Articles and Authors:

Increased Compensation for Teachers in High-Need Areas:
Perceptions of Teachers and Principals
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Abstract

The purpose of this study was to determine possible differences in the perceptions of teachers teaching in high-need areas and teachers not teaching in high-need areas regarding increased compensation for teachers in high-need areas. Possible perception differences among principals and teachers were determined. The independent variables of focus consisted of gender, position held, years of certified experience, and certification areas. The dependent variable was the perceptions of the participants on providing increased compensation for teachers in high-need areas in order to attract and retain them to work in hard-to-staff schools. The results of this study indicated that most teachers and principals agreed that increased compensation would attract and retain teachers to work in hard-to-staff schools, but fewer teachers not considered teachers in high-need areas agreed with increased compensation for teachers in high-need areas.

Introduction

Educating America's children has been a primary importance since the colonial period of history. Finding and retaining well-qualified people to teach P-12 students has been part of the educational endeavor. However, this effort has proven to be challenging for schools administrators seeking to hire the best teachers. Most school administrators have little problem finding teachers, but some administrators consistently have trouble finding and keeping teachers in high-need areas such as math, science (Murphy & DeArmond, 2003), and special education (Leko & Smith, 2010). Too many students find themselves in classrooms taught by people who are not qualified in those areas. According to Hassel (2002), steps must be taken to entice people to choose teaching as a career and to provide incentives for highly-qualified teachers to remain in the profession.

With student populations rising, the need for highly-qualified teachers is apparent. However, what happens when such teachers cannot be found by many of the nation's schools? Students are placed at a disadvantage. According to Sterling (2004), "…well-prepared teachers have the largest impact on effective classroom practice and high student achievement" (p. 7). For many schools with large percentages of high-poverty and minority students, finding highly-qualified teachers is much more of a problem than for schools with small percentages of these same students (Ingersoll, 2006a). This situation is especially true when schools are competing for teachers who are certified in high-need areas (Ingersoll, 2006b). Although most schools face occasional problems finding teachers in high-need academic areas, high poverty and high-minority schools experience such problems more frequently. Schools that are unable to attract these teachers are forced to use under-qualified teachers who do not remain in teaching, which increases the turnover rate and decreases student achievement. Sterling went on to say, "…experienced teachers are leaving the profession in greater numbers due to low salaries and job dissatisfaction" (p. 1).

The foundation of this study supports the idea that increased salaries can attract and retain highly-qualified teachers. More specifically, this study assumes that increased salaries will attract and retain teachers to fill positions that normally are filled by under-qualified or under-

certified teachers. According to Goldhaber (2006), improved compensation policies can be effective options for schools seeking to attract and retain highly-qualified teachers. He went on to say "…research shows that teachers are responsive to monetary incentives" (p. 1).

Problem

Because the quality of teachers is closely related to student performance (Salinas & Kritsonis, 2006), it is critical for all students, regardless of their personal characteristics and circumstances, to be taught by highly-qualified teachers. The problem arises when administrators begin the process of recruitment and the effort of attracting and retaining teachers in high-need areas. Many administrators have utilized financial incentives to attract such teachers to their schools (Ingersoll & Smith, 2003).

This study presents data in regard to the perceptions of teachers and principals concerning the use of increased compensation, primarily focusing on increased salaries for attracting and retaining teachers in high-need areas. The study also lays a foundation to determine if there is a difference in the perceptions of teachers teaching in high-need areas and teachers not teaching in high-need areas. In addition, possible perception differences among principals and their teachers regarding teachers in high-need areas are investigated.

This study is based partially on the works of Linda Darling-Hammond and Richard M. Ingersoll and partially on the works of other educational leaders such as Dan Goldhaber, Patrick J. Murphy, and Michael M. DeArmond. According to Darling-Hammond (2003), "[s]ubstantial research evidence suggests that well-prepared, capable teachers have the largest impact on student learning" (p. 7). Darling-Hammond went on to say that more teachers are leaving the profession than are entering the profession, which has been a problem since the early 1990s. Add to this dilemma an increased attrition rate of 50% in high poverty/minority schools over low poverty/minority schools (Ingersoll, 2001), and the problem becomes more severe. Because schools with large percentages of high poverty/minority students have difficulty attracting highly-qualified teachers, especially in high-need areas, students in these schools find their teachers to be under-qualified in many instances (Murphy & DeArmond, 2003).

For years, the single-salary schedule has been used by most U.S. schools as the primary means of teacher compensation. With this type of schedule, pay is determined based on years of teaching experience and the number of graduate hours completed; however, consideration is not given to teachers' certification areas (Podgursky, 2002). Such a pay structure developed due to the growth of school districts through consolidation and the need to move away from salary negotiations, which at the beginning of the 20th century was said to have created charges of favoritism among teachers. "Eventually, the unification of schedules for elementary and secondary school teachers was embraced by the National Education Association as well as the American Federation of Teachers, who remain strong proponents" (p. 3). According to Podgursky (2002), finding elementary school teachers is fairly easy for most schools; however, finding teachers at the secondary level with certification in math, science and other high-need areas is much more difficult. "Paying all teachers in the districts off the same schedule virtually guarantees shortages by field" (pp. 3-4).

