O'Brien, 2009). Both new and established teachers would seldom research their practices beyond fairly constricted boundaries of their assignments (O'Brien, 2009). Conversely, when teachers were offered an environment that fostered new ideas and collaboration, a focus on student learning and an environment of mutual engagement prevailed (Cherian &

Daniel, 2008). Mentorship opportunities have been regarded as mechanisms that foster instructional experimentation.

Challenges

Discrepancies in the results of mentoring as a strategy to improve aspects of teaching that lead to teacher retention have stemmed from variations in the amount of time, engagement, and support given within the mentoring programs studied. Senior teachers within a school, when managing the daily demands of the profession, rarely have time to meet and dialogue reflectively on issues important to new teachers such as long-term career objectives, teaching practices for student engagement, or processes and forces that make schools work (Ormond, 2011). With the most effective programs, mentors were expected to be more than the orientation guide; they were empowered to be change agents for both beginning teachers and the school community as a whole (Long, 2009).

Unfortunately, even the best intentions of a mentoring program have met obstacles in the organizational structure of schools. In many schools, teacher mentors have had difficulty finding significant blocks of time to assist their mentees, and truly effective and time-efficient mentoring of new teachers has required a flexible and diversified approach (Ormond, 2011). A lack of consistency was evident in Australia, where the quality and frequency of induction and teacher support programs have varied greatly and led to an uneven delivery of mentoring experiences (Hudson, Beutel, & Hudson, 2007). Furthermore, one difficulty in related research has been the lack of a

clear definition of mentoring (Smith & Ingersoll, 2004). Most schools and districts acknowledge the potential benefits of mentoring, but the specific aspects of a program that have been determined to be most effective have not been clarified, leaving districts to offer programs that may only supply nominal support (Strong, 2005).

The intent of this study is to determine features of the mentoring program at TIS that are effective in improving key areas of a teacher's experience affecting his or her decision to remain at the school. Findings may allow the administration to make changes to more effectively address issues of retention and improve new teachers' and lead teachers' experiences within the program. While the study findings will not be generalizable to all teachers in all international schools, the depth of the qualitative data combined with meaningful, relevant quantitative data will provide meaningful answers to the research questions useful to leadership at TIS.

CHAPTER II

METHODS AND RESULTS

This chapter begins with an explanation of the rationale for using a mixed-method research model. The qualitative interview process is explained as part of the mixed-method research technique. Next, the discussion provides an explanation of how the data were collected using qualitative interviews and a quantitative questionnaire. The logic model that guided the research is explained. How the data were recorded, sorted into usable information, and analyzed follows. Finally, the processes followed to safeguard the trustworthiness, transferability, validity, and reliability of data are discussed.

Rationale for Mixed Methods

To examine the effects of the TIS mentoring program on teacher retention rates, I conducted a mixed-method study as described by Creswell (2003). Mixed-method research offers more thorough evidence to study a research problem than the singular usage of quantitative or qualitative methods (Creswell & Plano Clark, 2007). Selecting a mixed-method approach enabled an understanding of the effectiveness of the mentoring program while taking into account the individual experiences that affect the data. For this study, a combination of quantitative and qualitative methods facilitated a deeper understanding of how a mentoring program affected teacher retention and teacher perception of the school environment. The mixed-method approach allowed analysis of

specific features of the program as they relate to job satisfaction, instructional improvement, and leadership culture of the school.

I took a pragmatic viewpoint, focusing on this real-world application rather than a theoretical approach. Pragmatists conduct their research while taking into consideration the multiple contexts in which the problem exists (Creswell, 2003). The research conducted in this record of study was based upon an existing condition which could not be manipulated to create a new research model. In pragmatism the focus is on applications and solutions within the context of the problem (Creswell, 2003). The nature of this record of study was problem based and solution focused. The intended outcome was to seek answers to the research questions derived from the school setting and to develop solutions based on the conclusions drawn. To judge the efficacy of a program, an evaluator should draw upon the methods that will provide the best supportive evidence to draw conclusions and make decisions (Greene & Caracelli, 2003). By taking a pluralistic approach to data collection and analysis, I was able to gain a fuller understanding of the problem and therefore determine solutions that matched the context of the research. The evaluative aspects of my research questions required both quantitative, close-ended data collection and qualitative, open-ended research to fully understand how the mentoring program affected the perceptions of teachers and their consequent decisions. The mixed-method approach best suited the context of the research and the central questions because my foci were both the effects of the mentoring program and the perceptions of the teachers' experiences within the program.

A mixed-method approach helped ensure that interpretations of quantitative data were valid. The decision of teachers to relocate was a yes/no question, and the mentoring program may not have had the capacity to overcome any personal reasons for why teachers relocated (Odland, 2007). Likewise, while the rating scale survey provided statistical data regarding teachers' experiences and perceptions at TIS, this approach alone did not effectively answer the questions of how the mentoring program impacted these factors. Interviews with all participants in the program provided insight into the relationship among mentoring, specific aspects of the mentoring program at TIS, and effectiveness of the program on key indicators that led to teacher retention. The purpose of the evaluation was to help school leaders make decisions about the lead teacher program. A wide range of data were analyzed to determine relationships between the program and its outcomes to ensure a thorough review of the program (Fitzpatrick, Sanders, & Worthen, 2011).

Mixed Methods

For the purpose of this study, the mixed-method theoretical approach was pragmatic. The knowledge base reflected a real-world application rather than a theoretical model. The pragmatic approach offered freedom to conduct research in a manner that allowed for a deeper understanding of how the mentoring program worked, what were the underlying beliefs about the mentoring program, how the mentoring program affected teachers' overall satisfaction, and how these factors related to teacher retention. The collection, analysis, and synthesis of both qualitative and quantitative data in this mixed-method approach enabled me to develop a comprehensive picture of

the impact of the mentoring program. The data were gathered in a concurrent process, analyzed separately and converged to provide a complete examination of the research problem (Creswell, 2003).

Quantitative methods gave clear data for the degrees of influence the mentoring program had on teachers' perceptions of the professional environment. These data alone were not sufficient to draw accurate conclusions, given the subjective nature of mentoring. By relying upon qualitative methods, I was able to understand the context of the setting and the underlying reasons for quantitative results, even though the reliance upon this method can sometimes weaken the ability to generalize findings (Creswell & Plano Clark, 2007). Table 1 displays the data sources, collection methods, and form of analysis used to answer the research questions.

Table 1. *Data Sources, Collection and Analysis*

<i>Data Sources</i>	<i>Collection</i>	<i>Analysis</i>
Survey of teachers being mentored (Pitton, 2006; Mancusco et al., 2010).	Collection with all teachers in October 2013.	Survey results reviewed to determine new teachers' attitudes and perceptions.
Survey of mentor teachers (Pitton, 2006; Mancusco et al., 2010).	Collection with all teachers in October 2013.	Survey results reviewed to determine lead teachers' attitudes and perceptions.
Semi-structured interview protocols (Pitton, 2006).	Individual interviews with new teachers conducted in November 2013. Interviews with lead teachers conducted in November 2013.	Interviews recorded and transcripts coded to determine themes in responses. Relationships between major themes among the groups analyzed within context of program goals.
Observations of new-teacher/mentor interactions.	Weekly meeting observation minutes recorded in October 2013.	Review of the documents to determine trends in meeting topics and outcomes; analysis and compilation of results based on program goals.

Data Collection

Texas A&M University Institutional Review Board (IRB) approval was requested and received for this study. Online surveys were used for the quantitative portion of data collection. The interview process and meeting observations served as the primary data collection instruments for the qualitative portion. A recruitment email was sent to invite eligible teachers to join the study (see Appendix A). Prior to participating in the study, all respondents met with me in person and were given a brief written consent form to read and sign in order to participate in the interview (see Appendix B). For online surveys, a brief paragraph reiterated the purpose of the study and the survey. Finally, a script which further outlined the recording procedure of the interviews was read to the participants prior to conducting the interview (see Appendix C).

Quantitative Data

Quantitative data were used to determine the degree to which aspects of the lead teacher program influenced the new teacher experience. Quantitative data clarified areas of the program that positively influenced the new-teacher experience and areas that could be improved.

Surveys

Two online surveys were administered to assess the program. One survey was sent to new teachers and a second survey was sent to lead teachers. The survey questions for both were adapted from the International Teacher Mobility Survey (ITMS) a well-validated instrument designed to study teacher retention in American overseas

schools (Mancusco et al., 2010) and Pitton (2006) who suggested items for evaluating teacher mentoring programs. The ITMS is an adapted form of the National Center for Educational Statistics Schools and Staffing Survey (SASS) and Teacher Follow-up Survey (TFS) Questionnaire for Current Teachers. The areas assessed in the new-teacher survey included the perceived degree of a collaborative culture within the school, perceived administrative support, perceived instructional improvement, and impact of the mentoring relationship on the decision to remain at TIS. Areas assessed by the mentor survey included the perceived degree of a collaborative culture within the school, perceived administrative support, perceived effectiveness in the role of the lead teacher, and the degree of teacher leadership capacity within the school. These categories aligned with the research noted in the literature review.

The first survey (see Appendix D) was administered to teachers who had been assigned a mentor in their first year at TIS. The purpose of this survey was to gather information about how the mentoring program affected a new teacher's transition to TIS and to understand aspects of the mentoring program that are effective. The questions were developed according to three themes based upon the literature review and a fourth question evaluated the perceived impact of the mentoring relationship on a new teacher's decision to extend the contract. The questions and themes are shown in Table 2. The themes allowed me to evaluate the program and consider ways to improve it to better support new teachers in their professional development and in their transition to the school in general.

Table 2. *New Teacher Survey*

<i>Cluster Topic</i>	<i>Statement Used</i>
Collaborative Environment	<p>My lead teacher helped me learn school procedures.</p> <p>Please rank your lead teacher's ability to provide you with academic (teaching) support.</p> <p>Please rank your lead teacher's ability to provide you with nonacademic (social and emotional) support.</p> <p>I am able to share my ideas openly.</p>
Administrative Support	<p>Administration has articulated clear expectations for faculty regarding working collaboratively.</p> <p>I had sufficient time to meet with my lead teacher.</p> <p>Administration actively supports collaboration between me and my mentor.</p>
Teacher Effectiveness	<p>Working with my lead teacher improved my work in the classroom.</p> <p>My lead teacher facilitated understanding of the PYP curriculum.</p> <p>My lead teacher clearly articulated grade-level expectations to me.</p> <p>My lead teacher asked questions to allow me to think critically about my teaching.</p> <p>Please rank your lead teacher's ability to provide you with resources.</p> <p>I benefited from having a lead teacher in my first year at TIS.</p>
Teacher Retention	<p>My relationship with my mentor has influenced my decision to extend my contract.</p>

The second survey was administered to lead teachers (see Appendix E). The survey questions were grouped into clusters around four themes that followed the findings from the literature review as shown in Table 3.

Table 3. *Lead Teacher Survey Clusters*

<i>Cluster Topic</i>	<i>Statement Used</i>
Collaborative Environment	I served as an instructional coach to my teammate. I provided emotional support to my teammate. I developed a close personal relationship with my teammate.
Administrative Support	Administration has articulated clear expectations for faculty regarding working collaboratively. I had enough time to meet with my teammate to give him/her the support needed. I clearly understood what was expected of me as a lead teacher. Administration supported me in my role as lead teacher.
Lead Teacher Effectiveness	Being a lead teacher helped me reflect upon my teaching. I felt confident in my role as lead teacher. On a professional level, I enjoy being a lead teacher.
Distributive Leadership	I felt comfortable setting agendas and leading meetings. Being a lead teacher gave me opportunities to be more involved in elementary school decisions.

Qualitative Data

Qualitative data enriched my study by allowing me to understand more about each teacher's interaction with the mentor, the mentoring relationship, and structures put into place during the mentoring process. Qualitative findings in evaluation can illuminate the people behind the numbers and put faces on the statistics to deepen understanding (Creswell, 2003). Data collected from mentor meetings, teacher interviews, and open-ended questions on the teacher survey provided specific evidence for my research questions. The specific evidence was analyzed from my viewpoint as

researcher and caution must be used when drawing conclusions from the data as researcher bias influences the analysis of the data (Lincoln & Guba, 1985).

The mentor meeting observations offered insight into how meetings were structured between mentor partners, how mentors interacted, and the content of the mentoring meetings. This enabled me to determine aspects of each of the mentoring relationships that might influence teacher perception. The follow-up interviews allowed the participant to describe aspects of the mentoring program that were positive and those that needed adjustments. Due to my position within the school, there was a degree of familiarity between the interviewer and the interviewees. This prior knowledge and familiarity improved communication between the researcher and the participants, possibly resulting in higher-quality responses to core questions. Finally, the open-ended questions from the Lead Teacher Survey and the New Teacher Survey allowed teachers to elaborate on how the program affected their experiences at TIS.

Framework/logical model

In order to systematically evaluate the mentoring program, I developed a logical model that guided the selection of data sources, analysis of the data, and interpretation. The central aspect of the model is the mentor/new-teacher relationship. Figure 1 provides the logic model for evaluation of the program. The model is based upon Pitton's structure of mentoring programs (Pitton, 2006), which emphasizes the importance of the new teacher and mentor teacher relationship and the level of administrative support offered. The input explored that is represented in the model is the characteristics of the mentor and new teacher and the administrative support given for

teacher training and for mentor and new teacher interactions. Specific survey questions address the level of administrative support. The output of the model is effect on teacher retention and school culture, which address research first two research questions.

Context

Tashkent International School is one of over 196 American Overseas Schools (AOS) directly sponsored by the United States government (U.S. Department of State, 2007). These schools are supported by the U.S. government through the Office of Overseas Schools of the U.S. Department of State. The system of AOS serves over half a million students throughout the world. The range in size of AOS varies greatly, from schools as small as the American School of Kolkata, India, with 7 students to larger ones such as the Singapore American School with 3,747 students (U.S. Department of State, 2007). The student body in AOS, both sponsored and non-sponsored, consists of U.S. citizens, host country nationals, and usually a diverse international population of the foreign diplomatic and business communities.

