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The Impact Of Teachers Selected By The Star Teacher Interview Process On Student Achievement

Duncan F. Klussmann
Seton Hall University

THE IMPACT OF TEACHERS SELECTED BY THE STAR TEACHER INTERVIEW
PROCESS ON STUDENT ACHIEVEMENT

BY

DUNCAN F. KLUSSMANN

Dissertation Committee

Elaine Walker, Ph.D., Mentor
Gilbert Castro, Ph.D.
Dan Gutmore, Ed.D.
Soundaram Ramaswami, Ph.D.

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ABSTRACT

THE IMPACT OF TEACHERS SELECTED BY THE STAR TEACHER INTERVIEW
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The purpose of the study was to determine if teachers selected using The Star Teacher

Interview process have significantly higher student achievement than teachers selected

utilizing traditional (non-Haberman) interview methods. The Star Teacher Interview was

developed by Martin Haberman and consists of a series of fourteen research-based

questions assessing the beliefs of individuals on seven mid-range functions. Teachers

selected for the study represented fifteen urban elementary schools in a major

metropolitan area school district. The eligible population of the study consisted of 87

teachers of reading represented 1351 student scores and the 88 teachers of mathematics

represented 1378 student scores. The Haberman Star Teacher Interview did not indicate a

statistically significant main effect on reading or mathematics scores while applying

statistical control to the type of classroom. In addition, the Haberman Star Teacher

Interview did not yield a statistically significant interaction effect with teacher gender

while applying statistical control to the type of classroom taught. In contrast, the

Haberman Star Teacher Interview did indicate a statistically significant interaction effect

with teacher ethnicity and years of teaching experience on reading and mathematics

Texas Assessment of Academic Skills (TAAS) test scores while applying statistical

control to the type of classroom taught. However, further analysis indicated that the

significant effect was not consistent within categories of ethnicity or years of service.

Even though students taught by teachers selected by the Star Teacher Interview scored higher on the reading and mathematics portions of the TAAS test than their counterparts, the overriding finding was that student performance was not significantly dependent on the method of teacher selection. Likewise, the inconsistent information derived from studying interactions between the teacher hiring method and specific demographic factors is of limited value in drawing specific conclusions. Despite these outcomes, urban school systems should not be discouraged from using the Star Interview Process to hire teachers. It should be noted that the Star Interview Process offers benefits that go beyond quantifiable measures of student achievement and adhere to pedagogic principles related to how students learn.

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DEDICATION

To my wife, Marissa Colunga Klussmann, for her love, encouragement, and high expectations,

To my children, Cameron Foster Klussmann, William Henry Klussmann, and Caroline Elizabeth Klussmann, for their love and understanding, and

To my brother, Dugan Klussmann, for being there throughout my life and paving the path of success for me.

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CHAPTER I

Introduction

Successful teachers of urban students are special. They possess an array of skills

that enable them to nurture and influence the most impoverished and educationally

challenged students in the educational system. Over the past ten years, the accountability

movement has magnified the need for effective urban teachers. With the development of

state standards and standardized assessments, analytical measures to determine teacher

effectiveness have emerged. As a result, new measures of student performance and

teacher effectiveness have appeared (Fuhrman, 2003; Schacter, 2001; Solmon &

Podgursky, 2000; Thum, 2001). The current accountability systems report the passing

rates of all students and individual student groups on a battery of criterion-referenced

achievement tests as well as standardized, norm-referenced assessments. Performance

standards are set by state agencies and the results are published in local and regional

media. In many states, school report cards are developed and distributed to parents. This

wave of accountability combined with the challenges of the urban teaching environment

has intensified the need to identify successful urban teachers during the teacher selection

process.

For the students in urban schools, the ability of the educational system to meet

their needs is crucial. As Haberman (1995b) states, "For the children and youth in

poverty from diverse backgrounds who attend urban schools, having effective teachers is

a matter of life or death" (p. 1). The effectiveness of urban teachers goes far beyond the skills of the ordinary teacher. Teachers of urban students must develop an appreciation for the cultural and social diversity of the students and community in which they work that often differs from their own experience (Anyon, 1997). In addition, urban teachers must possess skills such as persistence, commitment, and individuality to a much greater degree than teachers of non-urban students (Haberman, 1995b). These skills are required because urban teachers work with students confronted with much greater challenges to learning than suburban and rural students. In 1996, the National Center for Educational Statistics issued a report documenting the challenges of urban students. The report noted that urban students were twice as likely to live in poverty as their non-urban counterpoints (Lippman, Burns, & McArthur, 1996). At the same time, urban teachers must possess the same knowledge of subject matter and effective teaching skills such as communication and classroom management. Researchers have found teacher effectiveness to have a greater impact on student learning than factors such as classroom size and student economic status (Sanders & Horn, 1998). As a result, educational administrators need every tool available to help them identify and secure effective urban teachers.

The identification of effective urban teachers in the teacher selection process is a major challenge in urban school systems today. In a survey conducted by United States Department of Education, administrators in urban schools indicated a greater degree of difficulty in identifying, attracting, and retaining teachers than administrators in non-urban settings (Lippman et al., 1996). The recruitment task is compounded by a critical teacher shortage that affects all school systems (Ingersoll, 2001a). Furthermore, the

especially the nation's most vulnerable children – if school districts continue to

hire teachers who are unprepared and to assign many teachers outside of their

field of expertise (p. 3).

Several instruments have been developed to help educational administrators identify

potentially effective teachers for the urban setting. One instrument in particular, The Star

Teacher Interview, developed by Martin Haberman appears to meet this need. The basic

premise being that if you select teachers who have the aptitude to be more successful in

urban classrooms, they will remain in their teaching position for a greater length of time

and with less turnover (Haberman, 1995a). However, in the current climate of

accountability, student performance must be a factor in determining the effectiveness of

urban teachers. As a result of the lack of information connecting the methods of

identifying successful urban teachers based on actual student performance with The Star

Teacher Interview, this study intends to focus on the outcomes of students in the

classrooms of teachers who were selected using the Haberman instrument.

For urban school systems to identify potentially effective urban teachers, they

should examine the traditional hiring methods used in selecting classroom teachers and

consider non-traditional methods of selecting urban teachers. School systems that utilize

traditional hiring methods rely on techniques such as self-developed structured and

unstructured interviews. In a self-developed structured interview, the interviewer follows

a set of questions developed to ask each candidate. The questions are usually developed

at a local level without any measures of reliability or validity (Watrobka, 2003). In this

situation, each candidate is afforded the same opportunity to address the same set of

questions. In an unstructured interview, the interviewer develops the questions for the

candidate as the interview is taking place. In this setting, the questions are tailored to each potential teacher. In an unstructured interview, the interviewer's reliance on first impressions and the tendency to make decisions based the behavior of the interviewee leads to greater error in judgment (U.S. Merit Systems Protection Board, 2003). The Haberman Star Teacher Interview process provides a clear contrast to these traditional methods. A series of fourteen research-based questions developed by Martin Haberman are asked of each candidate. Once the candidate has completed their initial response, the interviewer probes for clarity and consistency. Once the candidate has fully developed their response, the interviewer scores each candidate responses on a matrix. The score ranges from zero to three. Zero being the least preferred response to three being the most preferred response. No baseline total score is used to determine whether a candidate passes or fails the interview; however, any candidate receiving a zero on any one of the fourteen questions would not be a preferred candidate for urban teaching.

The study compared the performance of students in classrooms of teachers selected with the Haberman instrument compared to the performance of students in the classrooms of teacher selected utilizing traditional methods.

Purpose of the Study

The purpose of the study was to determine if teachers selected using The Star Teacher Interview process have significantly higher student achievement than teachers selected utilizing traditional (non-Haberman) interview methods.

Research Questions

Research Question 1: Do students taught in a regular classroom score higher on the reading portion of the Texas Assessment of Academic Skills (TAAS) test than

students taught in a bilingual classroom?

Research Question 2: Do students taught by teachers selected utilizing The Star Teacher Interview process score higher on the reading portion of the Texas Assessment of Academic Skills (TAAS) test than students taught by teachers selected through the use of traditional (non-Haberman) methods while applying statistical control to the type of classroom taught?

Research Question 3: Does a significant interaction occur between the scores on the reading portion of the TAAS test of students taught by teachers selected using the Star Teacher Interview process and teacher demographic factors such as gender, ethnicity, and years of experience while statistically controlling for the type of classroom taught?

Research Question 4: Do students taught in a regular classroom score higher on the mathematics portion of the Texas Assessment of Academic Skills (TAAS) test than students taught in a bilingual classroom?

Research Question 5: Do students taught by teachers selected utilizing The Star Teacher Interview process score higher on the mathematics portion of the TAAS test than students taught by teachers selected through the use of traditional (non-Haberman) methods while applying statistical control to the type of classroom taught?

Research Question 6: Does a significant interaction occur between the scores on the mathematics portion of the TAAS test of students taught by teachers selected using the Star Teacher Interview process and teacher demographic factors such as gender, ethnicity, and years of experience while statistically controlling for the type of classroom taught?

Null Hypothesis

Null Hypothesis 1: No significant difference exists between the reading scores on the TAAS test of students taught in a regular classroom and students taught in a bilingual classroom (type of classroom taught).

Null Hypothesis 2: No significant difference exists between the reading scores on the TAAS test of students taught by teachers selected using The Star Teacher Interview and students taught by teachers selected using traditional (non-Haberman) interview techniques while applying statistical control to the type of classroom taught?

Null Hypothesis 3: No significant interaction exists between the teacher selection method and teacher gender on student scores on the reading portion of the TAAS test while applying statistical control to the type of classroom taught.

Null Hypothesis 4: No significant interaction exists between the teacher selection method and teacher ethnicity on student scores on the reading portion of the TAAS test while applying statistical control to the type of classroom taught.

Null Hypothesis 5: No significant interaction exists between the teacher selection method and teacher experience on student scores on the reading portion of the TAAS test while applying statistical control to the type of classroom taught.

Null Hypothesis 6: No significant difference exists between the mathematics scores on the TAAS test of students taught in a regular classroom and students taught in a bilingual classroom (type of classroom taught).

Null Hypothesis 7: No significant difference exists between the mathematics scores on the TAAS test of students taught by teachers selected using The Star Teacher

Interview and students taught by teachers selected using traditional (non-Haberman) interview techniques while applying statistical control to the type of classroom taught?

Null Hypothesis 8: No significant interaction exists between the teacher selection method and teacher gender on student scores on the mathematics portion of the TAAS test while applying statistical control to the type of classroom taught.

Null Hypothesis 9: No significant interaction exists between the teacher selection method and teacher ethnicity on student scores on the mathematics portion of the TAAS test while applying statistical control to the type of classroom taught.

Null Hypothesis 10: No significant interaction exists between the teacher selection method and teacher experience on student scores on the mathematics portion of the TAAS test while applying statistical control to the type of classroom taught.

Delimitations

The following delimitations may have some affect on the outcome of the study:

1. The study will be limited to studying the student performance in grades 3-5.

2. The study will be limited to the performance of students in a major metropolitan area school district in the Southwest.

3. The study will be limited to teachers meeting the study criteria.

4. The study is limited to examining the effects of a particular teacher on a group of students. The study is not examining the many factors that influence teacher effectiveness such as school climate, credentials, or school leadership. The study is factoring out the effect of the type of classroom taught on overall student performance.

Limitations

The following limitation exists:

1. Student performance will be gauged utilizing the Texas Assessment of Academic Skills test administered during the 2001-02 school year.

2. The study does not account for individual student learning differences.

3. The study does not analyze the many aspects of teacher effectiveness such as school leadership, available resources, or school organizational structure.

4. The study assumes that all teachers selected using the Star Teacher Interview received a passing score on the instrument. Therefore, the study assumes that no teacher hired using the instrument was classified as a "Failure".

Importance of the Study

The school district studied is a major metropolitan area urban school district in the Southwest. The district serves roughly 33,000 students from very diverse economic backgrounds. Fifty-one percent of the students participate on the federal free and reduce lunch program. Over the past five years, the district has spent considerable financial resources and time promoting the use of Martin Haberman's Star Teacher Interview process. Much of the focus has been on improving teacher effectiveness without any real parameters developed to gauge whether or not the use of the instrument has a positive effect on student outcomes. The results of this study will provide beneficial information to the school district studied in developing future plans for teacher selection. In addition, the Star Teacher Interview is used by several large urban schools systems. As a result, the outcome of this study will provide educational administrators nationally concrete information on the effectiveness of the Haberman Star Teacher Interview process in selecting urban teachers that have the potential to produce high student achievement. The findings in this study combined with the current research on teacher retention as a result

of using The Star Teacher Interview process will afford the practitioner a predictive

interview instrument that can be used in the teacher selection process.

Definition of Terms

Bilingual Classroom – an assigned group of students that require bilingual instruction.