Method

Teacher Recruitment and Retention

Because many schools have difficulty attracting and retaining teachers in high-need areas (Murphy & DeArmond, 2003), and hiring and keeping highly-qualified teachers is critical for improving student achievement (Sterling, 2004), it is essential for administrators to develop methods for securing competent personnel in every classroom. One way to accomplish this goal is through the implementation of better compensation policies that have shown some benefit for attracting and retaining highly-qualified teachers. However, a lack of empirical research exists to support the idea that such endeavors will cultivate appropriate behavioral responses from teachers (Goldhaber, 2006). According to Feng (2009), "[o]ne obvious factor affecting decisions to change employers or occupations is the potential for increasing one's salary. The lower a teacher's current salary, the more likely it is that the teacher will move" (p. 1169). Financial incentives are considered important by most teachers, but they are especially important to teachers working in hard-to-staff schools (Greenlee & Brown, 2009). This study provides data to help gain a better understanding of how teachers and principals perceive increased compensation for teachers in high-need academic areas. The results of the study provide insight to the plausibility of implementing such reform to a teacher-compensation structure that has not changed since the beginning of the 20th century (Podgursky, 2002).

Sample

The population in this study consisted of female and male teachers, and principals at public high schools containing any combination of grades 9 through 12 in the southernmost counties of Arkansas and northernmost parishes of Louisiana. Superintendents from 22 school district granted permission to conduct the study in a total of 17 high schools in Arkansas (Arkansas Department of Education, 2008) and 21 high schools in Louisiana (Louisiana Department of Education, 2008). The sample included 308 teachers and 29 principals from whom permission to conduct the study was granted verbally.

Design of the Study

The design of this study was descriptive and consisted of collecting data using a teacher/principal survey. The survey was created and administered electronically via *SurveyMonkey*, which improved the survey process. To establish validity and reliability of the survey instrument, a pilot study was conducted. The pilot study survey contained a comment section for respondents to make suggestions to improve the survey. *Cronbach's alpha* was used to establish reliability.

Variables

The independent variables were the participant's (a) gender, (b) position held (teacher or principal), (c) years of certified experience, and (d) area of certification. The dependent variable was the perceptions of the participants on providing increased compensation for teachers in high-need areas in order to attract and retain them. Because this was a non-experimental study, the researcher looked at conditions (independent variables) that had already occurred. The null hypotheses were tested at a statistical significance level of $p \leq .05$.

Instrumentation

The survey used in this study utilized a Likert Scale. The survey consisted of four parts and was validated by conducting a pilot study. The first part consisted of four items developed

to collect demographic information on the four independent variables including the respondent's (a) gender, (b) position held (teacher or principal), (c) years of certified experience, and (d) area of certification. The second part, items 1-21, was labeled as teachers' and principals' perceptions of teachers working in all high-need/critical shortage areas regarding compensation. The third part, items 22–24, was labeled as teachers' and principals' perceptions of mathematics and science teachers regarding compensation. The fourth part, items 25–29, was labeled as teachers' and principals' general perceptions of teacher compensation. A Likert Scale ranging in value from 4 to 1 was used. On the scale, descriptors ranged from 4 as strongly agree, 3 as agree, 2 as disagree, and 1 as strongly disagree.

Discussion

Based on the data analysis, the researcher concluded that teachers in areas not considered high-need were not in favor of compensating teachers in high-need areas at increased rates. However, the data suggested that these teachers understood that compensation, such as increased salaries, would work to attract teachers in high-need areas to work in hard-to-staff schools. The data also suggested that math and science teachers would prefer increased salaries over other forms of compensation. Even though these groups were not in agreement regarding varied compensation, the need for incentives to adequately supply hard-to-staff schools with highly-qualified teachers appeared to be common knowledge. According to Barth and Nitta (2008), "…each additional dollar spent on more highly qualified teachers [has] a larger impact on student achievement than [does] any other use of school funds" (p. 15).

Teachers in areas not considered high-need, such as English and social studies, along with teachers in areas considered other high-need due to geographic location, such as drama/speech, foreign language, gifted and talented, library media, and special education, were closer in their opinions, regarding varied compensation, than were teachers in areas not considered high-need and math and science teachers. The researcher also concluded that the majority of teachers in other high-need areas did not agree with paying increased salaries to teachers in the high-need areas of math and science. Although these teachers agreed that increased salaries are needed to attract teachers in high-need areas to work in hard-to-staff schools, they did not agree with paying increased salaries to teachers in high-need areas to work in these schools.