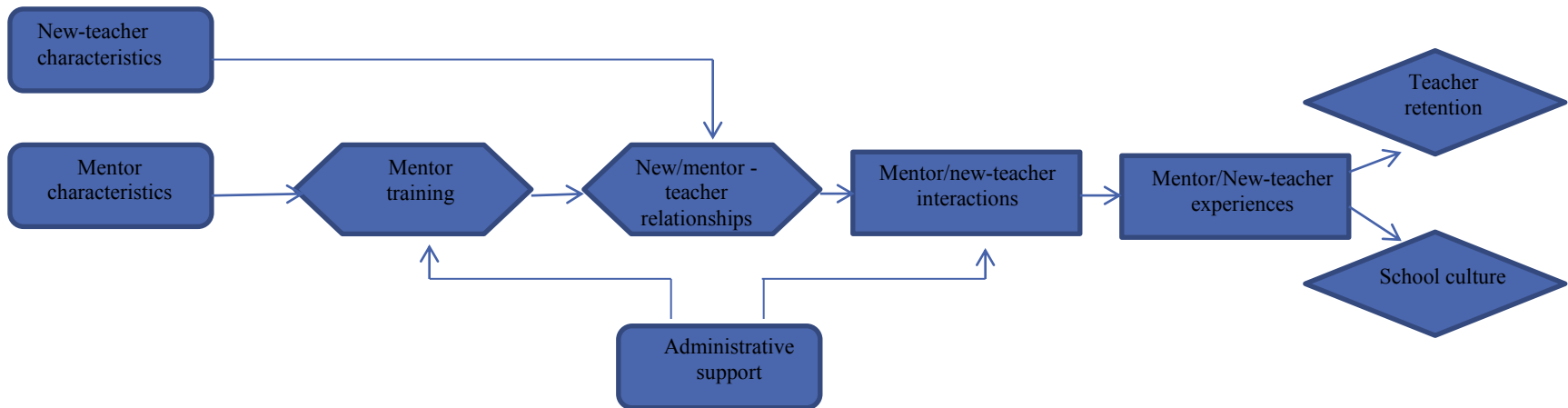


Figure 1. *Mentoring program evaluation logic.*

TIS, an International Baccalaureate (IB) world school, is a not-for-profit, independent, co-educational day school that currently serves 482 students from preschool to grade 12. The school has a direct link to the U.S. Embassy, and children of U.S. Embassy employees attend the school. The school offers the IB Diploma Program (DP) for grades 11 and 12, the Middle Years Program (MYP) for grades 6-10, and the Primary Years Program (PYP) for preschool to grade 5. TIS is governed by a board of directors elected from the parent community. The school admits students of the international community within Tashkent, with the student population comprised of children of expatriate business people and children from the diplomatic communities. Due to an influx of foreign investment into the country and a policy of gradual openness toward non-governmental organizations (NGOs), the school has doubled in size in the last four years.

While the size of the school has doubled, the staffing needs in the elementary school for overseas hired teachers has remained constant. A significant portion of student growth over time has occurred at the secondary level, grades 6-12. Class sizes in the elementary have grown over time from an average of 12 students per class to 18 students per class. By TIS school board policy, the maximum number of students per class is 22. The elementary school has two sections per grade level from kindergarten to grade 5. There is one overseas hired classroom teacher per section, resulting in two classroom teachers per grade level who work collaboratively with single subject teachers. Single subject course offerings include physical education, drama, music, art and Russian language. There is also a Learning Support department that employs one

learning support teacher and four English language-learning teachers. A majority of the single subject and learning support teachers are hired locally.

All teachers are evaluated by the school principal and re-employment contracts are offered yearly to teachers who meet the professional teaching standards adopted at TIS. Contracts for overseas hired teachers for the following school year are offered in November and must be signed by December.

Teacher retention was a major section of the New England Association of Schools and Colleges (NEASC) and Council of International Schools (CIS) visiting team report, which recommended that the school focus its attention on the development of strategies to retain faculty and reduce teacher turnover (Crippon & Mongardi, 2011). In 2011, teacher retention became a focus of the five year strategic plan developed and approved by the TIS school board. The main approach to address the problem in the elementary school was the implementation of a mentoring and teacher leadership program, which began at the school in 2011. The program consisted of hiring returning teachers to serve as mentors to newly recruited teachers and to manage administrative responsibilities of the grade level. This included documenting grade level unit plans, ordering supplies, managing the grade level budget, planning and organizing logistics for field trips and liaising with the PYP coordinator and the principal on building level decisions. Lead teachers ~~are~~ chosen to provide support, guidance and resources for new teachers, advice on classroom dynamics and challenging students” (quoted from Appendix F). A complete job description of the lead teacher is located in Appendix F.

Participant Description

The participants in this study were teachers currently employed at Tashkent International School from kindergarten to grade 5 who participated in the Lead Teacher program. Eight teachers, who were a part of a structured mentoring program that required weekly meetings between a new teacher and an assigned teacher mentor, participated. The participants can be categorized as:

- teachers who experienced the mentor program in their first year of teaching at TIS (Teachers 1, 2, and 3),
- teachers who had a lead teacher and have become a lead teacher (Teachers 4 and 5), and
- teachers who mentored new teachers, but did not have a mentor in their first year, (Teachers 6, 7 and 8).

The home of origin of the teachers included the United States, Australia, Canada, and South Africa. All teachers held professional teacher licensure from their countries of origin. Specific professional licensure requirements vary among countries, but each holds the minimum of the equivalent of a bachelor's degree. Prior international teaching experience of the participants ranged from 2 to 23 years.

Only teachers with full choice in hiring decisions were included in the study. This meant that teachers who were relocated due to the job status of a spouse were not included in the sample, as the mentoring program did not impact their decision to remain at TIS. All of the sampled participants completed the study. In order to protect

the anonymity of the participants, each was designated a number. Table 4 displays the demographic information of the participants.

The small number of teachers involved in this study limits the generalizability of the findings and potentially distorts change over time as a single teacher's decision (one of eight) will represent a large percentage. Because of this, the results will be reported as trends rather than significant change year to year.

Table 4. *Participant Demographics*

<i>Participant</i>	<i>Nationality</i>	<i>Gender</i>	<i>Years in Education</i>	<i>Years at TIS</i>	<i>Assigned a Mentor in the First Year</i>	<i>Lead Teacher</i>
1	American	Male	7	1	X	
2	S. African	Female	8	1	X	
3	Canadian	Female	23	1	X	
4	Australian	Male	3	3	X	X
5	American	Female	8	3	X	X
6	Canadian	Female	15	4		X
7	Canadian	Male	12	5		X
8	American	Female	22	4		X

Methods of Data Analysis

The first portion of this study was driven by two questions. The first asks whether mentoring programs impact teacher morale and the school culture, and the second investigates whether teacher retention rates are affected by mentoring programs within an international school. The two questions are related, with the expectation that

teacher morale will affect teacher retention. A final question seeks to determine which aspects of the mentoring program influence teacher retention.

Quantitative Data Analysis

The set of quantitative data gathered helped provide the needed information regarding organizational conditions related to the lead teacher program and teacher retention. A Mentor Teacher Survey (MTS) was adapted from the International Teacher's Mobility Survey as well as the well-validated Schools and Staffing Survey and Teacher Follow-up Survey created by the National Center for Educational Statistics (NCES) (Mancusco et al., 2010).

An online survey of new teachers provided data on the perception of three aspects of the first year of teaching at Tashkent International School. The three aspects addressed were: the teachers' perceived level of support in the first year of service at the school, perception of administrative support for collaboration with colleagues, and perceived teacher effectiveness. The survey questions were ordered to mix the three aspects. The teacher survey results were divided into three clusters and the group mean was computed for each. There was one final statement that utilized the same 10-point scale to assess the impact of the program on the respondent's decision to extend his or her contract. A screenshot of the new teacher online survey can be found in Appendix D. The new teacher survey presented 15 statements using a 1-10 Likert scale format, with 1 being strongly disagree and 10 being strongly agree. A 10-point scale was used to allow participants flexibility in their assessments.

There were two open-ended questions used in the survey. The purpose of asking the questions was to triangulate the findings from quantitative results. The two questions asked were:

1. Please add any thoughts on how the lead teacher program assisted your transition to TIS.
2. Please add any thoughts on how the lead teacher program can be improved.

Lead-teacher survey.

Lead teachers were given a similarly structured survey to determine strengths and weaknesses of the program. The categories clustered for this survey were: perceptions of distributive leadership, perceptions of administrative support, perceptions of collaboration and professional growth. The lead teacher online survey can be found in Appendix F.

The lead teacher survey followed a similar format to that of the new-teacher survey. A Likert scale from 1-10 was used and five teachers who were currently mentors participated. Four of these teachers had also been new teachers who experienced the mentoring program in their first year of teaching at TIS. These teachers filled out both surveys. Teachers who served as mentors but have since left the school were not surveyed.

Lead teachers were given the opportunity to answer open-ended questions on the survey. The two open-ended questions were:

1. Does (or did) being a lead teacher affect your level of job satisfaction? If so, how?

2. Please add any thoughts on how the lead teacher program can be improved.

Qualitative Data Analysis

Qualitative data included interviews, open-ended survey questions, and recorded meetings between the mentor and the new teacher. The process of ensuring validity began with a review of the data by a third party to ensure that the interview, questions, setting, and climate were conducive to debriefing participants about the mentor program. My role as building principal could have possibly influenced teacher responses. Therefore, Fran Kolesnikowicz, the Middle Years Program coordinator reviewed recordings of the interviews and meetings and separately observed mentor/new teacher meetings to compare agendas, topics, and interactions with those recorded. We compared observations and found that our observations were similar in scope and content. Once I validated the data in this way, I organized data into themes used in the quantitative data collection process and I looked for patterns in responses that related to the research questions. Qualitative instruments that addressed the research questions included open-ended survey questions, semi-structured interviews with teachers who were paired with a lead teacher in the first year of service and teachers who served as lead teachers, and recordings and analyses of mentoring meetings. I was personally involved in all data collection.

Open-ended survey questions

The open-ended survey questions allowed teachers to reflect upon the mentoring program and provided me with insights into the numerical responses shown

in the survey. The responses were sorted by themes that were found during the coding process. The themes were then analyzed concurrently with the quantitative survey data to provide an integrated approach to the analysis.

Semi-structured interviews

The semi-structured interviews enabled me to more completely understand how the mentoring program influenced a teacher's experience. Teacher responses provided evidence for both how the mentoring program operated and why it was effective. The interviews also clarified aspects of the program that could be improved upon.

Recorded meetings

In an additional effort to ensure validity of the data collected in the recorded mentor meetings, I reviewed prior meeting minutes. Reviewing the minutes provided information about the topics discussed and the outcomes of the meetings. A sample copy of a meeting agenda and minutes can be found in Appendix G.

Theoretical Issues

Validity

Qualitative evaluations occur within the natural setting of the program. To answer the research questions, the researcher does not control the program setting, but rather evaluates the program as it naturally functions. The researcher gathers information about the program by observing participants working within the context of the regular work duties and daily functioning. Therefore, controlled research designs are not feasible, and it is difficult to ascertain causal relationships that are internally

valid. Most researchers are skeptical of using qualitative methods in evaluations that seek to determine causality. Causality is determined by comparing what would happen should the program have not occurred. This means that determining whether the program caused the actual observed outcomes involves establishing the potential outcome had the program not existed (Denzin & Lincoln, 2011). Nevertheless, this study incorporated several steps to first elicit some determination of causality and, second, to ensure that the research was valid.

Mixed-method research must account for differences in the meaning of validity. Quantitative research validity is determined by the extent to which a research study measures the intended outcome and whether the measurement is accurate (Shadish, Cook, & Campbell, 2002). Qualitative research defines validity as the trustworthiness of the data. This requires analyzing truthfulness and certainty of the findings – truthfulness meaning that the findings correctly mirror the condition, and certainty meaning that findings are maintained by the evidence gathered (Patton, 2002).

The two types of validity accounted for in the study design are internal validity and external validity. Internal validity assesses the extent to which a causal relationship can be accurately determined (Shadish et al., 2002). For this study, threats to internal validity involved aspects of decisions to stay or leave that were not related to mentoring, including working conditions, personal circumstances, and salary. To address these threats, I asked specific questions regarding whether the mentoring program affected the subject's decision to stay in both the teacher survey and the semi-structured interview.

External validity considers whether the results of the study can be applied to a different context and yield the same results. To address external validity, I adapted the survey for this study to align with other, validated instruments used in researching teacher turnover. The content of the Mentor Teacher Survey was derived from the ITMS survey (Mancusco et al., 2010) that reported identifiable constructs in teacher turnover in combination with the TFS and SASS. The validity of the TFS and SASS has previously been demonstrated (Ingersoll, 2001b; Mancusco et al., 2010). Mancusco adapted these instruments for use in his study, eliminating certain demographic items not applicable in an international setting while maintaining the integrity of the content (Mancusco et al., 2010). The new teacher and lead teacher surveys also included recommended items for evaluation of a mentoring program as suggested by Pitton (2006). Furthermore, I reported demographic information such as gender, nationality, and the professional variable of years of experience. This information might facilitate and allow replication in future studies on international teacher retention and mentoring.

The purpose of ensuring trustworthiness in qualitative methodology is to demonstrate that the research findings are “worth paying attention to” (Lincoln & Guba, 1985). Trustworthiness of a research study is important to evaluating its worth (Lincoln & Guba, 1985). In order to deem the qualitative data from this study trustworthy, four issues were addressed:

- Credibility – sureness in the ‘truth’ of the findings;
- Transferability – demonstrating that the findings can be transferred to other contexts;

- Dependability – assessing the integrity of the process of data collection, analysis, and theory generation; and
- Confirmability – determining the level of researcher bias in shaping the findings of a study (Lincoln & Guba, 1985).

To address credibility, I utilized peer debriefing. Peer debriefing is a process of exposing oneself to a disinterested peer in a manner paralleling analytical sessions for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer's mind" (Lincoln & Guba, 1985, p. 308). For the purpose of this research, Fran Kolesnikowicz, MYP Coordinator at TIS, was asked to peer debrief the documents and field notes. She took into account the nature of the research questions, and how the teachers might react to the interview given my position as principal of the school. She analyzed the transcripts for potential researcher influence. Peer debriefing allowed me to discover unknown biases and assumptions when analyzing data. It also enabled me to become aware of my position toward the data analysis.

To further improve the credibility of the data, I triangulated my methods. Method triangulation involves using multiple data sources in an investigation check for consistency in findings and to produce a deeper understanding (Lincoln & Guba, 1985). A single method cannot adequately clarify a circumstance or occurrence, and using multiple methods helps enable a broader understanding. For the purposes of this research, triangulation is not a method specifically for validation or verification, but rather a technique that ensures that my account of the mentoring program is rich, wide-

ranging, and well developed. A robust account of the mentoring program and its effects on teachers' perceptions increases the credibility of the study.

To address dependability and confirmability, I employed an external audit to provide further analysis of the research methods. An external audit involves having an expert independently review the research process and appraise the results of the study. This process allows for an evaluation of whether the data supported the findings analysis. Using an independent audit by an expert in the field to confirm the appropriateness of the methods used and the analysis completed increases the dependability and confirmability of the study (Lincoln & Guba, 1985). Dr. Robert Brindley, my field-based investigator, offered advice and consultation throughout the design, implementation, and analysis of data in this study. Dr. Brindley has over 30 years of experience in education (see Appendix H for his curriculum vitae). His research includes work on power structures within schools.

To strengthen the transferability of the study, I kept all field notes and recordings of the interviews and observations for the purpose of developing a paper trail for researchers who might wish to conduct further analysis. All research material was kept in a secure location. By this careful documentation of the research process, other researchers will be able to transfer the findings of this inquiry and replicate the methods of this study.