Classroom teacher – a staff member with the primary responsibilities to provide

instruction to an assigned group of students.

Elementary school – a school comprised of students from preschool and or kindergarten

aged to grade 5.

ESL/Regular Classroom – an assigned group of students who may or may not require

English As a Second Language instruction.

Public school – a school primarily governed by a locally elected political body and

receiving its funding from local or state taxation.

Texas Assessment of Academic Skills – a statewide criterion-referenced assessment

given in the State of Texas to students in grades 3-8, and 10. The test were first

administered during the 1990 school year and last administered during the 2002 school

year.

Texas Learning Index (TLI) – a measure of performance on the Texas Assessment of

Academic Skills (TAAS) test. Students must score a 70 or greater on the reading and

mathematics portion of the TAAS to pass.

Urban school - a public school located within a major metropolitan area consisting of a

student population that is at least 51% low income as determined by the federal free and

reduced lunch program.

The Star Teacher Interview – an interview instrument developed by Martin Haberman used to select teachers for urban school settings.

Traditional (non-Haberman) Interview Methods – methods including structured and unstructured interview questions developed at the local level. The study assumes that the interview methods are not consistent across school districts and include any technique that is developed at the local level and not based on mainstream research.

CHAPTER II

Review of Related Literature

The literature review in this study focuses on the body of research on effective

teaching and the special skills of effective urban teachers. Building on the basic premise

of the study, urban teachers require a set of skills that teachers of non-urban students do

not have to possess to be successful. They need these skills in addition to the attributes

the study will identify as those of effective teachers. In addition, the review will include a

discussion of the use of student achievement as a measure of teacher effectiveness and a

more in-depth description of the Haberman Star Teacher Interview process. The review

will begin with a discussion of the challenges of urban teaching.

The Challenges of the Urban Teaching Environment

The urban environment produces challenges not present in non-urban settings.

Student characteristics of urban students differ greatly from students in suburban

locations. In 1990, students in urban areas were twice as likely to live in poverty as their

suburban counterparts (30 percent compared to 13 percent). In addition, a higher

proportion of the students in urban areas qualified for free and reduced lunch. As a result,

urban students were more likely to attend a school with a high concentration of students

in poverty that historically have produced lower student achievement (Lippman et al.,

1996).

The National Center for Education Statistics (Lippman et al., 1996) found other significant factors of urban students when compared to non-urban students. Not only were a greater number of urban students in poverty and attending high poverty schools, but urban students were more likely to be exposed to safety and health hazardous without the benefit of medical care. In addition, urban students were more likely to participate in risky behaviors. The study also discovered a greater concentration of students who had difficulty speaking English due to an increase in the number of Hispanic youth in urban areas.

Relevant to the location of this study, Murdock (2004) reports three major demographic trends affecting the future of urban education in the State of Texas. First of all, his demographic analysis points to a change in the rates and sources of the population growth. His findings indicate double-digit increases in the percent change in population from 1990 to 2000 in the major urban areas of Texas. Secondly, he predicts an increase in the non-Anglo population. In the past ten years, the percent change of the Hispanic population in Texas has increased five-times that of the Anglo population. Finally, Murdock emphasizes the aging of the population. Combining these three factors, Murdock asserts that if we do not insure a quality education for our urban population, we will see a decline in the quality of life across Texas in the next twenty years.

Not only do the characteristics of the lives of students pose a challenge in an urban environment, but the quality of the teaching force contributes to the difficulty educating youth in urban settings (Claycomb, 2000). The National Commission on Teaching and America's Future (1997) found that the least qualified teachers were more likely to be found in high-poverty schools. This finding was also supported by the 1993-

94 Schools and Staffing Survey conducted by the National Center for Education Statistics (NCES) indicating that low-income students are least likely to receive instruction from a qualified teacher (Recruiting New Teachers, Inc., 2000).

Imazeki (2002) found the teacher shortage in urban areas to be disproportionate to the shortage of teachers in non-urban settings. Her study focused on the attrition and mobility of teachers as a reason for the current shortage. The National Teacher Recruitment Clearinghouse (1999) established that the shortage of teachers in urban areas was greater in subjects in most need of improved student performance. In the report, *The Urban Teacher Challenge*, the largest urban school districts reported teacher needs in science (98 percent) and in mathematics (95 percent). High percentages were also reported in special education (98 percent), bilingual education (73 percent), and English as a Second Language (68 percent).

The quality of the teacher preparation process is central to the challenges of the urban teaching environment. Urban schools struggle to provide adequately prepared and certified teachers compared to suburban settings (Roth & Swail, 2000). In addition, Hirsch, Koppich, and Knapp (2000) assert that state policy makers recognize the deficiencies of teacher preparation programs. This lack of preparation is intensified in urban settings. Few prospective teachers receive focused instruction in the challenges of teaching in urban settings or the characteristics of urban youth and only five (5) percent of teacher educators have ever practiced in an urban school (Dandy, 2000).

Another challenge of the urban teaching environment is the lack of quality working conditions. Quality working conditions are essential to quality teaching (Education Commission of the States, 2000; Hirsch et al, 2000). Teachers in urban

schools not only confront the educational challenges of their students, but the challenges of their surroundings. Baker and Smith (as cited in NCES, 2001) identified that poor working conditions attributed to the high turnover rate among new teachers. Lynch (2000) reported numerous challenges facing urban teaching environments that affect teacher working conditions including crowded classrooms, aging infrastructure, poor resources, and poor student attendance. Darling-Hammond (2000b) found that affluent school districts have an abundance of well-qualified applicants while urban schools hire individuals ill-prepared to teach urban students who are willing to accept unequal salaries and poor working conditions.

It is evident that the challenges facing urban teachers are great. In many cases, teachers entering urban classrooms have not been exposed to the societal atmosphere surrounding urban schools and the working conditions inside them. Even though these candidates may have come through a traditional teacher preparation program, the success of these programs in preparing prospective teacher to work in urban school is questionable.

A Comparison of the Skills and Characteristics of Effective Teachers and

The Special Skills of Effective Teachers of Urban Students

The accountability movement has greatly changed how we look at education. In the past, much of the emphasis was on content and its appropriateness for students. Today, the focus is on what and how much students learn. To determine how much students learn, standardize test have become very important. States, school districts, schools, and now the national government use standardize test data to decide the effectiveness of schools and classrooms. In some school districts, data are available on

each individual teacher indicating the success of their students. As a result, teacher effectiveness is often gauged by student success on standardized tests. However, for students to be successful on outcome-based assessments, teachers must possess an array of skills and methodologies.

This review analyzed the work of six researchers studying the skills and characteristics of effective teachers (Table 1). Four of the studies focused on teachers without regard to location and two of the studies investigated the skills and traits of teachers in the urban setting. The comparison allowed the researcher to identify those skills and characteristics that were useful in the urban environment. The analysis categorized the skills and characteristics into five areas; knowledge of subject matter, instructional strategies, classroom management, learning atmosphere, and personal characteristics.

Knowledge of Content

Teacher knowledge of subject matter is a key factor in student learning (Wenglinsky, 2000). Shulman (1987) describes a teaching model that is based on teacher knowledge. In his model, the teacher possesses an appropriate level of content knowledge and is able to identify the materials and programs required to develop curriculum knowledge. In addition, the teacher must have a broad pedagogical knowledge in classroom strategies and content matter. Finally, the teacher must demonstrate knowledge of individual learners, different educational settings, and outcomes.

A study conducted in the Dallas Independent School District identified four common traits of effective elementary mathematics teachers (Mendro, Jordan,

Gomez, Bembry, & Anderson, 1998). First of all, effective teachers exhibited a high

degree of content knowledge with the ability to present the content in an in-depth

Table 1

Comparison of Teacher Skills and Characteristics

Skill or Characteristic	Brophy	Shulman	Mendro	Haberman	Bain	Taylor
Knowledge of Content						
Teacher Knowledge		X				
Content Knowledge			X			
Instructional Strategies						
Time on Task	X			X		X
Multiple Strategies	X	X			X	
Coherent Content	X			X	X	X
At-Risk Strategies				X		X
Questioning Skills	X					X
Assessment	X		X		X	X
Classroom Management						
Clear Expectations	X			X	X	X
Established Routines					X	
Co-operative Climate	X					X
Incentives					X	
Learning Atmosphere						
Supportive	X			X		X
Respect and Care				X		
Interpersonal Skills	X			X	X	X
Personal Traits						
Persistence				X		
Recognize Burnout				X		
Fallibility				X		

Brophy (1999), Shulman (1987), Mendro et al (1998), Haberman (1995b), Bain, Lintz, & Word (1989), and Taylor, Pressley, & Pearson (2002)

manner. Secondly, they emphasized higher-ordered thinking skills and concepts while

ensuring complete coverage of the curriculum. Third, the top teachers continuously

assessed student knowledge using multiple testing methods. Finally, effective teachers moved students beyond the core curriculum to expose them to greater knowledge.

Instructional Strategies

The instructional strategies category reviewed in the studies produced the greatest number of skills and characteristics. Six skills or characteristics were identified. First of all, time on task ensures that student learning is focused and well allocated to meet the educational needs of the classroom. Taylor, Pressley, and Pearson's (2002) review of recent studies on teacher effectiveness finds time on task an important aspect of effective teaching in regards to elementary reading. Brophy (1999) promotes a student's "opportunity to learn" (p. 10). In his assessment, this principle ranges from the length and time of the school day to the allocation of time in the classroom for activities. The school day is arranged to compliment the curriculum and its goals. Time allocation and arrangement play a large part in school and teacher effectiveness. As a result, teachers strong in this principle, allocate time based on instructional goals. In addition, effective teachers view classroom management as a process to improve instruction and not as a process to improve classroom discipline. They communicate purpose, plan well, monitor students and interact with students for a majority of their time. Rowan, Correnti, and Miller (2002) found the time allocated to a particular subject matter was not as important as how the time was used by the teacher. In the bureaucratic atmosphere of urban schools, effective teachers protect student learning even if it means promoting ideas that are counter to school norms or rules (Haberman, 1995b).

Secondly, effective teachers use a variety of instructional strategies (Wenglinsky, 2000). The strategies include small and large group instruction and individual attention

based on student need. In addition, effective teachers vary the manner in which they

present the lesson. Any one lesson may include a combination of direct instruction, group

work, and discussions. Brophy (1999) describes this skill as "strategy teaching" (p. 25).

He concludes that effective teachers use a variety of instructional strategies to teach

students. They view strategies as a learning process, not just a methodology. Instruction

in an effective classroom includes what, how, when and why to use a skill. Quality

teachers model these strategies for their students. Effective teachers vary student

activities and assignments. They present the activities with clarity and monitor to ensure

student success. In addition, effective teachers provide time for quality feedback.

Students feel a sense of security enabling them to be productive. Reflective activities

emphasize feedback on the quality of the assignment as well as student performance.

Shulman (1987) contends that effective teachers possess a broad array of

educational knowledge. They understand human development and the learning process of

students. The understanding of educational knowledge and the ability to use multiple

teaching strategies is essential with at-risk students. Bain, Lintz, and Word (1989) found

that effective teachers reteach students who struggled with new concepts and use a

variety of instructional techniques to assist students.

Another instructional strategy used by effective teachers is their ability to provide

a coherent content (Brophy, 1999). Large groups and interpersonal conversations are very

important in insuring a high level of student achievement. Effective teachers are effective

communicators. They clearly state instructional goals, content, and student outcomes

(Taylor et al., 2002). As Brophy states, they "organize and sequence content in a way that

maximizes its clarity and coherence" (p.17). Effective teachers are very comfortable with

establishing classroom routines and structure. Through process education, effective teachers use constructivist methods to assist students in their own learning. Effective teachers create constructive classrooms and explain the reasons for what they do. As Haberman (1995b) states, " This ability of stars to move from action to thought and back to action means that stars continue to grow throughout their careers" (p. 43). In a study of forty-nine effective teachers, Bain et al. (1989) found an individual's ability to present clear and focus instruction a significant factor in teaching. A teacher's ability to be clear and focused ranged from the development of quality lesson plans to providing clear written and verbal directions.

Once a student grasps the essential knowledge of a concept, effective teachers provide them time to practice and apply their learning. Brophy (1999) indicates that "skills practiced to a peak of smoothness and automaticity tends to be retained indefinitely" (p. 21). Effective teachers plan group and independent work that allows students to refine and store knowledge. They are skilled at selecting content that needs to be practiced to be retained and that can be learned with very little practice. If homework is used for practice and application, the length is appropriate and its content based on skills the student has acquired. To fully develop a concept, meaningful feedback is provided to students continuously.