All students deserve good teachers; however, many school administrators find it extremely difficult to attract certified personnel, especially teachers certified in high-need areas such as math and science. In many instances, these schools have large percentages of poor and minority students, who can achieve success if they are given access to highly qualified teachers in all subject areas. According to Peske and Haycock (2006),

> Poor and minority children don't underachieve in school just because they often enter behind; but also because the schools that are supposed to serve them actually *shortchange* them in the one resource they most need to reach their potential–high-quality teachers. Research has shown that when it comes to the distribution of the best teachers, poor and minority students do not get their fair share. (p. 1)

The researcher concluded that teachers with different years of experience had varying perceptions regarding salaries and other incentives for attracting and retaining teachers in high-need areas to work in hard-to-staff schools. It also appeared that, as teachers gained more experience, their perceptions regarding salaries began to change. This outcome was especially

true concerning small salary increases for attracting and retaining teachers between teachers with 0–5 years of experience and teachers with more than 20 years of experience. The majority of teachers with more experience agreed that small increases would do little to attract or retain teachers in high-need areas to work in hard-to-staff schools. The researcher also concluded that the majority of teachers from all experience groups saw substantial salary increases as a viable means for attracting and retaining teachers in high-needs areas to work in hard-to-staff schools. According to leading researchers, high-poverty schools find it difficult to attract qualified teachers and find it even more difficult to retain teachers once they are hired due to low salaries, poor working conditions, and increased stress associated with teaching students from disadvantaged backgrounds (Darling-Hammond, 2003; Darling-Hammond, 2007; Johnson & Birkeland, 2003; Peske & Haycock, 2006; Prince, 2002; Provasnik & Dorfman, 2005; Smith, 2008). Findings from such research bring additional attention to the need for compensating teachers in high-need areas with increased salaries to work in schools that have traditionally found difficulty attracting and retaining highly-qualified teachers.

When considering gender, male and female teachers had similar perceptions regarding salaries and other incentives for attracting and retaining teachers in high-need areas to work in hard-to-staff schools. Both groups believed that small-salary increases would do much less than substantial-salary increases for attracting and retaining teachers in high-need areas to work in hard-to-staff schools. In regard to providing other incentives, i.e., housing assistance, signing bonuses, student-loan forgiveness, etc., rather than providing increased salaries, male teachers favored this option at 57%. However, female teachers did not favor this option as much, with only 46% of these teachers agreeing that other incentives should be used over increased salaries. This outcome may have been due to the condition in this study that more female teachers than male teachers taught in high-need areas.

Math and science teachers as well as school principals expressed similar perceptions regarding salaries and other incentives for attracting and retaining teachers in high-need areas to work in hard-to-staff schools. Both of these groups appeared to understand that increased salaries are essential for attracting and retaining teachers in high-need areas in schools where the working conditions are challenging. According to Hanushek, Kain, and Rivkin (2003), many schools considered hard-to-staff "…have more disciplinary problems, rigid bureaucracies, poor leadership, high student turnover, and general safety concerns…" (p. 41). Because of these challenges, improved compensation is essential for ensuring that all students have highly-qualified teachers. Based on research conducted by Darling-Hammond (1999), "…the percentage of teachers with full certification and a major in the field is a more powerful predictor of student achievement…the effects of well-prepared teachers on student achievement can be stronger than the influences of student background factors, such as poverty, language background, and minority status" (pp. 38-39).

Teachers in other high-need areas and principals appeared to be in agreement on some aspects of varied compensation. This outcome was especially applicable regarding substantial salary increases and other incentives. However, there appeared to be some disagreement between these two groups regarding increased salaries and small-sustained salary increases for teachers in high-need areas. Most principals were in favor of increased compensation for teachers in high-need areas. However, teachers in other high-need areas were not in favor of increased compensation for teachers in high-need areas. Approximately half of these teachers seemed to think that small increases would attract and retain teachers in high-need areas to work

in hard-to-staff schools. Principals expressed the observation that small salary increases would probably not work as well as large salary increases. According to research conducted by Carroll, Reichardt, Guarino, & Mejia (2000), "Teachers tend to transfer out of schools with high proportions of students from poor families and into schools with relatively low proportions of poor students" (p. 76). Hanushek, Kain, and Rivkin (2003) suggested that increased pay could increase the number of teachers that are retained in such schools.

Teachers not teaching in high-need areas and principals had mixed perceptions regarding salaries and other incentives for attracting and retaining teachers in high-need areas to work in hard-to-staff schools. Teachers not teaching in high-need areas did not agree with paying increased salaries to teachers in high-need areas; likewise, these same teachers also did not agree with using other forms of compensation in lieu of increased salaries. The data revealed that these teachers did not believe that teachers in high-need areas should earn any form of increased compensation.