Ethical concerns

Ethical concerns must be addressed in any research that involves human subjects. In order to address ethical concerns, I followed IRB protocol in the

recruitment of teachers, data collection, and analysis of data for the study. Due to my role as principal in the school it was important that I utilize a clear and well-written script that built trust with my subjects. The consent form (Appendix B) indicated that a teacher could withdraw from the study at any point, and an introductory recruitment email offered teachers the option of choosing not to participate in the study (Appendix A). I clarified the measures taken to ensure confidentiality of answers to survey questions, interview responses, and grade-level meeting notes. While collecting data I aligned actual names with numbers that were known only to me to allow me to connect the data with the participating teacher. All data were stored in a locked file cabinet when not in use. Audio recordings of grade-level meetings were also stored in a secure cabinet, and participants were informed that these recordings would be used solely for the purpose of research. No identifiable names would be used and every effort would be made to keep the identities of the participants confidential.

The Survey Process

New-teacher survey

The first aspect of the data collection process was gathering quantitative data to analyze the experiences of new teachers who had participated in the mentoring program. An online survey was created using Google forms. All teachers in the study responded to the anonymous survey, allowing teachers to answer freely.

Results

The findings are based upon the previously described quantitative and qualitative data collection and analysis. The findings gave insight into the effects of the mentoring program at Tashkent International School on aspects of teaching in a new school that can affect a teacher's outlook on the school and working conditions within it. It demonstrated aspects of mentoring that produced job satisfaction for lead teachers, which may have increased the longevity of employment.

Quantitative Findings

Surveys

New-teacher survey

The survey results from new teachers indicated that there was a positive perception of the level of support given to new teachers in the mentoring program (see Table 5). The highest mean of the individual items pertained to emotional support ($\bar{x} = 9.14$) and the perceived benefit of having a mentor ($\bar{x} = 9.14$). Of the three cluster groups, the highest mean was teacher efficacy ($\bar{x} = 8.54$).

The means from the clustered scores (see Table 5) showed that new teachers agreed most strongly with the statements relating to the perception of a collaborative environment at TIS due to the mentoring program ($n = 4$; $\bar{x} = 8.48$). Although not receiving the highest responses, the new teachers indicated that the mentoring program had an impact on their perception of effectiveness.

Table 5. New Teacher Survey Responses

Cluster Topic	Statement Used	Question Mean	Cluster Mean
Collaborative Environment	My lead teacher helped me learn school procedures.	8.00	8.48
	Please rank your lead teacher's ability to provide you with academic (teaching) support.	8.43	
	Please rank your lead teacher's ability to provide you with nonacademic (social and emotional) support.	9.14	
	I am able to share my ideas openly.	8.33	
Administrative Support	Administration has articulated clear expectations for faculty regarding working collaboratively.	7.57	7.95
	I had sufficient time to meet with my lead teacher.	8.14	
	Administration actively supports collaboration between me and my mentor	8.14	
Teacher Effectiveness	Working with my lead teacher improved my work in the classroom.	8.43	8.43
	My lead teacher facilitated understanding of the PYP curriculum	8.33	
	My lead teacher clearly articulated grade-level expectations to me.	8.14	
	My lead teacher asked questions to allow me to think critically about my teaching.	8.14	
	Please rank your lead teacher's ability to provide you with academic (teaching) support.	8.43	
	Please rank your lead teacher's ability to provide you with resources.	8.43	
	I benefited from having a lead teacher in my first year at TIS.	9.14	
Teacher Retention	My relationship with my mentor has influenced my decision to extend my contract.	6.29	6.29

Lead teacher survey

The lead teacher survey gave insight into the perception of the contribution mentors make to a new teacher's success, the perceived level of administrative support received, and the perceived level of professional fulfillment mentoring brings. Cluster

topics, survey questions, and mean scores by individual answer and by cluster topic are shown in Table 6. The highest mean score of individual questions comes from teachers' involvement in elementary school decisions ($\bar{x} = 9.00$) and level of professional enjoyment in the role of lead teacher ($\bar{x} = 9.00$). The lowest scores regarded the understanding of expectations of the lead teacher ($\bar{x} = 7.57$). Related to this is the lower score on the question that indicated the level of confidence in the lead teacher role ($\bar{x} = 7.86$).

The survey results by cluster group reflected the individual questions item scores (see Table 6). The grouping of questions related to leadership was highest ($n = 2$, $\bar{x} = 8.50$). The results of the questions grouped that related to administrative support were lowest ($n = 4$, $\bar{x} = 8.04$).

Table 6. Lead Teacher Survey Responses

<i>Cluster Topic</i>	<i>Questions</i>	<i>Question Mean</i>	<i>Cluster Mean</i>
Collaborative Environment	I served as an instructional coach to my teammate.	8.43	8.19
	I provided emotional support to my teammate.	8.14	
	I developed a close personal relationship with my teammate.	8.00	
Administrative Support	Administration has articulated clear expectations for faculty regarding working collaboratively.	8.00	8.04
	I had enough time to meet with my teammate to give him/her the support needed.	8.14	
	I clearly understood what was expected of me as a lead teacher.	7.57	
	Administration supported me in my role as lead teacher.	8.43	
Lead Teacher Effectiveness	Being a lead teacher helped me reflect upon my teaching.	9.00	8.24
	I felt confident in my role as lead teacher.	7.86	
	On a professional level, I enjoy being a lead teacher.	9.00	
Distributive Leadership	I felt comfortable setting agendas and leading meetings.	8.00	8.50
	Being a lead teacher gave me opportunities to be more involved in elementary school decisions.	9.00	

The survey data displayed in Tables 6 and 7 indicated that new teachers' self-perceived effectiveness was rated highest. The responses also indicated that the perception of a collaborative environment was high among new teachers. Among lead teachers, the responses show that lead teachers believe that they are included in decision making. Lead teachers found enjoyment in their role. Meanwhile, new teachers felt that were provided support from their lead teacher and that they benefited from having a lead teacher in their first year at the school.

Qualitative Findings

Open-ended responses on new-teacher survey

The open-ended questions give insight into the quantitative data. These data use a different identification numbers than listed in Table 4. The teachers are numbered in order of the time responded. The identification numbers are shown in Table 7. The results of the open-ended questions indicated that new teachers highly valued support given by the lead teachers. Three areas of support specifically noted were providing information, offering moral support, and engaging in collaboration. In response to the question of how the lead teacher assisted in transition to TIS, every teacher responded very positively. Statements included “I cannot stress enough how valuable my lead teacher was for my transition to TIS and growth as a teacher” (Teacher 2). The responses indicated that lead teachers were particularly supportive in the first months at the school. One teacher noted “I appreciated having my lead teacher help me when I felt overwhelmed, which happened often in the first few months” (Teacher 3). Another response stated, “I really needed the help of my lead teacher when I arrived. I have worked in other schools where everyone does their own thing, and it’s very stressful. You are always wondering if you are doing the right thing. Working with my lead teacher allowed me to offer ideas but also to just be a learner” (Teacher 5).

Table 7. New Teacher Survey Open-Ended Responses

<i>Teacher response number</i>	<i>Please add any thoughts on how the lead teacher program assisted your transition to TIS.</i>	<i>Please add any thoughts on how the lead teacher program can be improved.</i>
1	It was always great to have someone to consult when I needed support or information.	Did not respond.
2	I cannot stress enough how valuable my lead teacher was for my transition to TIS and growth as a teacher. We continue to work collaboratively to support our grade level and individual professional and personal growth.	Having a clear understanding of what to expect of a lead teacher would be helpful as a new teacher. I also think clarifying and ensuring that lead teachers/coordinators are aware of their responsibilities versus the responsibilities of the PYP Coordinator would help. I also hope that lead teachers are being celebrated and recognized for the extra work they are doing.
3	I appreciated having my lead teacher to help me when I felt overwhelmed, which happened fairly often in the first few months.	More recognition to the lead teachers for their work. I know that that's their job, but my teammate took it very seriously and went above the call of duty to be sure I had a good first year.
4	My lead teacher was a great support person. She approached me with a team perspective and in our first meeting she acknowledged that she had a lot to learn. She was very helpful when I had questions and she always stopped by to see how I was doing. I wouldn't say that she specifically influenced my decision to stay but maybe if I didn't have her I would not have felt so positive about the school.	I had a great relationship with my lead teacher. I think sometimes it comes naturally and other times it doesn't. You just want to be sure it's the right match.
5	I really needed the help of my lead teacher when I arrived. I have worked in other schools where everyone does their own thing, and it's very stressful. You are always wondering if you are doing the right thing. Working with my lead teacher allowed to me offer ideas but also to just be a learner. It was just one of many aspects of the school that made me feel like this was I high quality school. I never had to wonder who to go to. If I wasn't sure I asked my teammate (mentor). I feel I have learned so much in this relationship and I know that in the future I will be sure to help a new teacher.	Did not respond.

The second open-ended question for new teachers asked for areas in which the lead teacher program could be improved. There were only three responses to this

question. One suggested improvement was to clarify the expectations of a lead teacher (Teacher 2). A second suggestion was to ensure that the match between the new teacher the lead teacher is effective (Teacher 4). Finally, there were two comments that indicated that the new teachers felt there should be further recognition for the work of the lead teachers (Teachers 2 and 3). Full responses can be found in Table 7.

Open-ended responses on lead-teacher survey

The first open-ended question on the lead teacher survey asked about whether being a lead teacher affected level job satisfaction. Full responses can be found in Table 8. Because this survey was anonymous, this data set uses a different identification numbers than listed in Table 4. The identification numbers for these responses are shown in Table 8. Lead-teacher survey responses indicated a high degree of professional satisfaction in the role as lead teacher. Two teachers noted the challenge of the position and the reward that the work brings (Teachers 1 and 2). A second theme that arose is the ability of the lead teacher to have a voice in decision making at the school (Teachers 2, 3, and 5). Three teachers noted that they appreciated the decision making aspect of the leadership role (Teachers 2, 3, and 4). One teacher noted the challenge of working with a partner who has a differing teaching style (Teacher 2), and three teachers felt a heightened degree of responsibility for the grade level (Teachers 1, 2, and 3).

The second open-ended question asked for suggestions for how the program can be improved. One teacher indicated that new teachers needed more time in classrooms before returning teachers arrive in order to allow for more meetings at the start of the

school year (Teacher 1). The role of the PYP coordinator in the lead-teacher program was noted twice (Teachers 1 and 4). Another teacher felt that it would be helpful to explain the job of the lead teacher more explicitly at the start of the school year (Teacher 2). Finally, two responses asked for further training for the lead teachers (Teachers 4 and 5).

Table 8. *Lead Teacher Survey Open-Ended Responses*

<i>Teacher response number</i>	<i>Does (or did) being a lead teacher affect your level of job satisfaction? If so, how?</i>	<i>Please add any thoughts on how the lead teacher program can be improved.</i>
1	I enjoy the challenge of organizing my grade level. It is rewarding when we complete a unit of inquiry that we both worked hard on to design.	<p>I would like the new teachers to have more time in the classroom before the returning teachers arrive. Therefore they will be more ready (classroom in a state that they feel comfortable leaving for meetings) to have meetings to discuss the curriculum and school expectations.</p> <p>Strengthening the understanding of the working relationship with the coordinator.</p> <p>Using some Lead Teachers to support the development of the PYP programme collaboratively in order to be ready and have succession built in for the next PYP evaluation.</p>
2	Because I am directing a teacher who is new to the school, I am responsible to introduce that teacher to curriculum, supplies, and expectations of working at TIS. At times this is challenging, especially if you have a different working style than your partner teacher. However, there is a level of pride in a job well done when I think of how I have been responsible for continuity of a solid curriculum at our school, as well as a voice in some of the big decisions at the elementary level. It is a lot of extra work, especially when your partner is brand new, and can be overwhelming at times.	The duties are clearly outlined, so that is helpful. After working together, teaching partners develop a routine that suits them, and administration is flexible enough at our school to allow that, to their credit. I think that going over the scope of my lead teacher duties with my partner, in the beginning of the year, with my partner, would have been helpful. I will do that if I have a new partner next year.

Table 8. Continued

<i>Teacher response number</i>	<i>Does (or did) being a lead teacher affect your level of job satisfaction? If so, how?</i>	<i>Please add any thoughts on how the lead teacher program can be improved.</i>
3	I think being a lead teacher changed my perspective about my job. I appreciated that I was consulted in decision making. I felt I was an effective intermediate between my teammate and administration. I could help someone else, and I felt a heightened degree of responsibility for my grade level.	I guess I am not sure of any. With a school this size, it is difficult to consider a different model. So many teachers have so much to contribute, whether lead teachers or not, but I am not sure how to be more inclusive without having a very large group, and that would be too many meetings for all staff. (2 each week)
4	I felt empowered as a lead teacher, I am interested in moving into a leadership position so this role is a move in that direction. Working with my teammate was rewarding, though I am not always sure I am giving the right information. It also helps to better understand the decisions that administration makes when I had to explain decisions to my partner.	Maybe there should be some training for how to interact with the administration. When we have grade level meetings with my teammate and the PYP coordinator, I wasn't always sure who was running the meeting. I didn't want to take over but I thought that was my job. Clarity in meeting protocols and who leads the agenda would help.
5	Yes because I know that I can bring issues that I feel strongly about to ELT and get them discussed. It helps me feel like my voice matters and that I have a role in improving the school.	I think there should be some kind of workshop to develop a clear sense of how to help in nontraditional situations. I think I have done my best but I also sometimes wonder if I am giving the best advice.

New-teacher interviews

The interviews with new teachers provided consistent themes that matched other data sources. Notes from the individual interviews can be found in Appendix I. The first question asked the new teacher to identify the way in which the lead teacher was most beneficial. A consistent theme from the interviews was that the mentor was a resource for curriculum and administrative questions. Two teachers referred to a level of trust they had in the lead teacher, one stating –Basically, [my mentor] was a person

to turn to when I had a question that seemed too simple to ask administration. It was nice to have a person to trust” (Appendix I, Teacher 1). Another stated, “I would say that my mentor was a friend and a colleague I could turn to when I had a question that seemed a bit ridiculous... I liked having someone that seemed nonjudgmental...” and “Trust is a big deal when you come into a new school” (Appendix I, Teacher 5).

When asked about the specific ways in which the lead teacher supported adjustment to the new school, responses varied. One teacher noted that the mentor contacted her before she arrived in Tashkent (Appendix I, Teacher 2). Another emphasized importance of the mentor as a resource for curriculum documents and resources (Appendix I, Teacher 4). Two teachers mentioned help given regarding technology (Appendix I, Teachers 3 and 4). The importance of the mentor for emotional support was discussed by one teacher (Appendix I, Teacher 2). She referred to this support by saying “It’s just like the kids, isn’t it? They don’t learn well without positive connections and I can’t teach effectively if I am feeling alone in my job” (Appendix I, Teacher 2).

Most new teachers felt that the time given to work with the mentor was sufficient. Comments from every new teacher indicated that the new teacher and mentor met often outside of the regularly scheduled meeting time. Three teachers indicated that there were many informal meetings in which the teachers planned or questions were answered (Appendix I, Teachers 1, 3, and 4). These responses corresponded with the new-teacher survey responses, in which the mean response for

questions asking teachers to rate whether there was sufficient meeting time was high ($\bar{x} = 8.14$).