A fourth skill of effective teachers is their ability to utilize strategies supportive of at-risk students. This is particularly important in urban setting since a larger proportion of at-risk students attend urban schools as opposed to non-urban settings (Lippman et al., 1996). Taylor's et al. (2002) review of recent studies indicates that effective teachers respect individual differences and differentiate instruction based on student need. "Star"

teachers view at-risk students as a healthy challenge. They recognize student potential and work diligently to help students realize their potential. According to Haberman (1995b), effective teachers establish a caring, respectful, and trusting relationship with their students.

This belief is supported by research conducted by Collinson, Killeavy, and Stephenson (1998). This qualitative study focused on twelve exemplary secondary teachers representing the countries of England, Ireland, and the United States. The study indicated that strong teacher-student relationships that are based on a high level of respect are highly conducive to learning.

Exposure to a caring teacher is the right of all students. In a Report of the National Commission on Teaching and America's Future (1996), an emphasis is placed on the need for a teaching core that places a high priority on caring relationships. The need for caring relationships is supported by the knowledge that urban students experience a higher degree of stress than suburban students and at the same time receives less social support (Wenz-Gross & Parker, 1999).

Payne (1995) provides some helpful insight in assisting students of poverty. Many of the teachers in today's classroom have never experienced poverty themselves. To help them develop an understanding, Payne begins with ten key points.

1. Poverty is relative.

2. Poverty occurs in all races and in all countries.

3. Economic class is a continuous line, not a clear-cut distinction.

4. Generational poverty and situational poverty are different.

5. Her work is based on patterns. All patterns have exceptions.

6. An individual brings with him or her hidden rules of the class in which he or she was raised.

7. For students to be successful, we must understand their hidden rules and teach them the rules that will make them successful at school and at work

8. Schools and businesses operate from middle class norms.

9. We can neither excuse them nor scold them for not knowing; as educators we must teach them and provide support, insistence and expectations.

10. To move from poverty to middle class or middle class to wealth, an individual must give up relationships for achievement.

These ten key points provide a basis for her research in how to work with individuals from poverty.

For a person from a background of poverty, the struggle to learn can occur on many fronts. Most people view poverty from only the financial realm (Payne, 1995). A person is in poverty if they do not have sufficient resources to function in society based on certain social norms. Payne defines poverty by focusing on the several resources. She indicates that a person can be in poverty as the result of a spiritual absence or because of a lack of education. In her eyes, it is not purely financial.

In contrast, the American dream is based on the belief that if one works hard enough that he or she can move out of the realm of poverty. This is viewed purely from the financial sense. Financial resources are very important; however, the acquisition of other resources will determine if one moves out of poverty. In today's schools, poverty is identified solely from a financial point of view.

Another instructional strategy skill identified in the review of the six studies is a teacher's capability to effectively question students. Brophy (1999) feels that the research is clear, effective teachers use thoughtful questions to stimulate student learning. However, he contends that questions are neither planned nor utilized in many of today's classroom instruction. Most questions asked of students by teachers are from a low level of understanding. Very seldom do the questions generate higher order applications. Effective teachers take questions to the next level. They use them to generate student interest in and depth of the curriculum. This interaction is best accomplished in the early stages of a lesson. Once individual mastery of content is reached, independent student work or group work is used to fully develop the concept. During this stage of the lesson, questioning is planned and used to monitor student progress.

The type of questioning a teacher uses can indicate the type of teaching that takes place in the classroom. Authentic teaching is characterized by questions that the teacher necessarily does not know the answer to. The methods used to find the answer to the question becomes part of the learning process. In psychometric teaching, the teacher and possibility the student already know the answer to the question. It is merely a check for understanding and determination of prior learning (Parkay & Hass, 2000).

The final instructional strategy skill compared in the studies is a teacher's use of assessments. Effective teachers view assessments as an integral part of the instructional program (Brophy, 1999). They utilize assessments for monitoring student progress and for curriculum adjustments. Quality teachers are comfortable using formal and informal assessment instruments. They have adapted to the wave of standardized criterion and norm-referenced testing and have learned to use it to their advantage. When the

assessments are well developed and directly aligned to standards, effective teachers are able to use the testing data to make quality instructional decisions. Mendro's et al. (1998) study in the Dallas Independent School District found that top performing teachers continuously assessed the achievement of their students. The studies of Bain et al. (1989) and Taylor et al. (2002) reported that effective teachers monitor student progress on a regular basis and provide quality feedback based on consistent assessments.

Classroom Management

Four classroom management skills or characteristics that were consistent across several of the studies were identified. The first skill is the teacher's ability to establish and communicate clear expectations. Teachers with high degrees of student success hold positive and realistic expectations for their students. In addition, they clearly communicate the expectations set for their students. As Brophy (1999) explains, effective teachers set expectations as floors, not ceiling. This provides clear minimum expectations that all students must meet. Secondly, effective teachers establish consistent classroom routines. In as study of forty-nine effective teachers, 94% received an excellent rating on their use of classroom routines to promote learning (Bain et al., 1989). It was clear that students knew what was expected of them and were familiar with the routines of the classroom.

Another trait of successful classroom management teacher is the establishment and support of a co-operative climate. Brophy (1999) contends that to mirror the current world of work, students must be able to work collaborative in groups. Today's work environment requires a high degree of teamwork. Research indicates that students show an increase interest in subject matter that is constructed in group settings. Effective

teachers combine whole-class instruction with co-operative learning. They model acceptable group interaction skills and provide instruction on how to be success in a group setting.

Over 15 years ago, co-operative learning became a major initiative in public school classrooms. The initiative brought about many changes in the way and manner in which teachers conducted their classrooms. However, the major benefit of the co-operative learning was an increase in group work that really did not teach co-operative work skills to students (Brophy, 1999). Similar to the movement of flexible grouping and centers in classrooms, the movement had its greatest effect in elementary schools. Today, there should be a renewed effort to teach co-operative learning as a process. This would ensure that students learn and acquire the skills needed to be successful in the work environment. Finally, one study of effective elementary teacher found classroom incentives assisted in fostering quality classroom management (Bain et al., 1989).

Learning Atmosphere

A comparison of the studies found the following aspects of effective teachers that promoted an effective learning atmosphere. First of all, the classrooms of effective teachers were supportive to the needs of student. Taylor et al. (2002) found the classrooms of effective teachers to be "warm, democratic, and cooperative" (p. 3). For effective teaching to occur, teachers make connections with their students (Haberman Educational Foundation, 2002b). Students need to feel safe to explore and learn content. Fear has a very detrimental affect on student learning; therefore, measures need to be taken in the classroom to decrease the amount of fear in students. One of the most effective ways to accomplish this is to model the values and beliefs one holds for his/her

students. This can be accomplished during all teacher and student interactions. In addition, effective teachers see mistakes as a natural part of the learning process and view them as opportunities to learn (Brophy, 1999).

Partnerships between the school, family, and community are essential in establishing a caring environment (Lezotte, 1997). It is unfortunate that in many cases, families do not understand schools and schools do not understand the families they work with (Fullan, 1997). For a caring atmosphere to develop, that understanding must be established. Much of the focus on parental involvement in the past ten years has focused on the number of volunteer hours a school can accumulate. The focus today must shift to developing true learning partnerships between the school and family. In many cases, the level of expectations is completely mismatched between the school and home.

Secondly, successful teachers have a sense of respect and care for their students. According to Haberman (1995b), teachers do not have to like every aspects of a student's behavior, but they must be able to maintain a level of respect for each student. Four of the studies found interpersonal skills to be essential in developing a significant level of rapport with students (Bain et al., 1989; Brophy, 1999; Haberman, 1995b; Taylor et al., 2002). These relationships promoted a sense of respect and caring among teachers and students.

Personal Traits

Haberman (1995b) identified four traits of "Star" urban teachers that were not mentioned by the other researchers. They are persistence, protection of learners, recognition of burnout, and a sense of fallibility. "Star" teachers are persistent. This persistence is evident in their ability to solve problems. Not just problems of curriculum

and learning, but of problems that affects ones existence in society, school, and the classroom. Their persistence is driven by their beliefs that children of poverty have potential. This drive enables them to confront many challenges that teachers of non-urban students do not face. Part of this persistence is the star teachers' ability to focus on student effort, not ability.

Wheatley (2002) found that persistence promotes effective teaching. Important to the urban setting, persistence assists in high teacher expectations for students over a sustained period of time and responsiveness to diversity. In urban schools, the accountability movement's emphasis on outcomes has resulted in repeated reform movements. Persistence has been found to promote successful use of reforms efforts targeting teaching methods.

Marso and Pigge (1996) conducted a longitudinal study on teacher persistence. The study followed five-hundred and fifty-one candidates from their commencement of a teacher preparation program through the first stages of classroom teaching. The researchers found that only 29 percent of the candidates were in full-time teaching roles after seven years. In addition, the study indicated that gender, major area of study, and the candidate's initial views about teaching were factors that influenced the teacher's persistence.

Another skill that "Star" teachers exhibit is the protection of learners and learning. This skill connects with Brophy's (1999) opportunity to learn. These teachers place learning and learners first in their decision-making. In the classroom, star teachers use current events and student interests and talents to motivate student learning. Educators have long known that relating to a student's interest is key to the learning process. In

1890, William James asserted that identifying and developing a student's interest was paramount in the learning process (Reis, Gentry, & Park, 1995). Teachers who identify with the interest of their students are able to move them to extraordinary levels of knowledge. The motivation of learning is key to this concept. Gruber (as cited in Reis et al., 1995) identified interest as a powerful motivator in student learning and accomplishments. The Star teacher possess the ability to identify and support the interest of his/her students

Effective urban teachers recognize the potential for teacher burnout. They realize that due to the bureaucratic nature of urban schools that high level of frustrations is present (Haberman Educational Foundation, 2002a). "Star" teachers establish supportive relationships with colleagues to counteract the frustrations. In addition, successful urban teachers understand the physical and emotional requirements of teaching. To meet these challenges, "Star" teachers develop close relationships with their stakeholders. These close relationships provide the energy and stamina required to teach urban students (Haberman, 1995b).

Finally, Haberman (1995b) identified that effective teachers are fallible. From an organizational standpoint, star teachers understand that they work in a bureaucratic environment that can cause extreme frustration. This underlying belief allows "Star" teachers to not overreact to issues that develop within the organization. From a personal standpoint, "Star" teachers admit to their mistakes. Not just minor mistakes, but mistakes that can materially alter the success of a child.

Student Achievement as a Measure of Teacher Effectiveness

The emergence of the accountability movement has provided additional means by which to determine teacher effectiveness. In the years before the accountability movement, most gauges of teacher effectiveness focused on teacher inputs such as levels of certification and experience. Even though these have proven to influence student outcomes (Darling-Hammond, 2000a), new measure that attempt to determine the relationship between effective teaching and student achievement have emerged. These new measures have created a body of research that has attempted to determine the relationship between student achievement and teacher effectiveness.

Bond, Smith, Baker, and Hattie (2000) reported a significant difference in the student scores of teachers certified by the National Board for Professional Teaching Standards and non-certified teachers. This study focused on thirty-one teachers who achieved National Board certification and thirty-four teachers who attempted certification and did not meet the criteria. The study determined that National Board certified teachers are, "producing students who differ in profound and important ways from those taught by less proficient teachers" (p. 118).

Stonge and Tuckers study (as cited in Stonge & Hindman, 2003) found the teacher to be the most influential factor in student achievement at the campus level. Recent research indicates that effective teaching over a period of years has a strong effect on student achievement. A study conducted by Wright, Horn, and Sanders (as cited in Stronge & Hindman, 2003) found that students exposed to highly effective teachers for a three year period scored significantly higher on the Tennessee mathematics assessment than students with ineffective teachers.

The level and concentration of poverty in urban schools establishes an environment that historically has produced poor student achievement. Darling-Hammond (2000a) found student characteristics such as poverty to be negatively correlated with student outcomes. In addition, she found a significant negative correlation between characteristics of urban students and the qualifications of teachers. In other words, the most disadvantaged students experience the most unprepared teachers. Her study also confirmed that the certification status of the teacher and a degree in the teaching field were very significantly correlated with higher student outcomes.

Many studies examining the link between teacher effectiveness and student achievement focus on teacher inputs such as certification, academic ability, or experience. In a study conducted by the Milken Family Foundation (2000) entitled, *How Teaching Matters: Bringing the Classroom Back into Discussions of Teacher Quality*, researchers examined the effect of classroom practices on student achievement. The study focused on classroom dynamics by analyzing data from the National Assessment of Educational Progress (NAEP). Combining the standardized assessments of the NAEP with responses to teacher questionnaires, the study found a positive relationship between teacher quality and student outcomes.

A study conducted in the Dallas Independent School District investigated the effects of teacher quality on student achievement (Mendro et al., 1998) The study measured student achievement as defined by an increase or decrease in score on the Iowa Test of Basic Skills (ITBS) over a five-year period. Students assigned to highly effective teachers showed a considerable increase in test scores over the period of time. In contrast,

students assigned to ineffective teachers over a three-year period of time showed a considerable decrease in their test scores.