In comparison to these teachers, it was evident that the majority of principals agreed that increased salaries would be an effective way to attract and retain teachers. In research conducted by Farkas, Johnson, and Foleno (2000), 94% of school administrators agreed that increasing teacher salaries would be an effective way to improve teacher quality. However, the data in this study revealed that principals may favor providing other incentives rather than increased salaries when trying to recruit and retain teachers in high-need areas. In either case, the principals appeared to understand the importance of improved compensation to attract and retain teachers in high-need areas, but they also seemed to understand the need for caution when implementing such pay plans. According to Yarbrough (2005), compensation plans that are not implemented appropriately cultivate an atmosphere of resentment among some teachers.

The findings of this study support the idea that varying compensation is a topic of importance among teachers and administrators. However, compensation policies must be addressed in an effort to ensure that all students have access to highly-qualified teachers. According to Goldhaber (2006), improved compensation policies can be effective options for schools seeking to attract and retain highly-qualified teachers. He went on to say "…research shows that teachers are responsive to monetary incentives" (p. 1). However, little research has been conducted to identify the perceptions of teachers and principals regarding additional monetary incentives paid to teachers in high-need areas.

> School systems wishing to implement pay reforms have shockingly little research that can be used to support the notion that such reforms would elicit beneficial behavioral responses from teachers. And in the absence of any empirical guidance, it is hard to make a strong case for a change that is bound to cause turbulence. (p. 24)

When considering professional relationships between teachers regarding the implementation of variable compensation based on certification/college major, the majority of teachers in all areas and the majority of principals were in agreement concerning professional relationships. The findings show that 61% (51) of the math and science teachers, 66% (66) of the teachers in other high-need areas, 85% (105) of the teachers not in high-need areas, and 86% (25) of the principals agreed that professional relationships would be damaged if school districts implemented variable compensation based on certification and/or college major. Although principals agreed that increased compensation would attract and retain teachers in high-need areas to work in hard-to-staff schools, 66% (19) of the principals surveyed would not favor working in districts that varied compensation.

Although providing increased compensation to teachers in high-need areas can be controversial among teachers and principals, the researcher found, through phone interviews, that some schools in this study did provide incentives. One district provided a $2,000.00 signing bonus for teachers designated as teaching in high-need areas. Another school district provided a $1,500.00 signing bonus to math and science teachers, and one other district gave $1,000.00 in moving expenses and an additional $1,000.00 bonus to live in the district. All of these schools indicated that the bonuses were effective in attracting teachers in high-need areas, but there were still some problems with retention. Of the 22 districts in the study, only 1 district had adopted a salary schedule that varied compensation based on the area of certification. This district provided a $5,000.00 yearly stipend for teachers certified in math or science. The administration in this district indicated that difficulties attracting and retaining teachers in these areas were nonexistent.

Most educators understand that teachers choose teaching because they love children and remain in the profession because of school leadership and working conditions; they do not choose teaching necessarily for monetary reasons (Strauss, 2012). However, when schools that are considered hard-to-staff are added to the equation, monetary factors do play critical roles. Because of this situation, perceptions regarding increased pay for teachers in high needs areas are important for school leaders to understand.

Due to the existence of little empirical research conducted regarding the recruitment and retention of teachers in high-needs areas (Ingersoll, 2011), school leaders will need to approach modifying salary schedules with caution (Goldhaber, 2006). However, the advantages for recruiting and retaining highly-qualified teachers will be reflected in improved student performance (Barth & Nitta, 2008), which should outweigh any negatives created from possible conflicts between and among teachers. Some people may question salary modifications in today's economy. In the short term, the need may not be as great compared to previous years. But, in the long term, it is probable that supply will fall further below demand in the areas of teachers in math, science, and special education, and the debate will continue for compensating teachers in high-needs areas more to improve learning for all students.

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Lessons Learned from First-Year Teachers

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Abstract

An array of research and empirically supported strategies help first-year teachers in the classroom. This article provides an overview of the literature on difficulties experienced by first-year teachers followed by a description of the development of a program designed specifically for this population. Quantitative data to analyze the pretest and posttest regarding self-efficacy and qualitative data from in-depth interviews and journals are presented to identify key themes for supporting and assisting first-year teachers. Mentors of Meaning (MOM) is a proposed

program consisting of nine months of guidance specifically tailored for the needs of first-year teachers. Clinical applications and future research directions for assisting teachers in classroom pedagogy are discussed.

Introduction

First-year teachers have specific educational, social, and developmental needs, which are often not well-articulated or well-organized. If a teacher's ability is not identified and supported, the teacher may not continue to remain in the field. Although a plethora of research focused on first-year teachers shows evidence that first-year teacher candidates experience unique challenges, there is a lack of research about the nature and extent of difficulties they experience. This article provides an overview of the literature on difficulties experienced by first-year teachers followed by a description of the development of a program designed specifically for this population.

Vulnerabilities of First-Year Teachers

Evidence indicates that first-year teachers may be more vulnerable due to classroom management problems (Sokal, Smith, & Mowat, 2003) as well as to adjustment and pedagogical problems, particularly if first-year teachers have chosen to teach in urban or hard-to-place teaching positions (Hawley, 1990). Justice, Greiner, & Anderson (2003) identified issues as potential areas of problems for first-year teachers that include (a) a lack of support from parents, (b) an increase in financial demands, (c) a lack of support from school administration, and (d) a variety of social problems with students.