During the interviews, new teachers were asked whether having a mentor influenced their experience of working at TIS. Two themes that came from the responses referred to teacher perception of the school as a supportive environment and perception of improved instruction due to the mentoring relationship. One teacher responded, ~~It~~ "I really felt like the school was looking out for me. The school feels very professional and supportive" (Appendix I, Teacher 2,). Another teacher commented on the positive influence that having a mentor had on her students, stating ~~More~~ "More importantly, I think I am doing a better job of teaching my kids. I really think that in the end it's the students who benefit from having this kind of support system in place. We really focus on what's best for kids together" (Appendix I, Teacher 3).

Lead-teacher interviews

The interviews of lead teachers provided information to consider for improvement of the program. Two teachers felt unsure that they had provided enough information to their partner or that they had not provided accurate information (Appendix J, Teachers 4, 7, and 8). Another teacher mentioned that the administrative tasks can be time consuming (Appendix J, Teacher 5). When asked about the accuracy of the lead teacher job description, all lead teachers felt that the job description was accurate and clear.

Similar to the interview responses that explored the new teacher perspective , all lead teachers felt that they had sufficient time to meet. Teachers referred to multiple

common planning times built into the schedule as times to meet informally. Teacher 5 stated “There’s plenty of time built into the schedule to meet and if we need to we can always meet at lunch” (Appendix J, Teacher 5). The focus of the meetings was instructional unit planning and managing difficult students. Teacher 6 referred to both, “Yes, we had enough time to effectively plan. We meet every week to plan the week ahead and we also meet to plan the Units. Sometimes we get bogged down with talking about student issues, but I think that that is part of what I need to do, give advice” (Appendix J, Teacher 6). One lead teacher mentioned multiple planning opportunities and administrative support for prolonged planning time. “We worked together often, we definitely met more than once a week. You gave us extra time when we needed it for unit planning, which was nice” (Appendix J, Teacher 4). These statements align with the lead teacher survey responses for questions related to having sufficient time to meet ($\bar{x} = 8.14$).

All lead teachers were asked whether the experience of being a mentor influenced their experience at TIS. Four of the five teachers reflected upon the increased responsibility of the position and how it was a positive experience (Appendix J, Teachers 4, 5, 6, and 8). One appreciated gaining an understanding of administrative decisions, with one teacher reflecting, “I also think liaising with administration has given me insight about the big picture a bit. I don’t ever want to work in admin but I think it is interesting to see how you work” (Appendix J, Teacher 4). Another teacher replied that “Having a leadership role has changed my

perspective a bit. I see the big picture in decisions. Maybe I take my role more seriously” (Appendix J, Teacher 5).

Responses indicated that being a mentor helped increase leadership capacity. Teachers appreciated having a voice in decision making and in acting in a coaching capacity, as one teacher stated, “I am interested in moving into a leadership position and this is good experience for me. It’s been good to give feedback to my partner and I like to be involved in school wide decision making” (Appendix J, Teacher 7). One teacher felt that being a lead teacher helped him to be more reflective in his teaching (Appendix J, Teacher 4).

When asked what could be added to or changed to the program, responses focused on mentoring expectations and recognition of responsibilities. There was a call for standard procedures for lead teachers, with one teacher explaining, “I think there should be some flexibility in how we all interact with our teammates, but some baseline expectations for actual things that need to be done would help, like a timeline of actions by month” (Appendix J, Teacher 5). A fellow lead teacher held a similar sentiment, stating, “Maybe could have a training session before school starts to talk through our role as mentors” (Appendix J, Teacher 6).

Meeting observations

To understand how the lead teacher and the new teacher interacted and to determine the focus of the meetings, I personally observed and digitally recorded meetings of each new teacher-lead teacher pair. The observations allowed me to take

notes on the interactions between the lead teacher and the new teacher, while the recording provided data on the content of the meetings.

I recorded the observation data by taking notes on the behaviors of the participants. The focus of the analysis was on two themes that were unitized from the notes. The first was the verbal interactions between the new teacher and the lead teacher. This included how often questions were asked, how direct the lead teacher was in guiding the conversation and categorizing the skill set required in the meetings. The second was role of the lead teacher in meetings. The observation notes for each meeting were reviewed and behaviors were clustered by concept. From this clustering, themes emerged which were named by skill set.

The recorded transcripts for each meeting were unitized by concepts found in the agenda items. The common agenda items were clustered into themes based upon the content of the item. The themes named include administrative issues, student work and assessment analysis and unit planning. The analysis of these themes provided information about the scope and depth of the information shared by the lead teacher.

The analysis of the mentor and new-teacher team meetings observed allowed me to understand the content of the meetings and the way in which the teams interacted. Results from meeting data analysis found that mentor meetings were focused generally on three themes: assessing student work, planning for the Unit of Inquiry, and administrative information sharing. Student work was often the focus, allowing the new teacher to understand the expectations of the school and to ask critical questions about how students were assessed. The planning time also focused on

teaching strategies for upcoming units; these sessions were a time for the mentor to explain the central idea of the unit, explain what worked well in the past, and explore ideas for improving the lesson plans. These sessions varied between the lead teacher imparting knowledge and more collaborative conversations. Finally, in many observed meetings there were questions related to administrative aspects of the school. These topics included how to order supplies, how to manage discipline issues, and when to contact parents. Some of these topics could be found in the teacher handbook, but many needed explanation beyond the written policy.

Each agenda item required a different skill set of the lead teacher. The interactions observed between lead teachers and new teachers indicated a reflective questioning technique in discussions that focused on student work. The planning sessions required openness to new ideas regarding the Unit of Inquiry. The level of support for new ideas by the mentor was high for each teaching team. Administrative inquiries from the new teacher required a high level of understanding about how the school works. The lead teacher often had to answer questions about how a new teacher should handle a situation, but also why it was handled in a certain manner. A sample of a teacher meeting transcript is found in Table 9. The scoring sheet and student work referred to is found in Appendices K and L.

Table 9. Meeting Observation Sample

Mentor and New-Teacher Meeting

(Teachers are looking at a summative mathematics assessment.)

Mentor: On the bottom they need to use two.

New Teacher: To me, I could tell that I hadn't spent enough time on this as a vocabulary word.

Mentor: Well, yes and no--even though we talked about it, but not having it up on the board made....

New Teacher: So for the third question we want to see that they have skip counted by 3s.

Mentor: So you want to see that they have skip counted, that they have gotten to the number 30.

New Teacher: This rubric doesn't assess how they explain themselves.

Mentor: The elements that need to be here is that they need to have skip counted. That they got to 30 and that they explained that thinking.

New Teacher: Yes.

Mentor: On this one, I didn't stress thinking. Let's talk about what's consolidating and what is developing.

New Teacher: What if they are a member of a pair? They were going to give me 8. So if they have 6, is that developing?

Mentor: Yes, even if they have one of each, it's developing. It has to match up, if they are able to show all on either page, it's consolidating.

New teacher: My question is- another thing that needs explicit teaching is to have them understand the question and the instruction.

Mentor: Yes- we need to show them how to underline, check and be sure they have answered all elements of the question. We need to find some questions that have multiple instructions and teach them how to follow. Question 4 is a great example. They need to label, write, list, and perform the problem. We need to give them this type of question.

New Teacher: We could give this to them orally for them to internalize it and transfer to the assessment.

Mentor: What do you mean oral? That will be hard for ELL students, I have some good examples if multiple step instructions. I think we need to do both, oral and visual in the lesson. In 4B they are asking to do three things. The key there is to teach them to look for the verbs. What is it they are asking me to do?

New Teacher: So, we will do a mini lesson on this.

Mentor: Yes, let's work on that next meeting – go back to question 2. Write 2 sentences- it's three spiders that have 8 legs, but $3+3+3_{3_3}$ doesn't represent the story, she gets it, she understands repeated addition so what would you do?

New Teacher: Well, on the rubric, she would get consolidating for the question, but I think you would want to use the question as an example for the whole class when you are teaching how to follow instructions.

How important do you think it is in the older grades? Would they be marked lower for this?

Lead teacher: I think I will show this to the grade 4 teachers and see how they would assess this student.

New Teacher: Sounds good.

The meeting transcript demonstrates the interactions of the lead teacher and the mentor teacher as they review a common assessment in mathematics. The mentor teacher uses specific examples, rephrasing and questioning to direct the discussion of student work. The mentor teacher is able to ask questions, and together they come to a common understanding of how to mark student work on the score sheet. By discussing student work as a team, both teachers are able to reflect on how to more effectively instruct the students and to plan forward by making adjustments. The mentor teacher also indicates that a further dialogue will take place between the grade 4 teachers to help clarify expectations.

CHAPTER III

CONCLUSIONS

Thorough analysis of the online surveys, teacher retention data, interview notes, and meeting observation notes helped answer the research questions: Does the mentoring program for newly hired teachers at TIS affect teacher morale and the culture within the school? Does the mentoring program affect teacher retention rates? What components of the mentoring program for newly hired teachers affect retention rates? This research revealed aspects of the mentoring program that have positively answered these questions and areas that can be improved.

Discussion

For research question one, quantitative and qualitative findings indicate that the mentoring program positively affects teacher morale and school culture. The new-teacher survey revealed that new teachers believe the mentoring program enabled them to be more effective teachers ($\bar{x} = 8.54$). The collaborative environment cluster was also rated highly ($\bar{x} = 8.25$). Teachers responded most positively to the individual survey questions that asked about emotional support ($\bar{x} = 9.14$). These findings align with the comments made in the open-ended questions and teacher interviews. Each of the open-ended question responses refer to the high degree of support that the new teacher received from the mentor. The new teachers gave specific examples of how the mentor assisted them in the transition by providing resources and by answering

questions often wondered about by a new teacher. The meeting observation notes showed that the mentor and new teacher most often focused on student work samples, planning units, and managing administrative tasks.

The new-teacher interviews reveal that new-teacher and mentor-teacher pairs often met outside of the regularly scheduled collaborative meeting time. All of the new teachers referred to the positive culture of the school.

Because there are many variables that affect teacher retention in international schools (Mancusco et al., 2010; Odland, 2007), this study was not able to answer the second research question and third research questions. However, the study does provide data to support the positive impact of the mentoring program on the experience of both the new teacher and the lead teacher. The new-teacher survey indicates that the relationship with the lead teacher had a positive impact on the decision to extend the contract ($\bar{x} = 6.29$) (Table 5). The means of the lead teacher responses to the questions of professional enjoyment in being a lead teacher, being involved in decision-making, and engagement in reflective practice was the high ($\bar{x} = 9.00$) (Table 6). The open-ended answers from lead teachers indicate that they enjoyed helping their colleagues and that they appreciate the ability to assist in decision making at the leadership level.

The findings align with other researchers' findings in the area of mentoring programs. Mancusco et al. (2010) found that teacher perception of an inclusive school culture and the perception of supportive leadership were important predictors of teacher retention in international schools. Similarly, the positive effect of mentoring on teacher attitude toward collaboration is supported in research from Hargreaves and Fullan

(2000), Long (2009), and Smith and Ingersoll (2004). Teacher perceptions of a collaborative school culture were clearly demonstrated through the survey data and the interviews in this study.

Recommendations for Practice

Taken together, the quantitative and qualitative data revealed aspects of the mentoring program that school leaders should include as they consider implementing a similar program. First, a theme found from the interviews was that the mentor/new teacher teams had ample time to work together collaboratively. Both new and lead teachers felt that they were given enough time to effectively plan together. This time was also used to support the new teacher with administrative questions that arose and with emotional support needed. Teachers perceived the time provided as a source of administrative support for the mentoring program. Administrative support and the collaborative culture that a mentoring program provides can positively affect teacher morale within a school, and carefully planning of the school schedule should allow for multiple formal and informal meeting times between the new and mentor teacher. A second theme refers to the need for both initial and ongoing training for the lead teachers. The analysis of meeting minutes revealed that, while each teacher engaged in reflective questioning and other facilitative modes of communication, meeting agendas held a wide range of items that required a high degree of knowledge of school procedures and flexible coaching strategies. Providing ongoing training would help standardize the skill set needed to be an effective mentor. Though the mentors in this

study were rated highly by their corresponding new teachers, the lead teachers expressed a desire to meet regularly to have their role clarified and to troubleshoot problems that may arise. This could be accomplished through a formal training program with regularly scheduled follow-up meetings throughout the year.

A mentor-teacher manual that outlines the responsibilities of the lead teacher and the responsibilities of the administration was recommended by participants. This would clarify the decision making processes and identify who to contact for specific information. The lead teacher will then clearly understand the role of the PYP coordinator, and confusion about curriculum decisions will be avoided.

Lead teachers enjoyed being a part of the decision making process. Distributive leadership was a quality that the lead teachers ranked highly in the survey. When possible, school leaders should continue to allow lead teachers to be involved in school-wide decisions.

Future Studies

A broader based study that includes multiple international schools should be introduced to regional associations like East Asia Regional Council Of Schools (EARCOS), Near East South Asia Schools Association (NESAS) and Central Eastern European School Association (CEESA) to determine the effect of mentoring programs within different school contexts.

Further research is needed to determine which aspects of a mentoring program have the greatest impact and in what areas.

Findings from this study provide limited information about the effects of a mentoring program at one international school but the positive nature of the interviews suggest that more research should be conducted using robust methodology to include a greater number of teachers at an increased number of sites. Possible revisions should be considered to elicit more nuanced meaning so as to increase the quantity and quality of data available for analysis. A more in-depth study that explores the themes developed could help ascertain the extent to which a mentoring program contributes to retention rates.

Conclusions

Ingersoll (2001b) posited that research-based understanding of teacher employment decisions was important to the success of school. This study attempted to reveal how one mentoring program influenced teachers' perceptions and decisions. Both survey data and interviews indicate that there is a need for administrative support in the way of mentor-teacher training. This follows a trend found in research literature. –As mentoring programs have matured, it has become apparent that caring and insightful classroom teachers do not necessarily know how to mentor new teachers. Training people for the role of mentors serving teachers is a critical aspect of any effective program. It is simply not effective to identify people as mentors and then throw them into service in that capacity” (Daresh, 2003, pg. 28).

One theme that emerged from this study that will improve the program is the need for a lead teacher handbook that would clarify the specific responsibilities of the

lead teachers. A draft of the lead teacher handbook can be found in Appendix M. This draft was developed in consultation with the current lead teacher cohort and draws from mentor handbooks used in districts in the United States and Canada. A completed version will be distributed to all lead teachers in May 2014.

The two areas most lacking in mentoring programs are systematic training and ongoing support for the mentors themselves. School leaders may believe that an excellent teacher will make an excellent mentor, but mentoring is a professional practice with specialized techniques and approaches to interaction with the mentee that require training. If school leaders do not provide mentors with opportunities to develop skills and knowledge of effective mentoring techniques, the mentoring program will not provide consistent services that meet the intended outcome (Sweeny, 2001).