The Star Teacher Interview Process

The Star Teacher Interview utilizes seven mid-range functions to assess candidates for urban teaching positions. Developed by Martin Haberman, Distinguished Professor at the University of Wisconsin, Milwaukee, the Star Teacher Interview attempts to assess a potential teacher's ability to be an effective teacher in an urban setting. Dr. Haberman's work began over forty-years ago with the original version of the Star Teacher Interview being administered in 1962. Over the years, the interview has progressed from the Urban Teacher Selection Interview to the Star Teacher Interview influenced by Dr. Haberman's belief that there are distinct differences in urban teachers who are "Stars" and those who are "Failures" (Haberman, 1995a). His characterization of teachers as "Stars" or "Failures" was formed preparing teachers for careers in urban schools.

The concept of using mid-range functions to predict future success of urban teachers was influence by the early work of Robert K. Merton (Haberman, 1995a). Haberman attempted to predict teacher success by identifying traits and behaviors placed on opposite extremes on a continuum (Table 2). Two extremes exist in this model. The far left extreme represents personality traits that a person would exhibit in any situation. The opposite extreme represents behaviors practiced in a particular situation. Merton argues that individuals who operated at either extreme are dysfunctional. The basic premise of the model asserts that it is not possible to predict how a person would respond to a particular situation based on his/her personality traits. Therefore, Merton suggested

developing mid-range functions or clusters of behaviors that an individual would

demonstrate to be effective.

From this research, Haberman (1995b) began to identify the mid-range functions

of successful urban teachers. His first group of subjects consisted of 124 student teachers

in New York City. First, he determined which teachers were "Stars" and those that were

"Failures". From the comparison of the extremes in these individuals, the first mid-range

Table 2

Basis for Predicting Teacher Success

Personality Traits		Situational Demands
(What are effective, constant teacher characteristics?)	Mid Range Functions	(What behaviors would be effective for all teachers in a given situation?)
(Haberman, 1995a)		

functions of urban teachers was developed. Since that first attempt, Haberman has

consistently refined the terminology and description of the seven mid-range functions.

(Table 3). A description of the current mid-range functions of the Star Teacher Interview

follows.

Table 3

Original and Current Terminology for Mid-Range Functions

Original	Current
Creativity, Problem Solving	Persistence
Human Relations Skills	Protecting Student's Learning
Planning	Application of Generalizations
Discipline	Approach to At-Risk Students
	Personal/Professional Orientation
Teaming	Burnout
Self-Analysis	Fallibility
(Haberman, 1995a)	

A discussion of the seven mid-range functions follows.

The first mid-range function is persistence. Persistence was originally described as creativity and problem solving. "Star" teachers were able to explore creative methods to solve problem that persist in urban schools. Current "Star" teachers define the problem at hand, evaluate the situation and generate options before deciding on a final decision. They constantly seek solutions to never ending problems that confront urban educators.

The second mid-range function is protecting the learning of students. Originally, this function was identified as human relations skills. However, early on, Haberman (1995b) realized that even "Failures" were able to get along with colleagues in certain situations and be liked by staff members. Over time, the function evolved into the protection of student's learning. "Stars" are motivated to do what ever it takes to protect the environment needed for student success. This is even true when it comes to challenging school rules or norms.

"Star" teachers demonstrate the third mid-range function by applying generalizations. In its simple sense, this function was originally named planning. However, the function today is much broader than just purely establishing a plan of action. "Stars" are able to take principles to practice. They possess strong follow-through skills focused around teaching and learning.

The fourth and fifth mid-range functions are associated with a "Star" teachers approach to at-risk students. Originally called discipline, these functions focused on a teacher's accountability for students whether they like or dislike the student in question. "Star" teachers do not blame the at-risk student for the situation the student is in, but feel accountable for each child's learning. In addition, "Star" teachers recognize that they may

not like each and every student, but personally and professionally accept the responsibility for each student's learning.

The sixth mid-range function was originally named teaming. Over time, it progressed to bureaucracy and finally to burnout. "Stars" are able to consistently deal with the bureaucracy of urban schools without becoming negative and cynical. They find ways to acquire resources needed in the classroom and navigate the components of the bureaucratic system.

The final mid-range function is fallibility. Originally described as self-analysis, this mid-range function points to a teacher ability to investigate his/her own behavior and accept that of others. They realize that everyone makes mistakes and that treat others with the same level of respect they themselves expect.

The Star Teacher Interview is administered by asking a series of fourteen research-based questions of each candidate. Once the candidate has completed their initial response, the interviewer probes for clarity and consistency. Once the candidate has fully developed their response, the interviewer scores each candidate responses on a matrix. The score ranges from zero to three. Zero being the least preferred response to three being the most preferred response. No baseline total score is used to determine whether a candidate passes or fails the interview; however, any candidate receiving a zero on any one of the fourteen questions would not be a preferred candidate for urban teaching.

Related Research on the Haberman Star Teacher Interview

The researcher identified several studies that discussed the work of Martin Haberman and the Star Teacher Interview process. Three of the studies focused on the

characteristics of effective urban teachers identified by Haberman. One study focused on the correlation between an individual teacher scores on the Star Teacher Interview and the degree of student achievement in each teacher's classroom.

Allington and Johnston (2000) reviewed and compared the features of seven studies focused on teacher effectiveness. One study reviewed was conducted by Martin Haberman (1995a) after 35 years of interviewing and observing urban teachers. Haberman identified fourteen characteristics of effective teachers. In addition to the characteristics already documented in this literature review, the following were presented.

1. Teaching Style – the ability to coach rather than direct.

2. Explanations of Success – focus on student effort versus ability.

3. Organizational Ability – displays planning and information gathering skills.

4. Emotional Stamina – persistence in potentially harsh environments.

5. Basis of Rapport – a focus on "us" instead of "me".

6. Readiness – expectations of student differences.

7. Physical Stamina – physical demands of teaching.

In summarizing their finding, the researchers identified several shortcomings of these studies. First of all, the researchers note that each study was organized in a different manner. In addition, none of the studies focused on the diversity of language in the today's classroom. Finally, the researchers felt that some of the beliefs presented in the studies were of minimal practical help.

The most comprehensive study attempting to link the Star Teacher Interview to student achievement was conducted by Williams (1999). The purpose of the study was to

test the predictive nature of the Star Teacher Interview to student achievement. The Star Teacher Interview was administered to thirty fourth-grade teachers in the Birmingham, Alabama school district. A designation of pass or fail was applied to each teacher. In addition, the teachers were asked to provide the following information: gender, age, years of teaching experience, and race. Student achievement data represented by the Stanford Achievement Test were collected from the school district for the teacher identified for the study. The data were analyzed utilizing independent T-Test and chi-square statistical techniques. The study found no statistically significant difference between the student scores of teachers identified as passing the Star teacher Interview and those who had failed the assessment. Also, the study found no association between the passing and failing of the Haberman instrument and the demographic data collected on the teachers.

Even though Williams (1999) study examined the relationship between the Star Teacher Instrument and student achievement, it was materially different from this study and in the judgment of this researcher flawed in its research design. The Williams' study administered the Star Teacher Interview to teachers already selected for a teaching position and at the time of the study, carrying out their duties as a teacher. First of all, the Star Teacher Interview process was developed to assist in identifying potential successful urban teachers during the teacher selection process. Secondly, the study never identified the urban nature of the schools used to select the teachers studied. The Williams' study provided a valuable body of research into the characteristics of urban teachers. However, this study builds on that body of research by determining the effect on student achievement of teachers selected using the Star Teacher Interview process.

Another study conducted by Ryan (1999) reviewed current literature on three

tools used by teacher education programs and school districts to assess potential teacher

candidates. The study compared the main components of the Star Teacher Interview, the

Teacher Perceiver, and the PRAXIS III Teacher Performance Assessment. The researcher

analyzed the main attributes of the three tools in comparison to the constructs of the

Myers Briggs Type Indicator on a matrix. The study found that all four instruments

identified a sense of efficacy, professionalism, student teacher relationship and school-

home collaboration as core functions of effective teachers.

A review of literature by Singer (1996) concluded that successful teachers assist

students in expanding their thought and intellect regardless of the social and racial

background of the teachers. He also asserts that few Anglo preservice teachers are trained

in urban settings during their preparation time in college. To form his conclusions, Singer

reviewed the works of Haberman, Cross, and Ladson-Billings.

In conclusion, the urban teaching environment possesses significant challenges to

student achievement not found in non-urban areas. The individuals who take on the

challenge of urban education must not only demonstrate the skills of effective teaching in

general, but have an array of skills that uniquely address the needs of urban youth. To

determine if teachers possess the skills needed to be successful in an urban setting;

federal, state, and local governments have developed accountability models that elevate

the significance of student test scores. The Star Teacher Interview attempts to identify

prospective candidates that possess the skills necessary to be effective in urban schools.

The Star Teacher Interview is a cost-effective method of departing from traditional

(non-Haberman) hiring methods to provide targeted assessment of a candidate's potential

success in urban teaching. The interview was developed by Martin Haberman in the

1960's and consistently improved to this day.

CHAPTER III

Methodology

Choice of Methods

The study primarily focused on archival quantitative data. The data utilized

included test data administered during the 2001-02 school year, hiring practices used

through the 2001-02 school year, and teacher demographic information. The quantitative

method allowed the researcher to analyze the data in context with the hiring procedures

for teachers and teacher demographics in a major metropolitan area school district

(Babbie, 1999; Krathwohl, 1998). The purpose of the study is to determine if teachers

selected using The Star Teacher Interview process have significantly higher achieving

students than teachers selected utilizing traditional (non-Haberman) interview methods.

Research Questions

Research Question 1: Do students taught in a regular classroom score higher on

the reading portion of the Texas Assessment of Academic Skills (TAAS) test than

students taught in a bilingual classroom?

Research Question 2: Do students taught by teachers selected utilizing The Star

Teacher Interview process score higher on the reading portion of the Texas Assessment

of Academic Skills (TAAS) test than students taught by teachers selected through the use

of traditional (non-Haberman) methods while applying statistical control to the type of

classroom taught?

Research Question 3: Does a significant interaction occur between the scores on the reading portion of the TAAS test of students taught by teachers selected using the Star Teacher Interview process and teacher demographic factors such as gender, ethnicity, and years of experience while statistically controlling for the type of classroom taught?

Research Question 4: Do students taught in a regular classroom score higher on the mathematics portion of the Texas Assessment of Academic Skills (TAAS) test than students taught in a bilingual classroom?

Research Question 5: Do students taught by teachers selected utilizing The Star Teacher Interview process score higher on the mathematics portion of the TAAS test than students taught by teachers selected through the use of traditional (non-Haberman) methods while applying statistical control to the type of classroom taught?

Research Question 6: Does a significant interaction occur between the scores on the mathematics portion of the TAAS test of students taught by teachers selected using the Star Teacher Interview process and teacher demographic factors such as gender, ethnicity, and years of experience while statistically controlling for the type of classroom taught?

Null Hypothesis

Null Hypothesis 1: No significant difference exists between the reading scores on the TAAS test of students taught in a regular classroom and students taught in a bilingual classroom (type of classroom taught).

Null Hypothesis 2: No significant difference exists between the reading scores on the TAAS test of students taught by teachers selected using The Star Teacher Interview

and students taught by teachers selected using traditional (non-Haberman) interview techniques while applying statistical control to the type of classroom taught?

Null Hypothesis 3: No significant interaction exists between the teacher selection method and teacher gender on student scores on the reading portion of the TAAS test while applying statistical control to the type of classroom taught.

Null Hypothesis 4: No significant interaction exists between the teacher selection method and teacher ethnicity on student scores on the reading portion of the TAAS test while applying statistical control to the type of classroom taught.

Null Hypothesis 5: No significant interaction exists between the teacher selection method and teacher experience on student scores on the reading portion of the TAAS test while applying statistical control to the type of classroom taught.

Null Hypothesis 6: No significant difference exists between the mathematics scores on the TAAS test of students taught in a regular classroom and students taught in a bilingual classroom (type of classroom taught).

Null Hypothesis 7: No significant difference exists between the mathematics scores on the TAAS test of students taught by teachers selected using The Star Teacher Interview and students taught by teachers selected using traditional (non-Haberman) interview techniques while applying statistical control to the type of classroom taught?

Null Hypothesis 8: No significant interaction exists between the teacher selection method and teacher gender on student scores on the mathematics portion of the TAAS test while applying statistical control to the type of classroom taught.

Null Hypothesis 9: No significant interaction exists between the teacher selection method and teacher ethnicity on student scores on the mathematics portion of the TAAS test while applying statistical control to the type of classroom taught.