Research in the area of first-year teachers has focused on supporting teachers educationally, examining both the nature and quality of preparation and providing teachers with skills to enhance their abilities in the classroom (Keller, Brady, Duffy, Forgan, & Leach, 2008). Although first-year teachers have specific educational needs, which require identification and support within the certification program, first-year teachers also present particular challenges in terms of self-efficacy.

Responsibilities and Needs of Mentors

Mentors of first-year teachers may feel an increased burden of responsibility compared and contrasted with other mentors of teachers. When mentors are asked about support they need to provide teachers, mentors often report that mentors require assistance not only with meeting their first-year teachers' educational needs, but importantly, with understanding all aspects of mentoring.

Research about programs developed to address mentoring needs is limited. These programs have been largely focused on educational needs, have been brief and lacking in evaluation, or have simply presented a list of strategies for mentors to employ without any form of evaluation of the efficacy of such strategies. These outcomes occur despite mentors and administrators indicating that mentoring and educational services for mentors are identified as one of the key service areas required, as differentiated from standard services for mentors, with a particular focus on understanding self-efficacy and first year teachers. Research indicates that there is confusion as to the conceptions and roles of mentors (Koballa, Bradbury, Glynn, & Deaton, 2008).

Mentors of Meaning (MOM) Program

The Mentors of Meaning (MOM) program is a multi-level, preventively oriented, mentoring program. It aims to prevent serious teaching pedagogical problems in classroom teachers by enhancing the knowledge, skills, and confidence of mentors. MOM incorporates levels of intervention on a tiered continuum of strength, based on social learning principles aiming to promote the knowledge, skills, confidence, self-sufficiency, and resourcefulness of mentors; to enhance more nurturing, safe, and engaging environments for first year teachers; and to increase teachers social, emotional, and pedagogical competencies through mentoring with meaning. The distinguishing features of the proposed MOM program are sufficiency, flexible tailoring to identified risk and protective factors, varied delivery modalities, wide potential reach, and a multidisciplinary approach.

The Mentors of Meaning (MOM) program was specifically tailored for the mentors of first-year teachers. It was designed to address the issues raised by pilot data, as well as feedback from practitioners working with mentors of first-year teachers. Several factors drove the development of the MOM program for mentors of first-year teachers. Evidence with mentors and mentoring clearly points to the role of mentors in providing a safe, supportive environment for the first-year teachers' development and for implementing techniques in order to support their teaching. Mentors of first-year teachers report a range of specific concerns and issues that are unique to this population and which are not specifically targeted in traditional mentor training. Although research has documented the benefits of mentoring and mentors' needs, research also indicates that some school districts and school administrators are still not committed to ensuring all teachers receive high quality mentoring (Zientek, 2007).

Method

Participants

First-year teachers were recruited from a local area school district in the Southeastern United States and invited to participate in the study. Twenty-five percent of the district first-year teacher candidates chose to complete the pretest and posttest as well as to maintain an electronic journal for seven months during their first year of teaching. Participants were 76% female teachers and 24% male teachers with a mean age of 39 (SD= 9.85). Women were on average age 38 years. Male teachers were on average age 40. Of the study participants, 76% were Caucasian and 24% were African American. Baccalaureate degrees earned by the study participants included but were not limited to social work, business, communications, liberal arts, computer science, and English. All of participating first-year teachers obtained certification through an alternative certification program.

Measures

Each volunteer first-year teacher was interviewed and several themes emerged as areas of low self-efficacy from the teachers that included, but not be limited to, (a) assessment, (b) continuous improvement, and (c) improvement as it relates to mentors. In addition, participants were asked to complete a pre-test and posttest adapted from the Ohio State Teacher Efficacy Scale (OSTES) based on perceived efficacy for (a) instructional strategies, (b) classroom management, and (c) student engagement. As the first-year teachers received on-the-job training and support from their mentors, they were asked to keep journals recording their experiences and feelings for seven months while progressing through their first year of teaching.

After seven months of their first year of teaching, the teachers were asked to submit their journals on disks and to complete a post-test consisting of the same questions posed on the pre-test to determine any significant change in self-efficacy regarding instructional strategies, classroom management, and student engagement. The pretest-posttest results were quantitatively analyzed and the journal entries were qualitatively analyzed for any significant changes in self-efficacy regarding the themes. See Table 1 for the data collection timeline.

Table 1
Data Collection Timeline

Participant Recruitment	Early September
Individual Interviews	Late September
Pretest	Early October
Journaling	October-April
Posttest	April

Quantitative Data Results

Twenty-five percent of the first year program participants completed the pretest and posttest and also submitted electronic journals. See Table 2 for the pretest and posttest data review.