In order to address the need for further professional development of lead teachers, I initiated contact with the director of our regional organization to host a teacher leader seminar at TIS. This will allow lead teachers to receive training in developing collaborative skills and to work with teacher leaders within the region. The program information flyer can be found in Appendix N.

Results from this study indicate that a mentoring program positively affects school climate, which can in turn positively affect teacher retention in international schools. New teachers benefitted from the support given and the increased expectation of collaboration the mentoring program entailed, while returning teachers who served as mentors found satisfaction in serving in a leadership role.

A great deal of time and resources are spent on teacher recruitment in international schools, and school leadership should carefully consider implementing a formal mentoring program to support these new teachers and increase retention.

REFERENCES

- Cherian, F., & Daniel, Y. (2008). Principal leadership in new teacher induction: Becoming agents of change. *International Journal of Education Policy and Leadership*, 3(2), 1-11.
- Creswell, J. W. (2003). *Research design: Quantitative, qualitative and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Crippon, G., & Mongardi, K. (2011). *Visiting team report for CIS and NEASC accreditation*. Bedford, MA: New England Association of Schools and Colleges, Inc. & Commission on American and International Schools Abroad.
- Daresh, J. C. (2003). *Teachers mentoring teachers: A practical approach to helping new and experienced staff*. Thousand Oaks, CA: Corwin.
- Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research*, 4th edition. Thousand Oaks, CA: Sage.
- Fallon, G., & Barnett, J. (2009). Impacts of school organizational restructuring into a collaborative setting on the nature of emerging forms of collegiality. *International Journal of Education Policy and Leadership*, 4(9), 1-14.
- Fitzpatrick, J. L., Sanders, J. R., & Worthen, B. R. (2011). *Program evaluation: Alternative approaches and practical guidelines*, 4th edition. Boston, MA: Pearson.
- Given, H., Kuh, L., Mardell, B., Twombly, S., & Redditt, S. (2010). Changing school culture: Using documentation to support collaborative inquiry. *Theory into Practice*, 49(1), 36-46.
- Glover, D., & Coleman, M. (2005). School culture, climate and ethos: Interchangeable or distinctive concepts? *Journal of In-service Education*, 31(2), 251-271.
- Green, J., & Caracelli, V. (2003). Making paradigmatic sense of mixed methods inquiry. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 91-110). Thousand Oaks, CA: Sage.
- Greiner, C., & Smith, B. (2006). Determining the effect of selected variables on teacher retention. *Education*, 126(4), 653-659.

- Hargreaves, A., & Fullan, M. (2000). Mentoring in the new millennium. *Theory into Practice*, 39(1), 50-56.
- Hudson, S., Beutel, D., & Hudson, P. (2007). A program for beginning teachers' perceptions of their induction into teaching. *International Journal of Practical Experiences in Professional Education*, 10(2), 1-7.
- Ingersoll, R. M. (2001a). A different approach to solving the teacher shortage problem. *Teaching Quality Policy Briefs (Center for the Study of Teaching and Policy)*, 3, 1-8.
- Ingersoll, R. M. (2001b). *Teacher turnover, teacher shortages, and the organization of schools*. Seattle, WA: University of Washington, Center for the Study of Teaching and Policy.
- Ingersoll, R., & Kralik, J. (2004). *The impact of mentoring on teacher retention: What the research says*. Retrieved from <http://www.ecs.org/clearinghouse/50/36/5036.htm>
- Ingersoll, R., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Education Research*, 81(2), 201-233.
- Ji, Y. H. (2012). Why do some beginning teachers leave the school, and others stay? Understanding teacher resilience through psychological lenses. *Teachers and Teaching: Theory and Practice*, 18(4), 417-440.
- Keeling, A. (2010). International schools: Still growing... English medium international schools to reach 11,000 mark by 2020. *The International Educator*, 12, 1-2.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Long, J. (2009). Assisting beginning teachers and school communities to grow through extended and collaborative mentoring experiences. *Mentoring and Tutoring: Partnership in Learning*, 17(4), 317-327.
- Mancusco, S., Roberts, L., & White, G. (2010). Teacher retention in international schools: The key role of school leadership. *Journal of Research in International Education*, 9, 306-323.
- Marvel, J., Lyter, D. M., Peltola, P., Strizek, G. A., & Morton, B. A. (2006). *Teacher attrition and mobility: Results from the 2004–05 teacher follow-up survey (NCES 2007–307)*. Washington, DC: U.S. Department of Education, National Center for Education Statistics - U.S. Government Printing Office.

- O'Brien, J. (2009). Teacher induction: Does Scotland's approach stand comparison? *Research in Comparative and International Education*, 4(1), 42-52.
doi:10.2304/rcie.2009.4.1.42
- Odland, G. (2007). *An investigation into teacher turnover in international schools*. Dissertation Seton Hall University. Retrieved from [http://domapp01.shu.edu/depts/uc/apps/libraryrepository.nsf/resourceid/D24F4580A38B790B852574E4005527D9/\\$File/Odland-Glenn_Doctorate.pdf?Open](http://domapp01.shu.edu/depts/uc/apps/libraryrepository.nsf/resourceid/D24F4580A38B790B852574E4005527D9/$File/Odland-Glenn_Doctorate.pdf?Open)
- Ormond, C. (2011). Tailoring mentoring for new mathematics and science teachers: An exploratory study. *Australian Journal of Teacher Education*, 36(4), 53-72
Retrieved from <http://ro.ecu.edu.au/ajte/vol36/iss4/4>
- Parise, J., & Spillane, P. (2009). Teacher learning and instructional change: How formal and on-the job learning opportunities predict change in elementary school teachers' practice. *The Elementary School Journal*, 110, 324-346.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications.
- Pitton, D. E. (2006). *Mentoring novice teachers: Fostering a dialogue process*. Thousand Oaks, CA: Corwin Press.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin.
- Smith, T., & Ingersoll, R. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41, 681-714.
- Strong, M. (2005). Mentoring new teachers to increase retention: A look at the research. *New Teacher Center: Research Brief* 5(1), 1-4. Retrieved from <http://www.newteachercenter.org/pdfs/NTCResearchBrief.05-01.pdf>
- Sweeny, B. (2001). *Developing, evaluating and improving peer mentoring and induction programs and practices to deliver a higher impact*. Wheaton, IL: Best Practice Resources.
- U.S. Department of State. (2007). Worldwide fact sheet 2005-2006. Retrieved on October 20, 2013 from <http://www.state.gov/m/a/os/1253.htm>

Waterman, S., & Ye, H. (2011). Effects of mentoring programs on new teacher retention: A literature review. *Mentoring and Tutoring: Partnership in Learning*, 19(2), 139-156.

Wilkinson, G. A. (2009). Supportive induction slows the revolving door. *Research in Comparative and International Education*, 4(1), 97-110.
doi:10.2304/rcie.2009.4.1.97

APPENDIX A

RECRUITMENT EMAIL MESSAGE

–The Effects of a Mentoring Program on Teacher Retention Rates at Tashkent International School”

You are invited to participate in a study evaluating effects of the mentoring program at Tashkent International School, conducted by Kristen DiMatteo, graduate student at Texas A&M University, Department of Teaching, Learning and Culture. This study involves completing one online survey, one face to face interview, and one observation of the teacher and mentor meeting. The time commitment includes 20 minutes for the online survey and 40 minutes for the face to face interview. Only teachers involved in the mentoring program are eligible to participate. The research will take place at Tashkent International School. If you are interested in participating, please contact Kristen DiMatteo at elemprincipal@tashschool.org.

APPENDIX B
CONSENT FORM

Title of the Study: The Effects of a Mentoring Program on Teacher Retention Rates at Tashkent International School

Principal Investigator: Dr. Robert Brindley (phone: +998908083309) (email: director@tashschool.org)

Student Researcher: Kristen DiMatteo (phone: 998906054233)

Texas A&M University Institutional Review Board (979-458-4067; irb@tamu.edu)

DESCRIPTION OF THE RESEARCH

You are invited to participate in a research study about the effects of a mentoring program on teacher retention at Tashkent International School (TIS).

You have been asked to participate because you have been involved in the mentoring program. Your involvement will allow for a deeper understanding of how the mentoring program has affected teacher's experience at TIS.

The purpose of the research is to evaluate the effectiveness of the teacher mentoring program on teacher retention rates at TIS.

This study will include teachers who have experienced the mentoring program at TIS.

The research will be conducted at TIS and online depending upon the timing of the interview.

WHAT WILL MY PARTICIPATION INVOLVE?

If you decide to participate in this research, you will be asked to participate in teacher/mentor meeting that will be observed and recorded by the researcher. The recorded meeting will be one of the regularly scheduled meetings. All meeting notes will be coded to ensure confidentiality.

The recorded meeting will take approximately 45 minutes. The total time for your involvement is 45 minutes.

ARE THERE ANY RISKS TO ME?

The potential risk involves a breach of confidentiality. Therefore, every attempt will be made to ensure the confidentiality of all participants.

ARE THERE ANY BENEFITS TO ME?

There are no direct benefits to participants in this study.

HOW WILL MY CONFIDENTIALITY BE PROTECTED?

While there will probably be publications as a result of this study, your name will not be used. Only group characteristics will be published.

If you participate in this study, we would like to be able to quote you directly without using your name. If you agree to allow us to quote you in publications, please initial the statement at the bottom of this form.

WHOM SHOULD I CONTACT IF I HAVE QUESTIONS?

You may ask any questions about the research at any time. If you have questions about the research after you leave today you should contact the Principal Investigator Dr. Robert Brindley at +998908083309. You may also call the student researcher, Kristen DiMatteo at 998906054233 or the Texas A&M University Institutional Review Board (979-458-4067; irb@tamu.edu).

Your participation is completely voluntary. You do not have to participate in this study. If you begin participation and change your mind you may end your participation at any time without penalty.

Your signature indicates that you have read this consent form, had an opportunity to ask any questions about your participation in this research and voluntarily consent to participate. You will receive a copy of this form for your records.

Name of Participant (please print): _____

Signature

Date

_____ I give my permission to be quoted directly in publications without using my name.

_____ I give my permission for photographs/audio/video recordings to be made of me during my participation in this research study.

_____ I do not give my permission for photographs/audio/video recordings to be made of me during my participation in this research study.

APPENDIX C

INTERVIEW SCRIPT

Interview # _____

Date _____ / _____ / _____

Interview Protocol Script

Welcome and thank you for your participation today. My name is Kristen DiMatteo and I am a graduate student at Texas A&M University conducting my record of study in partial fulfillment of the requirements for the degree of Doctorate of Education. Thank you for completing the survey, and this follow-up interview will take about 40 minutes and will include questions regarding your experiences with the Mentoring Program at TIS. I would like your permission to record this interview, so I may accurately document the information you convey. If at any time during the interview you wish to discontinue the use of the recorder or the interview itself, please feel free to let me know. All of your responses are confidential. Your responses will remain confidential and will be used to develop a better understanding of how the Mentoring Program has influenced your experience at TIS and whether any aspect of this influence has affected your decision making regarding whether to continue your contact. The purpose of this study is to evaluate the effectiveness of the Mentoring Program on aspects of teaching and working at TIS.

At this time I would like to remind you of your written consent to participate in this study. I am the responsible investigator, specifying your participation in the research project. You and I have both signed and dated each copy, certifying that we agree to continue this interview. You will receive one copy and I will keep the other, which will be separate from your reported responses. Thank you.

Your participation in this interview is completely voluntary. If at any time you need to stop, or take a break, please let me know. You may also withdraw your participation at any time without consequence. Do you have any questions or concerns before we begin? Then with your permission we will begin the interview.

Questions for Mentored Teacher

1. During the past year, what did your mentor do with you that was most beneficial for you?
2. Were you provided sufficient time to work with your mentor? How could your time together be improved?

3. Were there specific areas of your adjustment to TIS where your mentor gave support? If so, give specific examples.
4. Do you feel that having a mentor influenced your experience of working at TIS? If so how?
5. What could be added to or changed to the mentoring program for next year?
6. Before we conclude this interview, is there anything else you would like to share?

*** If participant wishes to discontinue study, ask if they would be willing to share why.

APPENDIX D

NEW TEACHER ONLINE SURVEY

Lead Teacher Survey - New Teacher Perspective

Thank you for agreeing to complete this survey. You have been asked to complete this survey because you have been involved in the lead teacher program in your first year at Tashkent International School. Your responses will remain confidential and will be used to develop a better understanding of how the Lead Teacher Program has influenced your experience at TIS. The purpose of this study is to evaluate the effectiveness of the Lead Teacher Program on aspects of teaching and working at TIS. By completing this study you are giving your consent to use your responses for research purposes.

1. My lead teacher facilitated the understanding of the PYP curriculum.

1 2 3 4 5 6 7 8 9 10

No not agree Strongly Agree

2. Administration has articulated clear expectations for faculty regarding working collaboratively.

1 2 3 4 5 6 7 8 9 10

Strongly disagree Strongly agree

3. Working with my lead teacher improved my work in the classroom.

1 2 3 4 5 6 7 8 9 10

Strongly disagree Strongly agree

4. My lead teacher clearly articulated grade level expectations to me.

1 2 3 4 5 6 7 8 9 10

Strongly disagree Strongly agree

5. My lead teacher helped me learn school procedures.

1 2 3 4 5 6 7 8 9 10

Strongly disagree Strongly agree

6. My lead teacher asked questions to allow me to think critically about my teaching.

1 2 3 4 5 6 7 8 9 10

strongly disagree strongly agree

7. Please rank your lead teacher's ability to provide you with academic (teaching) support.

1 2 3 4 5 6 7 8 9 10

no support

very supportive- met all my needs

8. Please rank your lead teacher's ability to provide you with resources

1 2 3 4 5 6 7 8 9 10

unable to assist

multiple resources and suggestions when asked

9. Please rank your lead teacher's ability to provide you with nonacademic (social and emotional) support.

1 2 3 4 5 6 7 8 9 10

no support

highly supportive/proactive

10. I benefited from having a lead teacher in my first year at TIS.

1 2 3 4 5 6 7 8 9 10

strongly disagree

strongly agree

My relationship with my mentor has influenced my decision to extend my contract.

1 2 3 4 5 6 7 8 9 10

strongly disagree

strongly agree

Please add any thoughts on how the lead teacher program assisted your transition to TIS.

Please add any thoughts on how the lead teacher program can be improved.

APPENDIX E

LEAD TEACHER ONLINE SURVEY

Lead Teacher Survey- Lead Teacher Perspective

Thank you for agreeing to complete this survey. You have been asked to complete this survey because you have served as a lead teacher to assist the transition of your grade level team member at Tashkent International School. Your responses will remain confidential and will be used to develop a better understanding of how the Lead Teacher Program has influenced your experience at TIS. The purpose of this study is to evaluate the effectiveness of the Lead Teacher Program on aspects of teaching and working at TIS. By completing this study you are giving your consent to use your responses for research purposes.

Being a lead teacher helpful me reflect upon my teaching.