Null Hypothesis 10: No significant interaction exists between the teacher selection method and teacher experience on student scores on the mathematics portion of the TAAS test while applying statistical control to the type of classroom taught.

Population and Subjects

No sampling procedures were used in the study. The study utilized all of the eligible population of third, fourth, and fifth grade teachers assigned to one of fifteen elementary schools that met the study criteria in a major metropolitan area school district in the Southwest. The district serves roughly 33,000 students from very diverse economic and ethnic backgrounds. Fifty-one percent of the students participate in the federal free and reduce lunch program. For a school to qualify for the study, at least 51% of its students were designated as economically disadvantaged as defined by the federal free and reduced lunch program during the 2001-02 school year (Table 4).

The eligible population consisted of all teachers who met the study criteria. To meet the criteria, each teacher reported at least 10 students scores and all relevant demographic data. The demographic data included teacher gender, ethnicity, and years of teaching experience. All teachers in the school district who meet the criteria were included in the study. The eligible population of the study consists of 87 teachers of record for reading and 88 teachers of record for mathematics representing 1351 reading students and 1378 mathematics students.

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Table 4

Metropolitan School District Urban Elementary Schools 2001-2002

Name of School	% of Economically Disadvantaged Students
Buffalo Creek	86
Cedar Brook	82
Edgewood	84
Hollibrook	95
Housman	86
Pine Shadows	75
Ridgecrest	90
Shadow Oaks	89
Sherwood	65
Spring Branch	91
Spring Shadows	79
Thornwood	51
Treasure Forest	92
Westwood	71
Woodview	82

Source: Metropolitan Area School District

Operationalization of Constructs

Two instruments were used in collecting data in this study. The Haberman Star Teacher Interview was used to identify the research group of teachers to study. The Texas Assessment of Academic Skills (TAAS) test was used to determine student performance. The Star Teacher Interview consists of a series of fourteen research-based questions developed by Martin Haberman (1995a). Candidates respond to each question and further clarify their response in reaction to probing by the interviewer. After the candidate has completed his or her initial response, the interviewer probes for clarity and consistency. Once the candidates have fully developed their response, the interviewer scores each candidate responses on a matrix. The score ranges from zero to three. Zero being the least preferred response to three being the most preferred response. No baseline total score is used to determine whether a candidate passes or fails the interview; however, any

candidate receiving a zero on any one of the seven questions would not be a preferred candidate for urban teaching. In this study, the principal of each campus was an integral part of the selection process and held the final authority to recommend teachers for employment.

The Star Teacher Interview was evaluated in several studies. In each study, the Star Teacher Interview demonstrated a less than 5 percent error between prediction and performance or effectiveness (Haberman, 1995a). The first study was conducted over an eleven year period of time. The Star Teacher Interview was administered to candidates for the Milwaukee Intern Teacher Program. Over 1500 individuals were given the Star Teacher Interview with a 95% accuracy rate. In a second study in Milwaukee, 108 individuals were given the Star Teacher Interview. A follow-up of the subjects indicated a less than 3 percent error rate. In a third study, the accuracy of the Star Teacher Interview was determined using first-year teachers who had not participated in a formal teacher preparation program. The study reported a less than 5 percent error rate.

The Texas Assessment of Academic Skills (TAAS) test is a criterion-referenced achievement test. The test measures academic achievement in reading, mathematics, writing, social studies, and science. The reading and mathematics tests are administered in grades 3-8, and 10. Writing is administered in grades 4, 8, and 10. The social studies and science tests are administered in grade 8. The TAAS test was first administered in 1990. Student scores are represented by the Texas Learning Index (TLI). The TLI is a score that indicates a student's performance relative to a passing standard. In the case of the 2001-02 TAAS test in reading and mathematics, the passing standard was a TLI of

70. The range of possible TLI scores on the reading and mathematics TAAS test in 2001-02 is represented in Table 5.

The reliability of the TAAS test was determined by analyzing the correlation between the true scores on the test and observed scores. Utilizing the Kuder-Richardson Formula 20 (KR-20), reliabilities range from the high .80's to the low .90's (Texas Education Agency, 2002). The validity of the TAAS test is content based and representative of the Texas Essential Knowledge and Skills (TEKS). Content validity tests what a student should be able to do or measures an intended response. Construct validity determines the extent to which an assessment measures a construct or trait. For the TAAS test, the construct validity is intertwined in the content validity since the assessment is gauging performance based on the state curriculum (TEKS) (Texas Education Agency). In addition, the Texas Education Agency (TEA) has conducted ten tests since 1992 to measure the criterion-related validity of the TAAS test. In summary, the analyses conducted by the TEA indicate a reliable and valid criterion-referenced assessment.

Table 5

Range of Texas Learning Index (TLI) Scores for Reading and Mathematics 2001-02

Grade	Range	
	Reading TLI	Mathematics TLI
3	2 – 94	1 – 93
4	15 – 98	9 – 91
5	8 – 101	10 – 93

Source: Texas Education Agency

Data Collection

Data used in this study consist of a combination of classroom performance data from an established criterion-referenced assessment, teacher hiring methods, and teacher

demographic information. From a performance standpoint, data representing student scores on the reading and mathematics portions of the Texas Assessment of Academic Skills (TAAS) test in grades 3-5 were collected. The teacher hiring method data includes the hiring method utilized for each teacher in the study. The teachers were classified as either being hired using the Haberman instrument or Non-Haberman, if traditional selection methods were utilized. In addition, the years of total teaching experience, years of total teaching experience in the school district, grade level taught, gender, ethnicity, and type of classroom taught were collected for each teacher.

The researcher collected raw data with permission from the school district and in accordance with all Public Information Act guidelines. Various sources were used to collect data for the study. The school district's internal data interpretation system, ASE Resources Data Management System (ADM) supplied student scores. The system allows the school district to analyze and interpret data provided by the State of Texas in regards to state examinations. Teacher hiring methods and demographic data were collected from information provided by the principals of the schools identified in the study and the Human Resource Department of the school district.

All Grade 3-5 TAAS testing data for the 2001-02 school year for the schools participating in the study were gathered and reviewed. The data collection process involved the following steps.

1. Submission of a Public Information Act request to the school district requesting the 2001-02 TAAS scores in reading and mathematics for all grade 3-5 classrooms identified for the study (Appendix A). In addition, the teacher name for each classroom was requested.

2. Submission of a Public Information Act request to the fifteen schools meeting the study criteria as an urban campus requesting the teacher hiring method, gender, ethnicity, classroom of record, and type of classroom taught for each teacher (Appendix B).

3. Submission of a Public Information Act request to the Human Resource Department of the school district requesting the total years of teaching experience and total years of teaching experience in the Spring Branch Independent School District for the classrooms selected for the study (Appendix C).

The information collected was reviewed to insure consistency of reporting. Any data provided that did not appear to be consistent received additional review for accuracy.

Data Analysis

The overall student performance of teachers selected with The Haberman Star Teacher Interview process was compared to the student performance of teachers selected by traditional interview methods. In addition, the interaction of the teacher hiring method with teacher demographic data such as gender, ethnicity, and years of experience on student TAAS scores while applying statistical control to the type of classroom taught was measured. Two statistical methods were used to analyze the data. An analysis of variance (ANOVA) was performed to analyze the relationship between the type of classroom taught and student performance. An analysis of a co-variance (ANCOVA) was utilized to analyze the main effect of the hiring method and any relationships between the teacher hiring method and teacher demographics while applying statistical control to the type of classroom taught.

An ANOVA is a statistical treatment used to test the difference among two or more means. Two types of variables exist in an ANOVA: independent and dependent. The independent variable may have multiple levels. An ANOVA was used to determine the main effect of the type of classroom taught on student test scores.

An analysis of a co-variance (ANCOVA) was utilized to analyze the main effect of the hiring method and any interaction between the hiring method and teacher demographics while applying statistical control to the type of classroom taught. An ANCOVA is a statistical treatment used to test the difference between various means while statistically controlling variation ascribed to a covariate. In this study, the primary independent variables are teacher hiring methods, gender, ethnicity and years of experience. The covariate is the type of classroom taught. The dependent variable remains student scores for the reading and mathematics portions of the TAAS test. The use of these statistical treatments will allow the researcher to test the null hypothesis presented in the study and provide answers to the research questions. Data gathered in this study will be statistically analyzed utilizing SPSS software and coded as indicated in Table 6.

The relevant statistical technique used to analyze each of the null hypotheses is stated below. The significance of each hypothesis was determined at the .05 probability level which is standard for social research.

Null Hypothesis 1: No significant difference exists between the reading scores on the TAAS test of students taught in a regular classroom and students taught in a bilingual classroom (type of classroom taught).

Relevant Statistical Technique: An analysis of variance (ANOVA) was performed

Table 6

Coding of the Key Variables of the Study

Key Variable	Code
Hiring Method	
Non-Haberman	0
Haberman	1
Type of Classroom Taught	
Regular	1
Bilingual	2
Teacher Gender	
Female	1
Male	2
Teacher Ethnicity	
Asian	1
Hispanic	2
Anglo	3
African-American	4
Other	5
Teacher Experience	
0-5 Years	1
6-10 Years	2
11-15 Years	3
16-20 Years	4
21 + Years	5

to analyze the data. The analysis tested the difference between student scores in regular classrooms compared to student scores in bilingual classrooms.

Null Hypothesis 2: No significant difference exists between the reading scores on the TAAS test of students taught by teachers selected using The Star Teacher Interview and students taught by teachers selected using traditional (non-Haberman) interview techniques while applying statistical control to the type of classroom taught?

Relevant Statistical Technique: An analysis of covariance (ANCOVA) was performed to analyze the data. The analysis tested the main effect of the teacher hiring method on student test scores while controlling for the type of classroom taught.

Null Hypothesis 3: No significant interaction exists between the teacher selection method and teacher gender on student scores on the reading portion of the TAAS test while applying statistical control to the type of classroom taught.

Relevant Statistical Technique: An analysis of covariance (ANCOVA) was performed to analyze the data. The analysis tested the interaction of the teacher hiring method and teacher gender on student test scores while controlling for the type of classroom taught.

Null Hypothesis 4: No significant interaction exists between the teacher selection method and teacher ethnicity on student scores on the reading portion of the TAAS test while applying statistical control to the type of classroom taught.

Relevant Statistical Technique: An analysis of covariance (ANCOVA) was performed to analyze the data. The analysis tested the interaction of the teacher hiring method and teacher ethnicity on student test scores while controlling for the type of classroom taught.

Null Hypothesis 5: No significant interaction exists between the teacher selection method and teacher experience on student scores on the reading portion of the TAAS test while applying statistical control to the type of classroom taught.

Relevant Statistical Technique: An analysis of covariance (ANCOVA) was performed to analyze the data. The analysis tested the interaction of the teacher hiring method and teacher experience on student test scores while controlling for the type of classroom taught.

Null Hypothesis 6: No significant difference exists between the mathematics scores on the TAAS test of students taught in a regular classroom and students taught in a bilingual classroom (type of classroom taught).

Relevant Statistical Technique: An analysis of variance (ANOVA) was performed to analyze the data. The analysis tested the difference between student scores in regular classrooms compared to student scores in bilingual classrooms.

Null Hypothesis 7: No significant difference exists between the mathematics scores on the TAAS test of students taught by teachers selected using The Star Teacher Interview and students taught by teachers selected using traditional (non-Haberman) interview techniques while applying statistical control to the type of classroom taught?

Relevant Statistical Technique: An analysis of covariance (ANCOVA) was performed to analyze the data. The analysis tested the main effect of the teacher hiring method on student test scores while controlling for the type of classroom taught.

Null Hypothesis 8: No significant interaction exists between the teacher selection method and teacher gender on student scores on the mathematics portion of the TAAS test while applying statistical control to the type of classroom taught.

Relevant Statistical Technique: An analysis of covariance (ANCOVA) was performed to analyze the data. The analysis tested the interaction of the teacher hiring method and teacher gender on student test scores while controlling for the type of classroom taught.

Null Hypothesis 9: No significant interaction exists between the teacher selection method and teacher ethnicity on student scores on the mathematics portion of the TAAS test while applying statistical control to the type of classroom taught.

Relevant Statistical Technique: An analysis of covariance (ANCOVA) was performed to analyze the data. The analysis tested the interaction of the teacher hiring method and teacher ethnicity on student test scores while controlling for the type of classroom taught.

Null Hypothesis 10: No significant interaction exists between the teacher selection method and teacher experience on student scores on the mathematics portion of the TAAS test while applying statistical control to the type of classroom taught.

Relevant Statistical Technique: An analysis of covariance (ANCOVA) was performed to analyze the data. The analysis tested the interaction of the teacher hiring method and teacher experience on student test scores while controlling for the type of classroom taught.