Table 2
Pre-test and Post-test Data Review

Group	Pretest	Posttest
Mean	3.096	4.292
SD	0.197	0.260
SEM	0.040	0.053
N	24	24

Note: N=25% of the district first year program participants

To analyze statistical significance of the teachers' growth, a paired *t*-test was performed to compare the means of the pre-test and the post-test. The two-tailed P value was less than 0.0001. The mean of group one minus group two equals -1.196 at the 95% confidence interval of the difference; from -1.246 to -1.145. Intermediate values used in the calculations included; t= 48.9393; df= 23; and the standard error of difference = 0.024. The results of this *t*-test showed the teachers' growth to be statistically significant. Hence, in the posttest, the teachers indicate a significant increase in teacher self-efficacy when compared to the pretest, providing support for the effectiveness of MOM program in increasing teacher self-efficacy.

Qualitative Data Results

First-year teacher maintained reflection journals regarding their first-year teaching

experiences for seven months. Electronic journals were prepared and submitted on disks to the researchers. Emergent themes from the journal entries revealed (a) assessment with the subthemes of feelings of inadequacies, the creation and use of rubrics, standardized testing, textbook tests, teacher-made tests, portfolios and other forms of alternative assessment, (b) continuous improvements with the subthemes of observation from mentors, learning from students, remaining current with scientifically based research, and staying inspired, and (c) mentors with the subthemes of seeking advice, gaining from mentors' experiences, and growing as a teacher. See Table 3 for emergent themes from the first-year teachers' journal entries.

Table 3
Journal Analyses

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Themes		
Assessment	Continuous Improvement	Mentors
Subthemes		
Inadequacies	Observation	Advice
Rubrics	Learning from Students	Experience
Standardizes Tests	Research	Growth
Textbook, Teacher Made	Inspiration	Preparation
Portfolio, Alternative		Feedback

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Journal Entries

All beginning teachers anticipate the first day of school. One such first-year teacher explains her experience in this way.

I can still vividly recall, August 1, at 8:16 AM when I faced my students for the first time as a teacher. As those 72 eyes looked at me expectantly, I clearly remember thinking "Oh, my gosh!" I am really a teacher and they expect me to teach them something. I need to go tell the administration that they have made a dreadful mistake. I don't know anything about British Literature! Then I took a deep breath and thought the following: "They don't know you feel this way. All they know is that you are the all-knowing teacher, so show them that they are correct and teach something" and that is precisely what I did.

Assessment, continuous improvement and improvement as it relates to mentors emerged as thematic with the first-year teachers who participated in this study. Journal entries revealed the lived experiences of the study participants for seven months from October to April in their first year of teaching.

Assessment

- First-year teachers struggle to define "assessment" in their own terms as depicted below by several first year teachers.

  Before, I felt that assessment was all about tests, and giving tests and making sure the students passed them. I have found now that assessments are so much more than that. At first glance you think that assessment is nothing more than checking to see if your kids know something.

  My assessments are a window into their lives and minds, and if I hurry through lesson to

lesson without exploring this information, I am leaving them without the skills that they need. And this huge obligation on my shoulders stresses me out big time!

Assessment is one of the hardest things for me to grasp as a new teacher. I understood the idea of modeling the lesson, going over the material, and then having a test. I did not understand the time frame that all of this entails. I also did not think about any type of pre-test assessment to determine whether or not my students were ready for the material.

- First-year teacher candidates feel inadequate regarding assessment.

  Assessment is one area where I am always seeking to improve and asking for advice from my peers and mentors. Despite being diligent about creating diverse and relevant assessments, I have come to realize that often the students in my classroom are not ready for the type of assessments that I give them. Over the course of the rest of this year my plan is to focus on observing student behavior, and especially performance in classroom activities, so that I can become a better judge of student readiness. As I become more and more experienced there will be less attention given to behavior management and disruptive behaviors, and hopefully my students will be engaged in the learning going on in the classroom so that I can focus more intently on their level of understanding.

- The construction and use of rubrics emerged as thematic with first year teachers learning about assessment for the first time.

  I have noticed that the time you spend [creating rubrics] on the front end, you save on the back end with having to explain your grading to the kids. With a good rubric nobody has question to how they got the grade they got.

  I have never heard of a rubric before this year and was a little afraid of using them. When I would ask my peers about them, I never got a lot of feedback. However, after creating a rubric for my class, I love them! I only need more TIME to create rubrics for the lessons being taught. I plan to learn more about rubrics and try to use them more in my assessments as I continue to grow with experience.

- First-year teachers noted standardized tests and the pressures of standardized tests, first and foremost, in their journal entries.

  The area I still feel a little unsure about is standardized tests, such as the upcoming [state standardized test]. I recently gave a practice test to a particular reading class and was really frustrated when majority of the class did not pass the test. I then went back and looked at last years' [standardized] scores for this class and from what I am able to determine the practice test reflected what they scored the previous year. What has concerned me and what I have questioned if they were passing the assessments given to them this year and I have taught the specific areas they were tested on in the practice test – why is there such a difference in scores? Does it reflect my teaching ability?