1 2 3 4 5 6 7 8 9 10

strongly disagree strongly agree

Administration supported me in my role as lead teacher.

1 2 3 4 5 6 7 8 9 10

strongly disagree strongly agree

I clearly understood what was expected of me as a lead teacher.

1 2 3 4 5 6 7 8 9 10

strongly disagree strongly agree

I had enough time to meet with my teammate to give him/her the support needed.

1 2 3 4 5 6 7 8 9 10

strongly disagree strongly agree

Being a lead teacher gave me opportunities to be more involved in elementary school decisions.

1 2 3 4 5 6 7 8 9 10

strongly disagree strongly agree

I felt confident in my role as lead teacher.

1 2 3 4 5 6 7 8 9 10

strongly disagree strongly agree

Administration has articulated clear expectations for faculty regarding working collaboratively.

1 2 3 4 5 6 7 8 9 10

strongly disagree strongly agree

I developed a close personal relationship with my teammate.

1 2 3 4 5 6 7 8 9 10

strongly disagree strongly agree

I provided emotional support to my teammate.

1 2 3 4 5 6 7 8 9 10

strongly disagree strongly agree

I served as an instructional coach to my teammate.

1 2 3 4 5 6 7 8 9 10

strongly disagree strongly agree

I felt comfortable setting agendas and leading meetings

1 2 3 4 5 6 7 8 9 10

strongly disagree strongly agree

On a professional level, I enjoy being a lead teacher.

1 2 3 4 5 6 7 8 9 10

strongly disagree strongly agree

Does (or did) being a lead teacher affect your level of job satisfaction? If so, how?

Please add any thoughts on how the lead teacher program can be improved.

APPENDIX F

ELEMENTARY SCHOOL LEAD TEACHER – JOB DESCRIPTION

Elementary School Lead Teacher - Job Description

SUMMARY

A Lead Teacher is an experienced teacher within the Elementary School who is chosen to provide support, guidance and resources for new teachers, advice on classroom dynamics and challenging students. The Lead Teacher is fully conversant with curriculum development and implementation. Lead Teachers draw upon their teaching experiences to serve as leaders, mentors and sometimes counselors to other teachers.

GUIDING PRINCIPLES

- Supports and advances the Mission, Vision and Beliefs of the Tashkent International School.
- Supports student learning and achievement through cooperative effort and best practices.
- Supports and promotes the Pre-School-12 curriculum based upon the IB goals and mission.
- Supports and advances international education.
- Incorporates current research and best practices in decision making.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties and responsibilities of the lead teacher include:

- mentoring an initially contracted (new) teacher. As such the lead teacher is the first person to whom the new teacher turns when he/she has questions about curriculum, student behavior, school protocol, etc.
- informally assisting the new teacher in the orientation to specific instructional practices, including Investigations mathematics and First Steps for literacy.
- sharing historical knowledge of the PYP at TIS and the grade level UOI and, along with the PYP coordinator, taking a lead role in running the collaborative planning meetings.
- assisting in the orientation of the new teacher to Atlas Rubicon.
- taking a leadership role in meetings and training sessions, including advising on the content and planning of PD workshops.
- proactively sharing school and community resources that can benefit students and staff.
- demonstrating high expectations for themselves, their peers and students.
- functioning as a team leader for her grade level or classroom.
- taking a primary role in the international ordering for the grade level.

QUALIFICATIONS

Lead Teachers:

- Have a capacity for leadership
- Wish to work in a changing, multicultural environment
- Ensure open and effective communication
- Work proactively and with initiative and innovation
- Provide an example to others in terms of commitment to the school through organizing and attending multiple school functions
- Are collaborative team-players
- Are literate in IT skills
- Are flexible and adaptable
- Are able to motivate their colleagues
- Are efficient organizers
- Are committed to their own learning
- Have sufficient experience to speak with confidence and authority on curricular issues
- Have a demonstrated interest in curriculum
- An ability to prioritize work effectively and to be attentive to detail

The Lead Teacher must:

- be well-versed in the instructional practices implemented at TIS.
- possess good observational and analytical skills and be able to offer fresh solutions.
- be able to provide constructive criticism and helpful solutions to new teachers.
- have exceptional people skills, as they will interact with a variety of individuals on a daily basis.
- have the ability to communicate effectively in both oral and written form, and conveying information from training and the administration to colleagues.
- participate in ongoing professional development to develop skills in mentoring new teachers.

If you are interested in being a lead teacher, please email Kristen DiMatteo by April 19th. The proposed stipend for this responsibility is \$3000 per year. The positions will be allocated yearly based upon the needs of the school.

APPENDIX G

SAMPLE COPY OF MEETING AGENDA AND MINUTES

Tashkent International School Meeting Agenda/Minutes				
Meeting Minutes		Purpose:		
		Decide	D	
Date:	9/28/2013	Recommend	R	
Location:	Tina's room	Understand	U	
Attendees:	Tina, Maureen	Inform	I	
Recorder:	Tina			
Task	Purpose	Discussion Points	Action/Decision	Person
Looking for video clips of handmade items being made	D	We need to focus on the fact that some things are completely handmade and some are partially made by hand. Some tools will be needed so look for something that isn't so we are looking at things that are mass produced or not - hand made or not? This is really a big discussion point so could look at it on the point of a continuum from totally made by hand and entirely made by machine. A scale from 1-10 of handmade.....	Will look for	Tina
Design/Value/Physical Features	U/I	Students need to know the definitions of the artifacts based on these. Physical features and function are easy to focus on. Function needs to be explained. Value is something that we need to focus on. What are the ways of making a produce. Value will be next week The design and function are often muddled.		Tina
Focus on value next week	D	Higher level features so focus on next week - what artifact is valuable to your family/mum.		
Research	D	Needs to start soon as getting a bit late. Why are artifacts important - so what? what makes you say that? etc.....		
Eyewitness Posters celebration	D	Instead of inviting parents invite the school community to come and view the posters in a gallery walk displayed outside the computer lab.		
First steps	I	Will discuss this next week.		
Show me what you are made of	I	Liz will send the clip link of this to Maureen, Tina and Oleg hopefully can download		
Focus next year will be books that support the units	D	We need to make a collection of books that will support the unit for guided reading - the central idea		

APPENDIX H

CURRICULUM VITAE OF DR. ROBERT BRINDLEY

CURRICULUM VITAE Robert Keith Brindley

PERSONAL DETAILS

<i>Nationality</i>	Australian/British
<i>Telephone</i>	
<i>Email</i>	
<i>Status</i>	Married to Jann (1978), two sons both IB students who have now graduated from universities in Australia.

QUALIFICATIONS

1993 - 1996	Doctor of Philosophy: Educational Administration, University of New England, Australia.
1992 - 1993	Masters of Educational Administration, University of New England, Armidale, NSW, Australia. (Upgraded to doctoral level in 1993).
1979 - 1980	P.G.C.E. University of Keele, U.K. - Mathematics, Physics and Geology (age range 11-18)
1972 - 1975	B.Sc. Hons, 2(i) Physical Geology, University of Exeter, Devon, U.K. Geophysics and hard-rock Geology, Physics, Mathematics, Statistics and Computing.
1965 – 1971	St. Olaves and St. Saviours Grammar School, Kent, U.K.

PROFESSIONAL EXPERIENCE

<i>Tashkent International School, Tashkent, Uzbekistan (NOR 450). Co-educational, Pre-School- Grade 12 (ages 4 – 18). Curriculum: IB World School (PYP, MYP, and DP)</i>	
2009 -	Director <ul style="list-style-type: none">▪ Campus Expansion projects▪ Responsible for Curriculum, Finances, Development, Human Resources, Marketing and Communications, Admissions and Operations.

	<ul style="list-style-type: none"> ▪ Restructure a growing school ▪ Guide the school through accreditation in the International Baccalaureate PYP, MYP, and DP, and CIS/NEASC.
<p>Atlanta International School, Atlanta, USA (NOR 952). Co-educational, 4K- Grade 12 (ages 4 – 18). Curriculum: IB World School (PYP,MYP and DP)</p>	
2005 - 2009	<p>Headmaster</p> <p>Major achievements</p> <ul style="list-style-type: none"> ▪ Recruitment, retention, professional development and appraisal of an excellent faculty ▪ Restructured the departments of Business, Development, Human Resources, Marketing and Communications, Admissions and Operations. ▪ Implementation of IBMYP to complement the existing IBPYP and IBDP programmes ▪ Excellent, and improving, academic results - first time in school's history a 100% pass rate at IBDP in 2007 ▪ Active participation in fundraising, architectural designs, grant application as part of the school's capital campaign to raise \$24 million to build 4K-2 and Art/Science/Design buildings. ▪ Increased student application and enrolment – current 4K/5K applications ratio 6:1. ▪ Establish an exceptional relationship with the Parent Organisation. ▪ Increase the profile of AIS within the Atlanta, national and international communities. ▪ Building professional learning communities within the school.
2001- 2005	<p>Head of Middle School and Director of Secondary Academic Studies</p>
<p>The British School, Caracas, Venezuela (NOR 300). Co-educational, Pre-School – Year 9(ages 3 – 15). Curriculum: Based on the British National Curriculum</p>	
2000 - 2001	<p>Deputy Head of School (Pre School – Year 9)</p> <p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ Day-to-day operation of the school. ▪ To act as second to the Head of School.
1999 - 2001	<p>Headmaster of the Secondary School (Years 7 – 9)</p> <p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ Responsible for all matters relating to the management of the Secondary School. ▪ Member of the Board Strategic Planning Committee with direct responsibilities to plan for an expansion to I.G.C.S.E. and I.B./A level ▪ Member of the Board Maintenance and Development Committee. ▪ Chair of the E.C.I.S. Steering Committee. ▪ Committee chair on policy, procedure and implementation of staff appraisal. ▪ Staff recruitment.
1997 - 2001	<p>Director of Studies (Pre-School – Year 9)</p> <p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ Evaluate and up-grade all Curriculum Documentation from KS1 – KS3

- based on the U.K. National Curriculum.
- Computerise reporting system and all other curriculum and assessment documents.
- Head of Mathematics.
- Oversee the building of a new wing of 8 classrooms, including Science Laboratory of I.B. standard and the renovation of two other buildings.

The Armidale School, Armidale, NSW, Australia. (NOR 550) G.P.S. Anglican Boys' boarding and day school Pre-School - Grade 12 (ages 5 - 18). 'Round Square' School. **Curriculum:** N.S.W. Board of Education.

- | | |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1994 - 1997 | <p>Housemaster</p> <p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ The co-ordination of boarding house staff members to ensure effective management. ▪ The pastoral welfare of students. ▪ Liaison with teaching staff to ensure academic discipline of the students. ▪ Effective and appropriate communication with the parents. |
| 1994 | <p>Head of Science</p> <p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ The daily operation and co-ordination of activities of the seven Science laboratories. ▪ To revitalise the academic programmes to satisfy both syllabus guidelines and needs of students. |
| 1992 - | <p>Senior Physics and Mathematics Teacher</p> <ul style="list-style-type: none"> ▪ Senior Mathematics (NSW. 2/3/4 Unit, equivalent to 'A' level/I.B.) ▪ Senior Science (Physics, Geology and 3/4 Unit Science, equivalent to 'A' level/I.B.) ▪ 1994, tuition of top student in NSW in Science and in 1995 Cosmology |

The Kooralbyn International School, Kooralbyn, Queensland, Australia. (NOR 320) Co-educational boarding school, Pre-School to Grade 12 (ages 4 - 18). **Curriculum:** Queensland Board of Education / I.G.C.S.E.

- | | |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1987 - 1991 | <p>Deputy Headmaster</p> <p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ All administrative duties with respect to the day-to-day running of the school. ▪ Liaison with boarding staff ▪ Instigate and monitor staff appraisal mechanisms. ▪ Trustee of the school superannuation fund. ▪ Supervision, instruction and monitoring of all "practicum" teachers. |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

The Junior English School, Rome, Italy. (NOR 300) Co-educational day school from Reception to Grade 10 (ages 5 – 16) Curriculum: I.G.C.S.E.

1984 - 1986

Head of Science and Mathematics

Responsibilities:

- Development of the Science and Mathematics curricula for an expanding senior school.
- Introduction of effective accounting and budgetary procedures.
- Costing and designing new Science facilities to meet extra courses offered.

Mullion High School, Cornwall U.K. (NOR 650) Co- educational, non-denominational day school Grades 6 –10 (ages 11 to 16). **Curriculum:** G.C.S.E.

1980 - 1984

Mathematics and Chemistry teacher

1977 - 1978

After leaving Ireland, I, together with my future wife, travelled and worked extensively around the world, for example: **Tunisia:** living and working at an Anglican mission in the centre of Tunis, adjacent to the 'souk'. **Israel:** working as a 'volunteer' on a kibbutz near the Sea of Galilee. It was here that I met my future wife. **Greece:** working in an hotel in the Peloponnese, repairing sailing boats. **Austria:** a labourer on an alpine farm, near Innsbruck. **New Zealand:** prospecting for gold in the Southern Alps. **Australia:** builder's labourer in Cairns.

1975 - 1976

Uranium Geophysicist: Irish Base Metals (Northgate Explorer), Dublin, Southern Ireland.

Team leader with an exploration unit prospecting for uranium in Southern Ireland.

1971 - 1972

Seismologist: S.S.L. and Seiscom Ltd., offshore Norway.

Working aboard a seismic vessel in the North Sea as part of an exploration team seeking oil and gas. Then as a computer programmer in London, analysing recovered seismic data.

Professional Memberships

- 1) Council for International Schools
 - a) Advisor to CIS Accreditation Service
 - b) CIS Team Visit (Chair) to Belgium (April 2012)
 - c) CIS Team Visit (Chair) to Turkey (March 2010)
 - d) CIS Team Visit (Chair) to Merrimac State High School, Queensland, Australia (March 2008)
 - e) CIS Team Visit (Chair) to Colegio Colombiano, Bogota, Columbia Chair (November 2006)
 - f) CIS Team Visit (Co-Chair) to Colegio Ingles, Mexico (April 2005)
 - g) ECIS Team Visit to Colegio Columbia, Mexico (November 2003)
 - h) ECIS Team Visit to Atlanta International School. (March 2000).
- 2) Board Member of the Central and Eastern Europe Schools Association.

Other Skills/ Interests/ Extra-Curricular

Music	I have been playing the classical guitar for the last 30 years, occasionally teaching and performing, but essentially a personal interest and pursuit.
Languages	Spanish: good working knowledge, both written and spoken. German/French/ Italian/Russian: basic knowledge of both written and spoken form.
Sport	Level 1 soccer coach; I used to play competitive club soccer, but now run to keep fit!
Geology	I continue to take great pleasure 'going bush' to fossick.

APPENDIX I

NOTES FROM NEW-TEACHER INTERVIEWS

Questions for New Teacher
Teacher 1

1. During the past year, what did your mentor do with you that was most beneficial for you?

Basically, _____ was a person to turn to when I had a question that seemed too simple to ask administration. It was nice to have a person to trust. I generally went to ____ for help with forms and finding curriculum documents. We work together well so it is easy to talk with her.