CHAPTER IV

Analysis of the Data

The purpose of the study was to determine if teachers selected using The Star

Teacher Interview process have significantly higher student achievement than teachers

selected utilizing traditional (non-Haberman) interview methods. Teachers selected for

the study represented fifteen urban elementary schools in a major metropolitan area

school district. Each teacher reported at least ten student test scores and all relevant

demographic data. The reading and mathematics TAAS scores of students in the

classrooms were collected for the study. The eligible population consisted of 87 teachers

of record for reading and 88 teachers of record for mathematics. The 87 teachers of

reading represented 1351 student scores and the 88 teachers of mathematics represented

1378 student scores. Of the 87 reading teachers, 64 were hired using traditional methods

and 23 were selected utilizing the Star Teacher Interview. In mathematics, 63 teachers

were hired using traditional method and 25 utilizing the Star Teacher Interview. In

addition, teacher gender, ethnicity, years of experience, and type of classroom taught

were collected. First of all, the effect of the type of classroom taught on student scores

was determined in reading and mathematics. Secondly, the main effect of the hiring

method of the teacher on student scores in reading and mathematics was determined

while statistically controlling for the type of classroom taught. Finally, the interaction of

the teacher hiring method on each of the following teacher demographics; gender,

ethnicity, and years of experience on student reading and mathematics scores was determined while statistically controlling for the type of classroom taught.

The study utilized ten null hypotheses to analyze the research data. Two statistical methods were used to analyze the data. An analysis of variance (ANOVA) was performed to analyze the relationship between the type of classroom taught and student performance (Null Hypothesis 1 and 6). An analysis of a co-variance (ANCOVA) was utilized to analyze the main effect of the hiring method and any relationships between the teacher hiring method and teacher demographics while applying statistical control to the type of classroom taught (Null Hypotheses 2, 3, 4, 5, 7, 8, 9 and 10).

Research Question 1

Research Question 1: Do students taught in a regular classroom score higher on the reading portion of the Texas Assessment of Academic Skills (TAAS) test than students taught in a bilingual classroom?

Null Hypothesis 1: No significant difference exists between the reading scores on the TAAS test of students taught in a regular classroom and students taught in a bilingual classroom (type of classroom taught). The null hypothesis was rejected. The mean score of students in a regular classroom was 85.50 (SD 11.07, n=1250) compared to students in a bilingual classroom mean score of 81.27 (SD 13.52, n=101). The results of the ANOVA indicate a significant statistical difference between TAAS reading scores of students in a regular classroom and students in a bilingual classroom (Table 7). The students in regular classrooms outscored students in bilingual classrooms by an average of 4.23 points on the reading portion of the TAAS test. This analysis was used to verify the significance of the covariate variable for Null Hypothesis 2, 3, 4, and 5.

Table 7

Analysis of Variance for Reading Scores on the TAAS Test of Students in Regular and Bilingual Classrooms

Classroom Taught	Source	Df	SS	F	P	η
	Between Groups	1	1671.030	13.158	.000	.010
	Within Groups	1349	171322.26			
	Total	1350	172993.29			

Research Question 2

Research Question 2: Do students taught by teachers selected utilizing The Star Teacher Interview process score higher on the reading portion of the Texas Assessment of Academic Skills (TAAS) test than students taught by teachers selected through the use of traditional (non-Haberman) methods while applying statistical control to the type of classroom taught?

Null Hypothesis 2: No significant difference exists between the reading scores on the TAAS test of students taught by teachers selected using The Star Teacher Interview and students taught by teachers selected using traditional (non-Haberman) interview techniques while applying statistical control to the type of classroom taught? The null hypothesis was accepted. The mean score of students taught by teachers selected using the Star Teacher Interview was 85.23 (SD 11.16, n=380) compared to students taught by teachers using traditional (non-Haberman) interview techniques mean score of 85.16 (SD 11.39, n=971). The results of the ANCOVA indicate no significant statistical difference

between TAAS reading scores of students taught by teachers selected using the Star

Teacher Interview compared to students taught by teachers using traditional (non-

Haberman) interview techniques (Table 8). Although students in classrooms taught by a

teacher selected using the Star Teacher interview scored higher than students taught by a

teacher selected using traditional (non-Haberman) methods, the difference of .07 is not

significant.

Table 8

Analysis of a Covariance for Reading Scores of Students Based on Teacher Hiring Method

Effect	Source	*df*	*SS*	F	*p*	*η*
Main Effect						
Hiring Method	Between Subjects	1	.204	.002	.968	.000
Covariate Effect						
Type of Classroom	Between Subjects	1	1669.820	13.139	.000	.010

Research Question 3

Research Question 3: Does a significant interaction occur between the scores on

the reading portion of the TAAS test of students taught by teachers selected using the

Star Teacher Interview process and teacher demographic factors such as gender,

ethnicity, and years of experience while statistically controlling for the type of classroom

taught?

Null Hypothesis 3: No significant interaction exists between the teacher selection method and teacher gender on student scores on the reading portion of the TAAS test while applying statistical control to the type of classroom taught. The null hypothesis was accepted. The mean scores based on gender are represented in Table 9. The mean score for non-Haberman female teachers was 85.02 (SD 11.57, n=896) compared to Haberman female teachers mean score of 85.43 (SD 10.56, n=324). The mean score for non-Haberman male teachers was 86.88 (SD 8.88, n=75) compared to Haberman male teachers mean score of 84.11 (SD 14.22, n=56).

Table 9

Mean Reading Scores Based on Teacher Gender

		N	Mean	Standard Error
Non-Haberman	Female	896	85.02	.386
	Male	75	86.88	1.026
Haberman	Female	324	85.43	.586
	Male	56	84.11	1.900

The results of the ANCOVA indicate no statistically significant interaction between the hiring method and gender of the teacher (Table 10). Female teachers selected using the Star Teacher Interview had a slightly higher average (.41) compared to their counterparts; however, the difference was not significant. The difference of (-2.77) between the mean of male teachers selected utilizing the Haberman interview and male teachers hired using traditional (non-Haberman) interview methods was not significant.

Null Hypothesis 4: No significant interaction exists between the teacher selection method and teacher ethnicity on student scores on the reading portion of the TAAS test while applying statistical control to the type of classroom taught. The null hypothesis was rejected. The mean reading scores based on ethnicity are presented in Table 11. The mean

score for non-Haberman Hispanic teachers was 86.40 (SD 8.40, n=45) compared to

Haberman selected Hispanic teachers mean of 79.52 (SD 14.24, n=31). The mean score

for non-Haberman Anglo teachers was 85.10 (SD 11.45, n=849) compared to Haberman

Table 10

Analysis of a Covariance for Reading Scores of Students Based on Teacher Hiring Method and Gender

Effect	Source	df	SS	F	p	η
Main Effect						
Hiring Method	Between Subjects	1	83.176	.654	.419	.000
Gender	Between Subjects	1	24.583	.193	.660	.000
Interaction Effect						
Haberman*Gender	Between Subjects	1	118.985	.936	.334	.001
Covariate Effect						
Type of Classroom	Between Subjects	1	1516.325	11.925	.334	.001

selected Anglo teachers mean of 85.12 (SD 10.86, n=315). The mean score for non-

Haberman African-American teachers was 87.86 (SD 8.34, n=65) compared to Haberman

selected African-American teachers mean of 91.50 (SD 7.30, n=34). A comparison of

scores for Asian teachers was not possible due to the reporting of only one Asian teacher.

The results of the ANCOVA indicate a statistically significant interaction between

the teacher hiring method and ethnicity (Table 12).). A review of a line graph indicated

the interaction between Haberman and non-Haberman categories was disordinal. Further

analysis indicated that the difference in the scores of students taught by Hispanic teachers

who were administered the Star Teacher Interview was significantly lower (-6.89,

p=.008) than the scores of students taught by Non-Haberman Hispanic teachers. The

Table 11

Mean Reading Scores Based on Teacher Ethnicity

		N	Mean	Standard Error
Non-Haberman	Asian	12	70.17	5.275
	Hispanic	45	86.40	1.253
	Anglo	849	85.10	.393
	African-American	65	87.86	1.035
Haberman	Asian	N/A	N/A	
	Hispanic	31	79.51*	2.557
	Anglo	315	85.12	.612
	African-American	34	91.50	1.251

* Indicates significance at the .05 level.

scores of students in classrooms taught by Anglo teachers did not differ (.02, p=.961)

significantly depending on the hiring method. The difference in the scores of students

taught by African-American teachers did not differ significantly. African-American

teachers hired using the Star Teacher Interview were not significantly higher (3.46,

p=.068) than African-American teachers hired using traditional (non-Haberman) interview

techniques.

Null Hypothesis 5: No significant interaction exists between the teacher selection

method and teacher experience on student scores on the reading portion of the TAAS test

while applying statistical control to the type of classroom taught. The null hypothesis was

rejected. The mean scores based on years of experience are shown in Table 13. The mean

score for non-Haberman 0-5 year teachers was 82.84 (SD 11.84, n=402) compared to

Haberman selected 0-5 year teachers mean of 84.71 (SD 10.85, n=96). The mean score

for non-Haberman 6-10 year teachers was 86.05 (SD 11.60, n=254) compared to

Haberman selected 6-10 year teachers mean of 84.75 (SD 11.96, n=81). The mean score

for non-Haberman 11-15 year teachers was 87.38 (SD 9.76, n=143) compared to

Table 12

Analysis of a Covariance for Reading Scores of Students Based on Teacher Hiring Method and Ethnicity

Effect	Source	df	SS	F	p	η
Main Effect						
Hiring Method	Between Subjects	1	225.375	1.817	.178	.001
Ethnicity	Between Subjects	3	3725.023	10.008	.000	.022
Interaction Effect						
Haberman*Ethnicity	Between Subjects	2	1301.364	5.244	.005	.008
Covariate Effect						
Type of Classroom	Between Subjects	1	767.480	6.186	.013	.005

Haberman selected 11-15 year teachers mean of 84.87 (SD 11.40, n=139). The mean

score for non-Haberman 16-20 year teachers was 90.66 (SD 7.20, n=64) compared to

Haberman selected 16-20 year teachers mean of 85.95 (SD 7.70, n=20). The mean score

for non-Haberman 21+ year teachers was 85.50 (SD 11.32, n=108) compared to

Haberman selected 21+ year teachers mean of 88.11 (SD 10.82, n=44).

The results of the ANCOVA indicate a statistically significant interaction between

the teacher hiring method and years of teaching experience (Table 14).). A review of a

line graph indicated the interactions between Haberman and non-Haberman categories

were disordinal. In this case, the interactions are at the extremes. Further analysis

indicated that the reading scores of students taught by teachers selected using the Star

Table 13

Mean Reading Scores Based on Teacher Experience

		N	Mean	Standard Error
Non-Haberman	0-5 Years	402	82.84	.590
	6-10 Years	254	86.05	.728
	11-15 Years	143	87.38*	.817
	16-20 Years	64	90.66*	.901
	21 + Years	108	85.50	1.089
Haberman	0-5 Years	96	84.71	1.108
	6-10 Years	81	84.75	1.329
	11-15 Years	139	84.86	.967
	16-20 Years	20	85.95	1.722
	21 + Years	44	88.11*	1.632

* Indicates significance at the .05 level.

Teacher Interview with 0-5 years of teaching experience scored higher (1.87, p=.345)

than students taught by Non-Haberman teachers; however, the difference were not

significant. The scores of students taught by teachers with 6-10 years of experience were

not significantly different between Haberman and Non-Haberman teachers. The scores

for Haberman teachers was slightly lower (-1.30, p=.301) than scores of Non-Haberman

teachers. For teachers with 11-15 years of experience, scores representative of Haberman

teachers were significantly lower (-2.52, p=.035) than their counterparts. Also, student

scores for Haberman teachers with 16-20 years of experience was significantly lower (-

4.71, p=.014) than Non-Haberman teachers with the same years of experience. Finally,

student reading scores for Haberman teachers with 21 plus years of experience were

higher (2.61, p=.193) than scores of students taught by Non-Haberman teachers;

however, the difference was not significant.

Research Question 4: Do students taught in a regular classroom score higher on

the mathematics portion of the Texas Assessment of Academic Skills (TAAS) test than

students taught in a bilingual classroom?

Table 14

Analysis of a Covariance for Reading Scores of Students Based on Teacher Hiring Method and Years of Experience

Effect	Source	*df*	*SS*	F	*p*	η
Main Effect						
Hiring Method	Between Subjects	1	182.526	1.478	.224	.001
Years of Experience	Between Subjects	4	2016.351	4.082	.003	.012
Interaction Effect						
Haberman*Experience	Between Subjects	4	1375.616	2.785	.025	.008
Covariate Effect						
Type of Classroom	Between Subjects	1	2082.248	16.863	.000	.012

Null Hypothesis 6: No significant difference exists between the mathematics

scores on the TAAS test of students taught in a regular classroom and students taught in a

bilingual classroom (type of classroom taught). The null hypothesis was rejected. The

mean score of students in a regular classroom was 83.42 (SD 8.13, n=1271) compared to

students in a bilingual classroom mean score of 81.30 (SD 7.24, n=107). The results of

the ANOVA indicate a significant statistical difference between TAAS mathematics

scores of students in a regular classroom and students in a bilingual classroom (Table 15).