- Some first year teachers mentioned the use of textbook or teacher-made assessments in their journal entries.

  I am learning with experience that text book assessments are not always appropriate and I have started creating more tests of my own. I am also learning to omit certain questions or reword them from textbook exams to better determine if what was taught is learned. I can

see where experience and time is a factor in this area.

One huge factor in my assessment is actually watching and listening to my students. The one thing that I have learned about my students is that I have made a healthy environment for them to ask me questions. When I feel that I am getting asked the same questions by multiple students, I stop and re–teach the lesson and I make it a major point to revisit the next day.

- Portfolios, observation, and alternative assessments were assessment tools that were new to first year teachers. However, according to the teachers, these alternative assessment tools were useful in their first-year classrooms.

    The portfolio checklist was wonderful to learn about, because it was something very unfamiliar to me. Since learning the uses of a portfolio and implementing it in the classroom, it has given my students a better sense of responsibility. I think it works great to keep a collection of work from our themed units, and I will continue to use them and improve them in any way possible.

    One huge factor in my assessment is actually watching and listening to my students. The one thing that I have learned about my students is that I have made a healthy environment for them to ask me questions. When I feel that I am getting asked the same questions by multiple students, I stop and re–teach the lesson and I make it a major point to revisit the next day.

    I assess their facial expressions, their demeanor, their body language, their speech, even their appearance. I like checklists, portfolios, observations and questioning. I especially use observation.

- Mentors were noted as helpful by first year teachers for perfecting the art of assessment in the classroom as depicted by the following two teachers.

    Interestingly enough, during the time of our class meetings for [assessment], a co-teacher who has been assigned to two of my classes challenged my methods of assessment. Even though I defended what I'm doing, and admitted that I have a lot more to learn, this experience has made me take a closer look at how I assess my students. Questioning my own novice means of assessment, not to mention feeling vulnerable and a bit freaked-out at having someone in my room observing what I do on a daily basis, has been a rich experience for me. Within three years, I want to be "totally confident at my methods of assessment." Of course, I'd like that confidence sooner, but I know it must take experience, which I'm steadily acquiring.

    When it comes to creating assessments, I am willing to admit that I steal whenever I can. I'm looking for valid and reliable ways to test the students on the material we've covered. In terms of self-efficacy, I have to have the confidence to use my own stuff as well as properly using others' assessments to pull this off. I can align objectives, lesson instruction and assessments. I've done it before. I can do it again. Others have done it. Why can't I?

- Experience and maturity in creating assessments and making data-driven decisions became evident as first year teachers maintained reflection journals during seven months of their first years of teaching.

    Assessment was a hard thing for me to tackle, but now that I feel as if I have a better

handle on it, I think that it is benefiting my students as well.

I like assessing. I like to see growth happening.

I was overlooking the baggage that comes with each student. Students had and will always have other things going on besides instruction; many have learning disabilities that they are coping with, and some have troubled home lives that make focusing on school almost impossible. As I test now, I try to recognize that no test is "one-size-fits-all," an outlook that is inappropriate for dealing with the diversity within each classroom. And as I am learning more and more about my job as teacher, I am discovering that assessment is not the end goal of each lesson. My assessments must drive my instruction.

I am too new in this profession. However, I will say I am exhausted with trying to teach not only the writing, but to cover all the state standards in grammar, math and reading in less than the required time for the students to learn the skills. I do not understand why the state is testing skills in early February, when we still have so much time left in the year. I feel like I am training monkeys to do tricks, not teaching children. Are standards necessary? Yes, I believe they are. Should teachers understand the standards they are expected to teach/reach each year? Yes. Did my class show their best work on the recent 45-minute writing test? I do not think so. I think I had a few more squirrels and otters, than monkeys.

Continuous Improvement

- First-year teacher study participants mentioned being observed in several contexts. In this case, the teacher is referring to continuous improvement.

  Continuously improving is a constant thought process. Sometimes it's unconscious. I was observed by the principal and was amazed at the things she wrote down that I was doing that I wasn't even aware that I was doing. (It was all good stuff too)!

- The teachers feel that they learned many important concepts from their students. Several teachers indicated they felt they actually learned more from the students than they believe the students learned from them. One first year teacher felt that her students were her best resource.

  I feel that a teacher needs to strive to improve every year. That great lesson or curriculum can always become better. As humans, we have many faults. Like our students, we need to learn. The ironic thing is that most days I feel that I learn more than I could ever teach them. Each day I have learned a lesson in humanity, in kindness, in communication, in caring, in what it truly means to be a teacher.

  One thing that I never thought about as I entered this school year was how much I was going to learn. As this year has gone on, I feel that I have learned as much if not more than my students. I thought that I could go into a classroom and things would just fall into place, wrong. I have learned so much this year not only from other teachers and workshops, but from my students.