2. Were you provided sufficient time to work with your mentor? How could your time together be improved?

We could always use more time together! There is a lot to learn in the first few months of the school year. We met outside the regular team meeting time. There is a lot of hallway conversation that is helpful. I think _____ would've been helpful regardless of whether she had a title of lead teacher, but knowing that she was designated to work with me made me feel a bit less guilty about asking tons of questions.

3. Were there specific areas of your adjustment to TIS where your mentor gave support? If so, give specific examples.

I received an email from _____ about a month after I was hired! Knowing that I had a friendly face to meet was a big relief. Mostly my mentor helped with finding things for me and showing me the ordering process. It's pretty complicated and time consuming, so she just showed me quickly and saved me time with that. I am new to the grade level so having her show me all the resources was a big help. The first few weeks were particularly helpful because she took the lead with Open House and parent letters home.

4. Do you feel that having a mentor influenced your experience of working at TIS? If so how?

Definitely working with __ has made the transition less stressful. I am sure she would've helped me regardless of being a mentor. I guess just having the structure

in place made me feel like the school was concerned about my adjustment, which in of itself is important.

5. What could be added to or changed to the mentoring program for next year?

I think the program is pretty clear. Maybe having meeting protocols would help, but really my mentor was very good at running meetings.

6. Before we conclude this interview, is there anything else you would like to share?

No, I think that's all for now.

Teacher 2

1. During the past year, what did your mentor do with you that was most beneficial for you?

My lead teacher was supportive right from the start. When you move overseas it's a huge adjustment and there are so many things going through your head. Having a person who I could turn to was great. She contacted me before I even arrived and let me know how excited she was to work with me. You have no idea how nice that is. Of course just having someone let me know that the things I am doing are correct also helps.

2. Were you provided sufficient time to work with your mentor? How could your time together be improved?

We definitely had enough time together. I think we spend about three to four hours a week planning. Sometimes we get off topic, maybe that's just our personalities. So, yeah, maybe we aren't using the time sticking to a specific agenda, but we really need the time together. Or at least I do. We could probably be more thoughtful about our agendas for meetings, but we seem to do well with getting things done.

3. Were there specific areas of your adjustment to TIS where your mentor gave support? If so, give specific examples.

I think I have already mentioned the emotional support. I really think that that shouldn't be underestimated. It's just like the kids, isn't it? They don't learn well with positive emotional connections and I can't teach effectively if I am feeling alone in my job.

Are there ways that your mentor helped you professionally?

She gave me very direct assistance at the start of the school year. You know-figuring out how to get supplies, etc. Also with Open House and administration's expectations of us. Now our relationship is more even, but I am still new to the curriculum so I have questions when we start a new unit. I like to think that I provide some new ideas to our meetings.

4. Do you feel that having a mentor influenced your experience of working at TIS? If so, how?

I think that having a mentor has influenced my perception of the school. It really felt like the school was looking out for me. The school feels very professional and supportive.

5. What could be added or changed to the mentoring program for next year?

I am not sure how lead teachers are chosen. I would love to help someone and be a mentor, but I don't know if I am qualified.

6. Before we conclude this interview, is there anything that you would like to share?

Just that I think it's important to recognize the work of the lead teacher. I have been in schools where everyone does their own thing and it's very demoralizing. You definitely need to keep this program going.

Teacher 3

1. During the past year, what did your mentor do with you that was most beneficial for you?

He was super helpful with everything. I think _____ helped me in so many ways, it's hard to choose just one.
(could you think of one?)

I suppose that the main way he helped was by showing me the curriculum documents and resources. I am not very strong with technology, and with everything on goggle docs, I was a bit intimidated. _____ was very patient and took the time to show me how everything works. I never felt uncomfortable because I didn't know something. Now I know how to use it.

2. Were you provided sufficient time to work with your mentor? How could your time together be improved?

Yes, we have a lot of time together. We meet with Liz and you every week, and then we often meet during our Russian time. Sometimes that's just for ten minutes,

but we have four periods of Russian a week so we have the time to meet if we need it.

How could your time together be improved?

I don't know. We seem to do well together. I think we are well planned and I feel like when we meet we are focused. We don't always use the google doc agenda when we meet. Sometimes it's just informal. Sometimes we are just comparing student work.

3. Were there specific areas of your adjustment to TIS where your mentor gave support? If so, give specific examples.

I think the technology example is the best one! I still struggle with tech and I probably rely on _____ more than I should, but he doesn't seem to mind.

4. Do you feel that having a mentor influenced your experience of working at TIS? If so how?

TIS is a friendly place. I think working with _____ has made me a better teacher. I feel like I am a better teacher after I meet with him. I know I am a good teacher, I just think it's nice to work with someone who is so interested in teaching. _____ is very calm too. He is very reassuring. He is encouraging and he always keeps things focused on what we are doing with students. He's very professional.

5. What could be added to or changed to the mentoring program for next year?

I think you just want to be sure that the right people are mentors. Everyone needs something different. I really need to have someone professionally, I haven't had a hard time adjusting personally, and I have a family so I don't need a lot of social support. Other teachers may need to have more of a friend. It seems like you really want to have a good match.

6. Before we conclude this interview, is there anything else you would like to share?

I feel very fortunate to work with _____. He's a great guy and he has helped me so much. I feel blessed.

Teacher 4

1. During the past year, what did your mentor do with you that was most beneficial for you?

My lead teacher helped me by leading the planning. I was new to grade 5 and it was nice to have someone tell me about grade level expectations, show me assessment rubrics, and just lead me in general. I have learned so much more quickly than I would have on my own. I think I would've had a break down from trying to keep up with everything. My lead teacher let me focus on my students. She showed me the plans, the resources, the school website, then she showed me how to use IXL and the other programs used here. There's just so much to know, it was nice not to have to figure it all out on my own.

2. Were you provided sufficient time to work with your mentor? How could your time together be improved?

Yeah, oh yeah we had time. Our classrooms are side by side and we met daily. We really tried to check in with each other a few times a day. A lot of our collaborative work is informal. Sometimes we would get on a role and then we start moving in a direction that really requires some input from admin. So we meet with you or Liz (PYP coordinator) A few times we started planning an idea together and we were told it was not aligned with the Program of Inquiry. That can be frustrating.

Can you give an example?

Well, we were thinking about changing the focus of one of our units from sharing resources to a more science based look at energy. The grade 5 program is heavily social studies based and we wanted to add some science. The problem is that it doesn't fit with the transdisciplinary theme. It's absolutely true that it's a stretch to make it work but we just got excited about it. We are still working on that unit with Liz.

3. Were there specific areas of your adjustment to TIS where your mentor gave support? If so, give specific examples.

I think for me it was mostly just getting used to grade 5 and figuring out what to expect of the students. It really helped to have someone to show student work to and to analyze it and make sure that my interpretation of the work and my expectations were in line with the grade 5 curriculum. The scope and sequences are great documents, but they don't give you and on the ground picture of what's expected of grade 5 writing. So to work together on the assessment rubrics and discuss student work has been a great help.

4. Do you feel that having a mentor influenced your experience of working at TIS?
If so how?

Oh, I think I have had a fairly smooth transition because of my mentor. We work well together. More importantly, I think I am doing a better job of teaching my kids. I really think that in the end it's the students who benefit from having this kind of support system in place. We really focus on what's best for kids together. So yes, my partner has really positively influenced my experience.

5. What could be added to or changed to the mentoring program for next year?

We worked informally very often and we had so many ideas, we probably need to have some clarity on what aspects of the curriculum we can change and what we can't. Obviously there are some things that can't change. But we have started a reading enrichment program and a math –Brain Benders” program. Is that okay? Do we need permission from administration? Those are the types of things that need some clarity.

6. Before we conclude this interview, is there anything else you would like to share?

You really need to make it clear to the Board and others how special this school is in terms of teachers working together. It might not be just because of the mentoring program, but I think that it facilitates it. The PD time that we have been given to work in small groups on math differentiation and some of the other structures in the school are really important as well. It may not be IS Bangkok, but in many ways it feels more put together than the big Asian schools.

Teacher 5

1. During your first year, what did your mentor do with you that was most beneficial for you?

I would say that my mentor was a friend and a colleague I could turn to when I had a question that seemed a bit ridiculous. Definitely that was the case at the start. I liked having someone that seemed nonjudgmental, not that you or anyone else came across that way, but there was definitely a feeling that I could trust my mentor. Trust us a big deal when you come into a new school. You need someone you can be yourself with. I felt like I could be myself with my mentor.

How so?

Well, like I said, I felt I could ask her anything, and sometimes my questions seemed silly but I never felt that way from her. I could also talk to _____ about a

couple of my more difficult students. Usually after talking about a kid with her, I would walk away with some good ideas for how to manage him. She never made me feel like I had to take her suggestions, she just offered feedback and mostly listened. She is a good listener.

2. Were you provided sufficient time to work with your mentor? How could your time together be improved?

I think our time together was enough. We have meetings that are focused on student assessment and planning units with Liz and we meet outside of collaborative planning time fairly often.

3. Were there specific areas of your adjustment to TIS where your mentor gave support? If so, give specific examples.

I think I mentioned most of it earlier. I really relied on my mentor for two things. It was great to have someone who I could ask questions about how the school worked. That helped with the adjustment. It was those simple things like ordering materials locally and knowing where documents were saved on the server. She saved me time and I think I would have been frustrated if I didn't have her. Or I would have driven someone else crazy with my questions.

4. Do you feel that having a mentor influenced your experience of working at TIS? If so how?

Sure, yes, definitely working with _____ influenced my experience. We are pretty close friends now. Maybe we would've been anyway, but you need a friend in your first year.

5. What could be added to or changed to the mentoring program for next year?

I think some sort of orientation to the mentoring program would be good. If we had a meeting at the start of the year during the teacher work week that spelled out job responsibilities, it would make it clearer who we should go to for different things.

6. Before we conclude this interview, is there anything else you would like to share?

Not right now. I think I have said everything that's important.

APPENDIX J

NOTES FROM MENTOR-TEACHER INTERVIEWS

Questions for Mentor Teacher
Teacher 4

1. When you look at the job description, what was the most challenging aspect of being a lead teacher?

There wasn't one specific thing that was difficult. It kept me on my toes, having to be sure that I was telling my teaching partner everything she needed to know. Maybe that was difficult, sometimes you aren't sure if you are missing something. I think we had a pretty open relationship- she asked questions when she needed to. I worried that I wasn't being as proactive as other lead teachers though.

2. Did the job description feel accurate?

Yes. There are varying degrees of emphasis on the level of support I gave, I didn't really help with challenging students, because she never had issues with students. I can't think of anything that is here that shouldn't be. I am trying to think of other things that should be but I think everything is covered.

3. Were you provided sufficient time to work with your partner? How could your time together be improved?

We worked together often, we definitely met more than once a week. You gave us extra time when we needed it for unit planning, which was nice. Sometimes we would get a bit off topic, so maybe we weren't efficient, but we tried to stick to the agenda. Having an agenda and protocols is helpful.

4. Do you feel that being a mentor influenced your experience of working at TIS? If so how?

I like being a mentor, I would've helped a new teacher whether I had the title or not, but it is nice to be recognized for the extra work. I think being a lead teacher has made me a bit more reflective about how other people teach and work with students. _____ does things differently than me and I like to learn new ways of doing things. We work together more than I think we would have if I was not a lead teacher. I also think liaising with administration has given me insight about the big picture a bit. I don't ever want to work in admin but I think it is interesting to see how you work.

5. What could be added to or changed to the mentoring program for next year?

I know some people wanted even clearer expectations and maybe more oversight. I know you can't come to every meeting, but in the beginning I think people need you or Liz there for reassurance. We could have had even more time together during the work week.

6. Before we conclude this interview, is there anything else you would like to share?

I hope the program continues. I think it is a sign of a good school and I will look for schools that do this when I go recruiting. I think it really does make the transition easier.

Teacher 5

1. When you look at the job description, what was the most challenging aspect of being a lead teacher?

For me the most difficult part was the administrative tasks, like doing the international orders. That takes a lot of time. I felt comfortable with working with my partner. I think I gave her the support she needed regarding the curriculum.

2. Did the job description feel accurate?

Yes. I would say that the duties and responsibilities are accurate. I do most of the planning for field trips and any type of community involvement, but I suppose that goes under the category of team leader. My teammate contributes quite a bit to the planning but she just doesn't know how to manage the logistics of those types of things.

3. Were you provided sufficient time to work with your partner? How could your time together be improved?

Yes, we had enough time together. There's plenty of time built into the schedule to meet and if we need to we can always meet at lunch. We have done a lot of forward planning and updating the Units of Inquiry. I think the Units are stronger and I feel more organized this year. My teammate likes to be well planned so it's kept us focused.

4. Do you feel that being a mentor influenced your experience of working at TIS? If so how?

I am more organized! I think having more responsibility for the grade level planning has made me more proactive. I also think having a leadership role has

changed my perspective a bit. I see the big picture in decisions. Maybe I take my role more seriously.

5. What could be added to or changed to the mentoring program for next year?

There should be some standard procedures for what a mentor should do. One of my colleagues was writing to her teammate in the spring before she arrived. I didn't do that, but I would have if I knew it was a requirement. I think there should be some flexibility in how we all interact with our teammates, but some baseline expectations for actual things that need to be done would help. Like a timeline of actions by month.

6. Before we conclude this interview, is there anything else you would like to share?

I have enjoyed being a lead teacher this year. I think it's good to have the structure in place for new teachers, it definitely helps them. It helped me when I was new. I also think it gives you as an administrator the ability to gain teacher perspective on decisions that affect the school. Definitely keep the program. I think it's a sign of a good school and it gives a good impression when you first arrive.

Teacher 6

1. When you look at the job description, what was the most challenging aspect of being a lead teacher?

I haven't had any specific challenges so I can't really say. I think it would be hard if you had a difficult teammate or if you were not really aware of how the school functions. That wasn't the case for me, but I have had difficult teammates in the past that I think would be very hard to mentor.

2. Did the job description feel accurate?

Yes, it's accurate. I think that the level of support a new teacher needs varies from teacher to teacher, so the job could be very different for each of us. In general though, I think the duties are accurate.

3. Were you provided sufficient time to work with your partner? How could your time together be improved?

Yes, we had enough time to effectively plan. We meet every week to plan the week ahead and we also meet to plan the Units. Sometimes we get bogged down with talking about student issues, but I think that that is part of what I need to do, give

advice. We have a difficult grade this year, and we also have some tough parents. That goes hand in hand, doesn't it? I think we both need to talk these kids through and align our expectations and how we deal with them.

4. Do you feel that being a mentor influenced your experience of working at TIS? If so how?

I think I feel more responsible for my grade level. I think many of the duties of being a lead teacher I would've done for a new teacher anyway. It's not like I would shut my door and ignore a new teacher. It's just good to have the job clarified so that I know exactly what's expected of me. It's also nice to recognize that mentoring a new teacher is extra work.