Students in regular classrooms scored on average 2.12 points higher than students in

bilingual classrooms on the mathematics portion of the TAAS test. The analysis was used

to verify the significance of the covariate variable for Null Hypothesis 7, 8, 9, and 10.

Table 15

Analysis of Variance for Mathematics Scores on the TAAS Test of Students in Regular and Bilingual Classrooms

Classroom Taught	Source	Df	SS	F	p	η
	Between Groups	1	443.002	6.807	.009	.005
	Within Groups	1376	89555.588			
	Total	1377	89998.610			

Research Question 5

Research Question 5: Do students taught by teachers selected utilizing The Star

Teacher Interview process score higher on the mathematics portion of the TAAS test than

students taught by teachers selected through the use of traditional (non-Haberman)

methods while applying statistical control to the type of classroom taught?

Null Hypothesis 7: No significant difference exists between the mathematics

scores on the TAAS test of students taught by teachers selected using The Star Teacher

Interview and students taught by teachers selected using traditional (non-Haberman)

interview techniques while applying statistical control to the type of classroom taught?

The null hypothesis was accepted. The mean score of students taught by teachers selected

using the Star Teacher Interview was 83.57 (SD 7.30, n=400) compared to students

taught by teachers using traditional (non-Haberman) interview techniques mean score of

83.12 (SD 8.38, n=978). The results of the ANCOVA indicate no significant statistical

difference between TAAS mathematics scores of students taught by teachers selected

using the Star Teacher Interview compared to students taught by teachers using

traditional (non-Haberman) interview techniques (Table 16). Even though the students

taught by teachers selected using the Star Teacher Interview scored higher (.45) on the

TAAS test than students taught by teachers hired using traditional (non-Haberman)

methods, the difference was not significant at the .05 level.

Table 16

Analysis of a Covariance for Mathematics Scores of Students Based on Teacher Hiring Method

Effect	Source	*df*	*SS*	F	*p*	*η*
Main Effect						
Hiring Method	Between Subjects	1	44.849	.689	.407	.001
Covariate Effect						
Type of Classroom	Between Subjects	1	430.435	6.612	.010	.005

Research Question 6

Research Question 6: Does a significant interaction occur between the scores on

the mathematics portion of the TAAS test of students taught by teachers selected using

the Star Teacher Interview process and teacher demographic factors such as gender,

ethnicity, and years of experience while statistically controlling for the type of classroom taught?

Null Hypothesis 8: No significant interaction exists between the teacher selection method and teacher gender on student scores on the mathematics portion of the TAAS test while applying statistical control to the type of classroom taught. The null hypothesis was accepted. The mean scores on the mathematics tests are shown in Table 17. The mean score for non-Haberman female teachers was 83.05 (SD 8.48, n=935) compared to Haberman female teachers mean score of 83.74 (SD 7.11, n=369). The mean score for non-Haberman male teachers was 84.67 (SD 5.65, n=43) compared to Haberman male teachers mean score of 81.55 (SD 9.20, n=31).

Table 17

Mean Mathematics Scores Based on Teacher Gender

		N	Mean	Standard Error
Non-Haberman	Female	935	83.05	.277
	Male	43	84.67	.862
Haberman	Female	369	83.74	.370
	Male	31	81.55	1.653

The results of the ANCOVA indicate no statistically significant interaction between the hiring method and gender of the teacher (Table 18). Students of female teachers hired using Haberman interview score higher (.69) than students of Non-Haberman female teachers; however, the difference was not significant. In addition, the scores of male Haberman teachers was lower (-3.12) than Non-Haberman male teachers, but not significant.

Null Hypothesis 9: No significant interaction exists between the teacher selection method and teacher ethnicity on student scores on the mathematics portion of the TAAS

test while applying statistical control to the type of classroom taught. The null hypothesis was rejected. The mean mathematics scores are presented in Table 19. The mean score for non-Haberman Hispanic teachers was 83.88 (SD 5.37, n=59) compared to Haberman selected Hispanic teachers mean of 81.55 (SD 9.20, n=31). The mean score for non-Haberman Anglo teachers was 82.89 (SD 8.81, n=819) compared to Haberman selected Anglo teachers mean of 83.57 (SD 7.19, n=351). The mean score for non-Haberman

Table 18

Analysis of a Covariance for Mathematics Scores of Students Based on Teacher Hiring Method and Gender

Effect	Source	df	SS	F	p	η
Main Effect						
Hiring Method	Between Subjects	1	54.383	.836	.361	.001
Gender	Between Subjects	1	.085	.001	.971	.000
Interaction Effect						
Haberman*Gender	Between Subjects	1	145.105	2.229	.136	.002
Covariate Effect						
Type of Classroom	Between Subjects	1	334.006	5.132	.024	.004

African-American teachers was 84.67 (SD 5.72, n=88) compared to Haberman selected African-American teachers mean of 87.06 (SD 3.96, n=18).

The results of the ANCOVA indicate a statistically significant interaction between the teacher hiring method and ethnicity (Table 20). A comparison for Asian teachers was

Table 19

Mean Mathematics Scores Based on Teacher Ethnicity

		N	Mean	Standard Error
Non-Haberman	Asian	12	84.25	1.462
	Hispanic	59	83.88*	.699
	Anglo	819	82.89	.308
	African-American	88	84.67	.610
Haberman	Asian	N/A	N/A	N/A
	Hispanic	31	81.55	1.653
	Anglo	351	83.57	.384
	African-American	18	87.06	.934

* Indicates significance at the .05 level.

not performed due to the lack of Asian teachers hired using the Haberman interview

process. A review of a line graph indicated the interaction between Haberman and non-

Haberman categories was disordinal. Further analysis indicated that the scores of

Hispanic teachers hired using the Star Teacher Interview were significantly lower (-2.33,

p=.028) than the scores of Hispanic teachers selected using traditional (non-Haberman)

methods. The difference in scores for Anglo teachers was not significant. Anglo teachers

selected utilizing the Haberman interview had slightly higher (.68, p=.181) scores than

Non-Haberman hired Anglo teachers. The student scores of African-American teachers

hired using the Star Teacher Interview scored higher (2.89, p=.095) than their African-

American counterparts; however, the difference was not significant at the .05 level of

significance.

Null Hypothesis 10: No significant interaction exists between the teacher

selection method and teacher experience on student scores on the mathematics portion of

the TAAS test while applying statistical control to the type of classroom taught. The null

hypothesis was rejected. The mean scores based on teacher experience are presented in

Table 21. The mean score for non-Haberman 0-5 year teachers was 80.79 (SD 9.19, n=424) compared to Haberman selected 0-5 year teachers mean of 84.36 (SD 6.31, n117). The mean score for non-Haberman 6-10 year teachers was 84.22 (SD 7.74, n=202) compared to Haberman selected 6-10 year teachers mean of 83.82 (SD 7.66, n=98). The mean score for non-Haberman 11-15 year teachers was 86.36 (SD 4.57, n=161) compared to Haberman selected 11-15 year teachers mean of 82.45 (SD 8.23, n=135).

Table 20

Analysis of a Covariance for Mathematics Scores of Students Based on Teacher Hiring Method and Ethnicity

Effect	Source	df	SS	F	p	η
Main Effect						
Hiring Method	Between Subjects	1	8.416	.131	.718	.000
Ethnicity	Between Subjects	3	643.611	3.328	.019	.007
Interaction Effect						
Haberman*Ethnicity	Between Subjects	2	468.844	3.637	.027	.005
Covariate Effect						
Type of Classroom	Between Subjects	1	978.362	15.178	.000	.011

The mean score for non-Haberman 16-20 year teachers was 82.63 (SD 9.63, n=41) compared to Haberman selected 16-20 year teachers mean of 85.75 (SD 3.93, n=20). The mean score for non-Haberman 21+ year teachers was 84.88 (SD 7.82, n=150) compared to Haberman selected 21+ year teachers mean of 83.30 (SD 6.57, n=30).

The results of the ANCOVA indicate a statistically significant interaction between the teacher hiring method and years of experience (Table 22). A review of a line graph indicated the interactions between Haberman and non-Haberman categories were disordinal. The interactions occurred within the 6-10 year category, between the 11-15 year and the 16-20 year category, and within the 21+ year category. Further analysis indicated that the mathematics scores of students taught by teachers selected using the

Table 21

Mean Mathematics Scores Based on Teacher Experience

		N	Mean	Standard Error
Non-Haberman	0-5 Years	424	80.79	.447
	6-10 Years	202	84.22	.545
	11-15 Years	161	86.36*	.360
	16-20 Years	41	82.63	1.504
	21 + Years	150	84.88	.638
Haberman	0-5 Years	117	84.36*	.584
	6-10 Years	98	83.82	.772
	11-15 Years	135	82.45	.708
	16-20 Years	20	85.75	.879
	21 + Years	30	83.30	1.199

* Indicates significance at the .05 level.

Star Teacher Interview with 0-5 years of teaching experience scored significantly higher (3.57, p=.000) than students taught by Non-Haberman teachers. The scores of students taught by teachers with 6-10 years of experience were not significantly different between Haberman and Non-Haberman teachers. The scores for Haberman teachers was slightly lower (-.40, p=.543) than scores of Non-Haberman teachers. For teachers with 11-15 years of experience, scores representative of Haberman teachers were significantly lower (-3.91, p=.000) than their counterparts. Student scores for Haberman teachers with 16-20 years of experience were higher (3.12, p=.987) than Non-Haberman teacher with the same years of experience; however, not significant. Finally, student scores for Haberman

teachers with 21 plus years of experience were lower (-1.58, p=.302) than scores of students taught by Non-Haberman teachers; however, the difference was not significant.

The analysis was accomplished utilizing an ANOVA for Null Hypothesis 1 and 6, and an ANCOVA for Null Hypothesis 2, 3, 4, 5, 7, 8, 9, and 10. The analysis began by determining the significance of the covariate variable, the type of classroom taught. The emphasis of the analysis then focused on the main effect of the Star Teacher Interview

Table 22

Analysis of a Covariance for Mathematics Scores of Students Based on Teacher Hiring Method and Years of Experience

Effect	Source	df	SS	F	p	η
Main Effect						
Hiring Method	Between Subjects	1	1.332	.022	.883	.000
Years of Experience	Between Subjects	4	881.542	3.576	.007	.010
Interaction Effect						
Haberman*Experience	Between Subjects	4	2375.614	9.636	.000	.027
Covariate Effect						
Type of Classroom	Between Subjects	1	636.726	10.330	.001	.008

and concluded with an analysis of the interaction effect of the hiring method of teachers with teacher demographic information.

In summary, the type of classroom taught was statistically significant for reading and mathematics scores. The Haberman Star Teacher Interview did not indicate a

statistically significant main effect on reading or mathematics scores while applying statistical control to the type of classroom. In addition, the Haberman Star Teacher Interview did not yield a statistically significant interaction effect with teacher gender while applying statistical control to the type of classroom taught. In contrast, the Haberman Star Teacher Interview did indicate a statistically significant interaction effect with teacher ethnicity and years of teaching experience on reading and mathematics TAAS scores while applying statistical control to the type of classroom taught. However, further analysis indicated that the significant effect was not consistent within categories of ethnicity or years of service. Table 23 summarizes the outcomes of all the variables and categories tested.

Table 23

Student Performance on TAAS Test as a Function of the Type of Classroom Taught, Teacher Hiring Method, and Interacting Variables of Teacher Gender, Ethnicity and Experience.