  A teacher never stops learning. Every minute of every day is an opportunity for a teacher to learn and to grow both professionally and personally. And while, learning communities, mentors, and in-services are the most common tools that a teacher utilizes to continually improve her practice, they are not the only ones nor are they the most important resource that a teacher has. The most important resource that a teacher has at her disposal to help her continually improve herself and her practice is her students. At least, that has been the

case and the truth for me.

- Goal setting, both short term and long term, as part of their training program was mentioned in several different contexts in the teachers' journals.

    Research is also a big part of my life. There is so much that I can learn and then in turn bring to the children that I teach. By increasing my knowledge base, I can increase the knowledge base of my students. My students love all the details and little known facts that I share with them about historical events and people. It enables them to really feel as though they know this great person. In bringing these life details, I can show my students how someone struggled with adversity, yet overcame the odds to be a great and successful person that we are still talking about today. Hopefully, I can inspire them to follow through on their goals and to reach their dreams as well.

Mentors

- Mentors, as such an important part of the first year teachers' journey, emerged as a thematic topic in several different contexts. Therefore, there is some crossover related to mentorship. Beginning teachers soon realize the value of peer relationships and mentors, especially when there is an effective mentor-teacher match.

    I have learned and accomplished so much this year that it has catapulted me into my planning for next year.

    The most important thing that I have taken from the [teacher program] training is that you will always need more training, experience, and the advice of your colleagues to be the most effective teacher you can be.

- First-year teachers acknowledge that much of their growth was the result of good mentoring. While most first-year teachers feel competent in their content areas, the wisdom of experience is something that first-year teachers respect in their mentors and look forward to obtaining themselves with practice.

    What has probably helped me the most is that I have a mentor to guide me along and assist me with I need help. I'm very fortunate that my mentor is the best teacher in my school and she has only been teaching for four years. She grew up with educators in her family and when I sit in her classroom to observe her teach you can really tell that she enjoys her job and is very knowledgeable about her subject matter and profession. I believe the most important thing that she has taught me is that you should listen to your students and you must always be prepared for a lesson. If you are not prepared your students can sense that and you will struggle teaching that lesson to them.

- Constructive feedback, especially related to an observation is something first-year teachers depend upon and value in their mentors.

    The many processes and procedures required of a new teacher should be discussed with the teacher both before and reviewed after the observation is done. Constructive feedback is critical to the success of the new teacher. The feedback allows the teacher to pinpoint critical elements of teaching.

Lessons Learned

The results of the research study indicated that, in general, first-year teachers found their first year of experience and their mentors to be helpful in increasing their self-efficacy. In particular, first-year teachers felt the range of strategies and the emphasis on specific feedback were primary advantages of the mentee-mentor relationship. In addition, the first-year teachers felt that the opportunity to discuss concerns and to share experiences with other teachers in a similar situation were key to success of the relationship as well as of the application of teaching strategies. The main concerns that first-year teachers listed were in relation to the amount of time it takes to cover subject area content as well as a lack of time to complete lesson planning and design assessments all while implementing classroom management strategies. State and district mandates regarding standards, benchmarks, and responsibility for student learning outcomes also were major concerns of the first-year teachers. First-year teachers felt like there was insufficient time devoted to cover the content and to tailor it to the special needs and interests of their students.

The response to the pretest-posttest, especially with an item by item analysis, indicated more clearly the specific elements that would need to be included in an intervention specifically tailored for first-year teachers and their mentors. Several themes were addressed by the existing program, such as instructional strategies, assessment, and student engagement. First-year teachers reported that they felt uncertain about how to assess their own classrooms, what strategies for student engagement were appropriate, and how they would need to adjust their teaching pedagogy accordingly. Additional themes also emerged from the first-year teachers' journals pointing to specific areas to be addressed by any mentor or intervention strategy. These themes included assessment, continuous improvement, and improvement as it related to mentorship as well as ways for first-year teachers to manage time and cope with the growing demands of the teaching field.

- Two first-year teachers reflect on their experiences at the end of their first years of teaching.
  The extra work for this profession is all worth it when a student is bursting with pride because they have conquered an unknown.

  It would've been easier to just "get by" for this year and then assess the situation over the summer and try again next year. However, the year was not wasted (for me or the students) because I was able to conquer battles before they were fought.

Implications for Future Research

Mentors of first-year teachers are faced with many of the same challenges that all mentors of teachers have to provide; however, mentors of first-year teachers have additional issues with which to contend. The results of this study provided some key insights into the development and tailoring of interventions for first-year teachers. The MOM program is a population-based mentoring strategy, which deserves to be evaluated extensively and then tailored individually to the needs of first-year teachers enrolled in specific teacher education programs. A randomized controlled trial of the program is needed to evaluate the efficacy of the program as an intervention and support for first-year teachers.

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