5. What could be added to or changed to the mentoring program for next year?

Not really. Maybe we could have a training session before school starts to talk through our role as mentors. We meet with you as lead teachers to talk about school related issues but we don't often practice skills for mentoring or talk about how our mentoring relationships are working out. I think everyone's pretty happy at the moment, but maybe we can support each other more.

6. Before we conclude this interview, is there anything else you would like to share?

I think having a formal program is just a part of a well-organized school. It's like having a well-documented curriculum. It should be expected that teachers will support each other. It's part of the PYP and it's nice that it has become an expectation here. I worked in a school where my teacher basically shut the door on me when I went to her and it was really awful. Don't hire people like that!

Teacher 7

1. When you look at the job description, what was the most challenging aspect of being a lead teacher?

Sometimes it was difficult to understand my role in developing the curriculum. I guess now that I look at the job description it never mentions developing the curriculum, but we had some miscommunications about that. We would work on Units and make some changes and then we'd be told by the PYP Coordinator that the changes wouldn't work. I totally understand why we couldn't make the changes, but it would have been good to know how much we can change from the start.

2. Did the job description feel accurate?

Yes, the job description is pretty clear. I think we should refer back to it to be sure we are doing everything that is listed here. Also, maybe some form of self-evaluation and administrative evaluation on how we are doing would be good to have.

3. Were you provided sufficient time to work with your partner? How could your time together be improved?

Yes, we work together often and I think we get a lot done. We are pretty focused when we meet so I can't think of ways to improve our time.

4. Do you feel that being a mentor influenced your experience of working at TIS? If so how?

I have enjoyed being a mentor, and I really like working in this capacity. I am interested in moving into a leadership position and this is good experience for me. It's been good to give feedback to my partner and I like to be involved in school wide decision making.

5. What could be added to or changed to the mentoring program for next year?

Clarifying the role of the lead teacher regarding curriculum might help. I could also use more feedback about how I am doing in the role of mentor. It would be good to check in and talk with you or Liz (PYP coordinator) about how things are going.

6. Before we conclude this interview, is there anything else you would like to share?

No, just that I am glad I have had the opportunity to be a lead teacher. I think it's a good program.

Teacher 8

1. When you look at the job description, what was the most challenging aspect of being a lead teacher?

Sharing the historical knowledge of how the school works was a bit difficult because this is only my second year teaching here. Sometimes I wasn't sure of the answers to questions that came up.

2. Did the job description feel accurate?

The job description is very accurate. It pretty much covers everything that I can think of. Well, I guess it doesn't cover the emotional support. Sometimes _____ was just having a bad day at home and I would be there for her. We are good friends and we hang out together outside of school. I don't know if that's my job, but we definitely spend a lot of social time together. I have taken her out to the markets and gone for walks on the weekend. At the start of the year, I made a point to ask her to do things on the weekend. Now she calls me, which is good. Again, it's not my job but I think it's sort of a part of working in an overseas school.

3. Were you provided sufficient time to work with your partner? How could your time together be improved?

We meet often and I think we work well together.

4. Do you feel that being a mentor influenced your experience of working at TIS? If so how?

It feels like a big responsibility and it takes a lot of time. There were definitely times when I felt overwhelmed because I didn't have my own class planned and there were things I needed to get done. At the same time, I like the responsibility and I like leading the grade level meetings. I kind of like to be in charge.

5. What could be added to or changed to the mentoring program for next year?

Maybe just a recognition that it's time consuming at the start. We really meet a lot and in many ways it's great but I needed time for my own planning. Not everything is collaborative and I spent extra time to get prepared even after my prep times.

6. Before we conclude this interview, is there anything else you would like to share?

Not really. I think it is a good program.

APPENDIX K

DISCUSSION SAMPLE ITEM FOR TABLE 9

Things That Come in Groups Summative Assessment Name Khwalish

Mathematical knowledge	Consolidating	Developing	Beginning
TASK 1: Demonstrates an understanding of the relationship between a multiplication sentence and a picture showing equal groups	✓		
TASK 1: Can use a strategy to find the total of equal groups	✓		
TASK 2A: Can solve word problems using multiplication, skip counting and/or repeated addition	✓		
TASK 2B: Can use multiplication and/or repeated addition notation to write number sentences <i>repeated addition sentence doesn't match story problem.</i>	✓		
TASK 3A: Can skip count correctly by a given factor	✓		
TASK 3B: Recognizes that skip counting represents multiples of the same number and has a connection to multiplication	✓		
TASK 4A: Demonstrates an understanding of the array as a model of multiplication	✓		
TASK 4B: Can find factors of numbers using factor pairs	✓		

Please review with your child. Sign and return

Parent Signature: _____

APPENDIX L

SAMPLE MENTOR/NEW TEACHER DISCUSSION ITEM

Name _____

Date _____

Assessment Master 8

End-of-Unit Assessment Tasks

- 2A.** There are 3 spiders on a web, and each spider has 8 legs. How many legs are there altogether?



24

- 2B.** Write two number sentences that represent the above story and solve both problems. Use multiplication and repeated addition.

$$8 \times 3 = 24$$

$$\begin{array}{r} 3+3+3+3+3+3+3+3 = 24 \\ \swarrow \quad \downarrow \quad \swarrow \quad \downarrow \quad \swarrow \quad \downarrow \\ 6 \quad +6 = 12 \quad 12+6 = 18 \quad 18+6 = 24 \end{array}$$

APPENDIX M

DRAFT LEAD TEACHER HANDBOOK

**Elementary Lead Teacher Handbook
Tashkent International School
2014-15**

Vision

To be an exemplary international school learning community.

Mission

Tashkent International School educates students to be internationally-minded, think creatively, reason critically and communicate effectively.

INTRODUCTION

As a Lead Teacher, you take a primary role in helping the school achieve its Vision and Mission. As a learning community, we are dedicated to a creating supportive and collaborative environment that allows all students to succeed and allows us to find professional enjoyment in our work.

This handbook serves as a guidebook for you as a Lead Teacher. It outlines the roles and responsibilities of the Lead Teacher and provides a framework for how and when to provide information to your new teaching partner.

This handbook was developed in order to assist you in supporting your new teacher through the first year of employment at TIS. It includes a monthly planner of topics, issues and general information that should be discussed by lead teachers and new teachers throughout the school year.

Why Be a Lead Teacher?

Being a lead teacher allows you to share your knowledge and expertise with a colleague. Lead Teachers at TIS are also involved in advising the administration of elementary and school wide decisions. The Lead Teacher job description outlines the responsibilities of the Lead Teacher.

How Will I Be Supported?

The principal and the PYP coordinator will support you by:

- supporting the relationship with your new teacher;
- providing training for you in your mentoring role;
- providing time for you to meet with you new teaching partner;
- advising you through the process.

What is My Role?

Mentoring a new teacher is a primary function of the Lead Teacher. As a mentor, you will support your partner teacher by sharing your experience and knowledge of the school and its programs with him or her. You will also take a lead role in coordinating your grade level team. This includes setting meeting agendas, planning field trips, and ordering supplies through the international order.

What is the Principal's Role?

The principal's role is to support both the new teacher as he or she adjusts to a new environment and the lead teacher as he or she takes on the added responsibility of mentoring a new colleague and managing grade level administrative tasks. By supporting the professional relationships between new teachers and lead teachers, the principal takes a facilitative role.

What is the PYP Coordinator's Role?

The PYP Coordinator attends grade level planning and collaborative planning meetings. His or her role at these meetings is facilitative and informative. The lead teacher sets the meeting agenda and directs the meeting. The PYP Coordinator provides information about components of the PYP needed for planning purposes and offers a school-wide perspective on the curriculum.

SUCCESSFUL PRACTICES

The Three Cs

It is important to acknowledge the skills and practices that a success mentor undertakes. Effective mentors work as a consultant, collaborator and a coach to the new teacher. These roles are outlined below.

Consultant

As a consultant, the lead teacher transfers knowledge about procedures, policies and practices. This includes information about school and board procedures, as well as information about the PYP and the school curriculum. The lead teacher might plan the logistics for field trips, explain how special events work at TIS or clarify expectations of teaching assistants.

Collaborator

As a collaborator, the lead teacher plans, reflects, problem-solves, and shares decisions made with the new teacher. The process is one of mutual input, with both the lead teacher and new teacher participating actively in the process, developing unit plans, sharing insights on professional practice, setting priorities and planning student activities.

Coach

As a coach, the lead teacher supports the new teacher's thinking, problem-solving and teaching practice. Inquiry-based education may be new to some teachers, and coaching is a technique that provides the new teacher with guidance while building independent skill development. The coaching role prompts the new teacher to problem-solve classroom issues and learn new skills to manage them.

Adapted from: *Partnering for Success: Getting the most from Ontario's New Teacher Induction Program*. September 2010.

Monthly Discussion Topics

This section provides monthly lists of topics that follow the needs of the school calendar. Please use this section when planning grade level meeting agendas. By following this list, you can be assured that you are providing timely information and support to your new teacher.

August

- Meet and welcome your new teaching partner
- Set up grade level meeting times with your new teaching partner
- Informal sharing of materials, files, bulletin board displays, etc.
- Check for readiness of classroom materials, equipment, etc.
- Clarify record-keeping/management procedures
- Share school plant layout, discipline policies, location, and availability of resources/materials, etc.
- Make sure your new teaching partner has been informed of the following:
 - Attendance (Forms and Policies)
 - Student forms
 - Copying Codes
 - Emergency Forms
 - Supervision Responsibilities (Playground, Lunch, etc.)
 - School Board Policy
 - Parent Handbook/Elementary Handbook
 - Important folders on the z-drive
 - Curriculum Guides
 - Parent Communication Before School/new family orientation
 - Dress Code

September

- Informal check-in and mutual sharing
- Student Support Team Referral process
- Semester report indicator explanation
- Parent contacts (parent communication plan and preparing for student led conferences)
- Substitute folder
- Possible agenda items: clarifications/questions/problem-solving around student issues, materials, and classroom management.
- Informal support and information sharing about resources in Tashkent as needed.
- Adjustment/culture shock

October

- Informal check- and mutual sharing
- Joint planning for time management and new Units of Inquiry
- Discuss MAP results and goal setting
- Discuss report cards
- Investigate methods of parent/teacher communication
- Preparation for student led conferences

November

- November observation of mentor by mentee
- Encourage contact and activities with colleagues
- Think aloud regarding student motivation
- Share personal time management strategies
- Ensure new teacher involvement in extra-curricular activities
- Check with new teacher periodically to ensure communication lines are working
- Discuss professional development opportunities

December

- Discuss pacing and curricular progress
- Calibrate overload and assist in determining priorities
- Provide information/clarification regarding end-of-course exams, grades and report cards
- Think aloud regarding goals for second semester
- Discuss quality professional development opportunities
- Celebrate successes

January

- Mutual sharing of professional growth goals and strategies
- Joint planning for upcoming units
- Clarify schedules, recordkeeping, reporting, etc.
- Encourage collaborative opportunities with other colleagues
- Discuss Retention Policy
- Think about supplies and materials for next year – international ordering
- January observation debrief

February

- Explore team teaching opportunities
- Discuss student performance data and its use
- MAP goal setting review
- Clarify/share information regarding schedules (spring break, student testing, etc.)
- Reflect upon prior units

- Clarify student portfolio assessment
- Prepare for student led conferences
- Confer and advise on home leave flights

March

- Reflect on student led conferences
- Discuss upcoming Units
- Provide information/clarification on student files/records, parents conferences, etc.
- MAP and standardized testing procedures
- Testing skills
- Schedule an observation for mentee to see another teacher presiding in the classroom
- Retention policy
- Celebrate success

April

- Discuss end-of-year schedules, final evaluation, student testing, field trips, etc.
 - Classroom inventory
 - Requisitions, materials, and supplies
 - Summer school
 - Student's permanent record
- Begin to build class list for following year
- MAP testing prep

May

- Build class list for the next grade
- Complete pass-up folders
- MAP testing data review
- Schedule a reflecting conversation
- Final check for clarification on semester 2 reports
- Check out form
- Complete check out form and turn in copy to the main office
- Review and discuss Professional Development Plan for the next school year
- Help new teacher "pack up"
- Celebrate successes

New Teacher Self-Assessment

In the areas below, please indicate the response for each item that best matches your concern/need level. Use this inventory with your lead teacher to determine some areas that need clarification, identify resources and set professional learning goals.

1. I am unsure about this, I would like clarification/support.
2. I understand how this works, but I have a few clarifying questions.
3. I understand how this works and what I need to do.

Information about Policy/Procedures

- ___ The teacher-evaluation system
- ___ Paperwork and deadlines
- ___ Expectations of the principal
- ___ Expectations of my colleagues
- ___ Communicating with parents
- ___ Standardized tests (MAP) department
- ___ Professional development plan

Accessing Resources

- ___ Organizing/setting up classroom
- ___ Accessing instructional materials
- ___ Arranging field trips
- ___ Ordering materials
- ___ Using the library/technology labs
- ___ Working with learning support

Working with Students

- ___ Establish class rules
- ___ Motivating reluctant learners
- ___ Maintaining student discipline
- ___ Assessing student needs

Managing Time

- ___ Organizing my day/week
- ___ Lesson Planning
- ___ Following the daily/wkly schedule
- ___ Attending meetings

___ Differentiating instruction for

___ Supervising extracurricular activities

___ Implementing the curriculum
development

___ Opportunity for professional

___ Evaluating student progress

___ Maintaining

personal/professional balance

Reflection of needs from the lead teacher/new teacher relationship:

Other:

References

Mentor Handbook Arlington Public Schools Arlington, Massachusetts. Retrieved from:
<http://www.arlington.k12.ma.us/tl/pd/pdfs/mentorhandbook.pdf>

Ontario Ministry of Education (2010) New Teacher Induction Program; Partnering for Success: Getting the most from Ontario's New Teacher Induction Program, A Resource Handbook for Mentors. Retrieved from:
<http://www.edu.gov.on.ca/eng/teacher/ntipmentor.pdf>

Regional School Unit 34: 2010-11 Beginning Teacher Induction Program Handbook.
Retrieved from:
<http://www.rsu34.org/Teachers/Certification/2010/RSU%2034%20Beginning%20Teacher%20Induction%20Program.pdf>

APPENDIX N

LEADERSHIP SEMINAR FOR TEACHER LEADERS

Adaptive Schools Leadership Seminar

For Aspiring Leaders and Individuals in Various School Leadership Roles

November 10-13, 2014 at Tashkent International School

Led by Carolyn Mckanders and Dr. Fran Prolman

and sponsored by CEESA and Tashkent International School

This leadership seminar will develop the capacities of individuals (and organizations) to cohesively respond to the changing needs of students and the changing needs of society providing skills development, improved collaboration and increased capacity for teams to reach greater levels of success.

Contact Dr. Robert Brindley, Director, TIS about this leadership workshop opportunity

at director@tashschool.org.

or

Visit www.thinkingcollaborative.com for more information