Variable	Groups Compared	Significance Difference in TAAS Reading		Significant Difference in TAAS Math	
		No	Yes	No	Yes
Setting	Regular classroom Bilingual classroom		Regular > Bilingual		Regular > Bilingual
Teacher Hiring Method	Haberman teachers Non-Haberman teachers	X		X	
Gender	Haberman (female) Non-Haberman (female)	X		X	
	Haberman (male) Non-Haberman (male)	X		X	
Ethnicity	Haberman - Hispanic Non-Haberman - Hispanic		Traditional > Haberman		Non-Haberman > Haberman
	Haberman - Anglo Non-Haberman - Anglo	X		X	
	Haberman - African Am. Non-Haberman - African Am.	X		X	
Years of Experience	Haberman: 0-5 yr Non-Haberman: 0-5 yr	X			Haberman > Non-Haberman
	Haberman: 6-10 yr Non-Haberman: 6-10 yr	X		X	
	Haberman: 11-15 yr Non-Haberman: 11-15 yr		Non-Haberman > Haberman		Non-Haberman > Haberman
	Haberman: 16-20 yr Non-Haberman: 16-20 yr		Non-Haberman > Haberman	X	
	Haberman: 21+ yr Non-Haberman: 21+ yr		Haberman > Non-Haberman	X	

CHAPTER V

Findings, Conclusions, and Recommendations

Urban schools confront many obstacles to meeting the accountability standards imposed on them in today's educational climate (Dandy, 2002; Imazeki 2002; Lynch 2000; NCES, 1996; Recruiting New Teachers, Inc., 2000). One of the main obstacles is the ability for urban schools to select an effective teacher for each classroom (Darling-Hammond, 2000; Roth & Swail, 2000). One researcher, Martin Haberman (1995b) has spent his whole career preparing and identifying potential candidates for the urban teaching environment. Many of those years have been dedicated to developing and refining the Star Teacher Interview. Validated by several studies (Baskin & Ross, 1992; Haberman, 1995a), The Star Teacher Interview is a series of fourteen research-based questions assessing the beliefs of individuals on seven mid-range functions. The mid-range functions recognize the need for urban teachers to possess skills not required for success in non-urban settings. The purpose of the study was to determine if teachers selected using The Star Teacher Interview process have significantly higher student achievement than teachers selected utilizing traditional (non-Haberman) interview methods.

Teachers selected for the study represented fifteen urban elementary schools in a major metropolitan area school district. The eligible population of the study consisted of 87 teachers of record for reading and 88 teachers of record for mathematics. The 87

teachers of reading represented 1351 student scores and the 88 teachers of mathematics represented 1378 student scores. Of the 87 reading teachers, 64 were hired using traditional methods and 23 were selected utilizing the Star Teacher Interview. In mathematics, 63 teachers were hired using traditional (non-Haberman) method and 25 utilizing the Star Teacher Interview.

Two statistical methods were used to analyze the data. An analysis of variance (ANOVA) was performed to analyze the relationship between the type of classroom taught and student performance. An analysis of a co-variance (ANCOVA) was utilized to analyze the main effect of the hiring method and any relationships between the teacher hiring method and teacher demographics while applying statistical control to the type of classroom taught. The statistical methods used in the study allowed the researcher to include all eligible subjects by controlling for the type of classroom taught. In addition, the methods allowed the researcher to investigate the effect of the Star Teacher Interview based on the demographics aspects of teacher gender, ethnicity, and years of teaching experience. This chapter provides a discussion of findings and conclusions drawn from the experimental data and recommendations for future research.

Findings

The main focus of the study was to compare the academic achievement of students taught by teachers hired using the Star Teacher Interview with that of students taught by teachers hired using traditional (non-Haberman) interview methods. To facilitate a thorough review of the data, six research questions were developed. A presentation of the findings for each research question follows.

Research Question 1: Do students taught in a regular classroom score higher on the reading portion of the Texas Assessment of Academic Skills (TAAS) test than students taught in a bilingual classroom? Students taught in a regular classroom scored significantly higher on the reading portion of the TAAS test than students taught in a bilingual classroom. The researcher analyzed the difference in the scores of students based on the type of classroom taught to confirm the use of a covariate in the analysis of the Star Teacher Interview. This technique allowed the study to capture as many teachers as possible in comparing the use of the Star Teacher Interview and traditional (non-Haberman) interview methods. The teachers selected for the study represented schools with Hispanic student populations in excess of the overall district percentage of 51.8%. As a result the schools represented in the study offered a variety of regular and bilingual classes. By controlling for the type of classroom taught, all classes that met with the study's criteria were included in the analysis.

Research Question 2: Do students taught by teachers selected utilizing The Star Teacher Interview process score higher on the reading portion of the Texas Assessment of Academic Skills (TAAS) test than students taught by teachers selected through the use of traditional (non-Haberman) methods while applying statistical control to the type of classroom taught? Students taught by teachers selected using the Star Teacher Interview tended to score higher on the reading portion of the TAAS test than students taught by teachers hired utilizing traditional (non-Haberman) methods; however, the difference between the two groups was not statistically significant. The ANCOVA model used to analyze the data controlled for the type of classroom taught.

Research Question 3: Does a significant interaction occur between the scores on the reading portion of the TAAS test of students taught by teachers selected using the Star Teacher Interview process and teacher demographic factors such as gender, ethnicity, and years of experience while statistically controlling for the type of classroom taught? The analysis examined the interaction between the Star Teacher Interview and the demographic factors of teacher gender, ethnicity, and years of teaching experience. This in-depth look at the interactions of the Haberman instrument and the demographic factors enable the researcher to investigate the influences of the Star Teacher Interview when isolated to a particular category of teachers. The first interaction tested was teacher gender. The finding indicated that relative to student performance on the reading TAAS test there was no significant interaction between the Star Teacher Interview and the gender of the teacher. It should be noted that the number of male subjects in the study were considerably fewer than the number of female subjects.

The second interaction tested was teacher ethnicity. The analysis indicated a significant interaction occurred between the teacher hiring method and the ethnicity of the teacher. Further analysis of each ethnic category found a significant difference between the student reading scores of Hispanic teachers. Students taught by Hispanic teachers selected using the Star Teacher Interview scored significantly lower than those of Hispanic teachers selected using traditional (non-Haberman) methods. No significant difference was found for student of Anglo or African-American teachers as a function of the teacher selection process. It should be noted that the number of Hispanic teachers were very limited in the analysis.

The final interaction tested was the teacher hiring method and total years of teaching experience. The interaction was tested to verify if a significant difference occurred between the TAAS reading scores of students taught by teachers selected using the Star Teacher Interview process and those chosen using traditional (non-Haberman) methods by stratified levels of teaching experience. The analysis indicated a significant difference between subjects. Further analysis found the significant difference in three stratified levels of teaching experience. Students taught by Non-Haberman teachers with 11-15 years of experience scored significantly higher than students taught by Haberman selected teachers with the same years of experience. The same outcome for teachers with 16-20 years of teaching experience was found. However, the students of Haberman selected teachers with 21+ years of teaching experience significantly outscored the students taught by teachers hired by traditional methods.

Research Question 4: Do students taught in a regular classroom score higher on the mathematics portion of the Texas Assessment of Academic Skills (TAAS) test than students taught in a bilingual classroom? As with the first research question, the outcome of this question assisted the researcher in determining the significance of the covariate variable. An ANCOVA was used to maximize the eligible population of teachers for the study. The analysis indicated that students taught in regular classrooms score significantly higher on the mathematics portion of the TAAS test than students taught in a bilingual classroom. Of the 1387 student scores reported, 107 of them resided in a bilingual classroom.

Research Question 5: Do students taught by teachers selected utilizing The Star Teacher Interview process score higher on the mathematics portion of the TAAS test than

students taught by teachers selected through the use of traditional (non-Haberman) methods while applying statistical control to the type of classroom taught? The main effect of the Star Teacher Interview was determined by using an ANCOVA with the type of classroom taught as a covariate. The study found that students taught by teachers selected using the Star Teacher Interview tended to score higher than students taught by teacher selected utilizing traditional (non-Haberman) methods; however, the difference in scores between the two groups was not statistically significant.

Research Question 6: Does a significant interaction occur between the scores on the mathematics portion of the TAAS test of students taught by teachers selected using the Star Teacher Interview process and teacher demographic factors such as gender, ethnicity, and years of experience while statistically controlling for the type of classroom taught? The study investigated the interaction of the Star Teacher Interview with the demographic factors of teacher gender, ethnicity, and years of experience to determine if any significant difference exists within each demographic factor. For example, the Haberman instrument might predict the success of one gender level versus another. The interaction was tested for each factor while controlling for the type of classroom taught. The findings of the analysis are as follows.

The first interaction tested was the teacher hiring method and teacher gender. The study found no significant interaction exists between the teacher selection method and teacher gender on student scores on the mathematics portion of the TAAS test while applying statistical control to the type of classroom taught.

The next interaction examined was the teacher hiring method and teacher ethnicity. In this case, the study identified a significant interaction exist between the

hiring method of teachers and their ethnicity on the mathematics scores of students. Further analysis revealed a significance difference for Hispanic teachers based on their method of selection. Teachers hired using the Haberman instrument taught students with significantly lower mathematics scores on the TAAS test than Hispanic teachers selected using traditional (non-Haberman) methods. No significant difference was found in the scores of students taught by Anglo and African-American teachers.

The final interaction tested was the teacher hiring method and teacher experience. The overall analysis found a significant interaction between these two categories. The study concluded that a significant interaction exists between the teacher selection method and teacher experience on student scores on the mathematics portion of the TAAS test while applying statistical control to the type of classroom taught. Further analysis found the difference in student scores based on teacher hiring method and years of experience to be significant in only two of the stratified levels of experience. Student taught by Haberman hired teachers with 0-5 years of experience scored significantly higher on the mathematics portion of the test than student taught by Non-Haberman selected teachers with the same amount of teaching experience. The reverse is true for teachers with 11-15 years of experience. Students of traditionally (non-Haberman) hired teachers scored significantly higher than those taught by teachers selected using the Star Teacher Interview.

Conclusions

The purpose of the study was to determine if teachers selected using The Star Teacher Interview process produce higher student achievement compared with teachers selected utilizing traditional (non-Haberman) interview methods. The research questions

were structured to guide the researcher to a series of conclusions regarding Martin Haberman's Star Teacher Interview. A review of related literature identified several studies regarding the Star Teacher Interview. Only one of the studies reviewed attempted to investigate the use of the Star Teacher Interview and the achievement of students taught by teachers selected using the Haberman process (Williams, 1999).

The outcomes of the current study provide useful information to the numerous school systems across the country that incorporate the Star Teacher Interview into their teacher selection process. Even though no significant difference was found between the scores of students taught by teachers selected using the Haberman process and the scores of students taught by teachers hired utilizing traditional (non-Haberman) interview methods, the mean scores of Haberman selected teachers were slightly higher than Non-Haberman teachers. This outcome would indicate that the Star Teacher Interview is at least as successful in identifying effective urban teachers as the current traditional (non-Haberman) methods. This finding is consistent with the work of Williams (1999). Her study found no significant difference in the performance of students based on the overall score a teacher received on the Star Teacher Interview.

Despite comparable performance between students of teachers selected by the Haberman method and those chosen with traditional (non-Haberman) interview techniques, the additional benefits gained from the Star Teacher Interview should not be overlooked. Haberman (1995a) contends that the use of the Star Teacher Interview reduces the rate of teacher turnover in an urban setting. Recent research on teacher turnover indicates an estimated 30% of teachers new to the profession leave in the first three years of teaching (Darling-Hammond, 2000b). Fetler (1997) found that 50% of

teachers new to the profession left the teaching field in the first five to seven years and Ingersoll (2001b) found a 40% attrition rate in the first five years. Therefore, the predictive nature of the Star Teacher Interview with regard to student outcomes in reading and mathematics should not be the only focus of the interview instrument.

In addition, the correlation of the seven mid-range functions of the Star Teacher Interview to the attributes of effective teachers identified in the review of literature should not be ignored. Several of the mid-range functions matched the skills and characteristics already found to be attributable to effective teachers. For example, Haberman (1995b) found effective urban teachers protected the learning environment to maximize student learning. In many cases, this protection comes in promoting a student's opportunity to learn described by Brophy (1999). Haberman also identifies the skills of providing clear expectations, taking generalizations to practice, and ensuring a caring learning climate. These skills and characteristics are also promoted by the other researchers in the field of effective teaching (Bain et al., 1989; Brophy, 1999; & Taylor et al., 2002).

Therefore, the outcomes identified in this study relating directly to the use of the Star Teacher Interview should not discourage an urban school system from its use. The results confirm that students in classrooms taught by teachers selected using the Star Teacher Interview score at least as well as students taught by teachers selected using traditional (non-Haberman) selection methods. School administrators should use the instrument with confidence. The teachers selected by school based staff display an array of effective teaching skills that have been documented in recent research (Bain et al., 1989; Brophy, 1999; & Taylor et al., 2002). In addition, teacher selected by the Star

Teacher Interview tend to remain in their positions for longer periods of time thus improving the teacher retention rate (Haberman, 1995a). Practitioners interested in the cost savings associated with higher retention rates should take notice of the instrument. Finally, school based administrators who use the Star Teacher Interview attend required training. As a result of the required training on a research based structured interview process, practitioners' interview skills are enhanced.

The study also examined the interaction of the hiring method of teachers and the demographic factors of teacher gender, ethnicity and years of experience. Each interaction was tested for its significance and any interaction that was determined to be significant received further analysis. The study concluded that the Star Teacher Interview did not perform significantly different based on the teacher's gender in reading and mathematics. This analysis was performed to verify the consistency of the Star Teacher Interview across gender. It should be noted that the eligible population in the study was very limited in regards to male subjects.

In reference to teacher ethnicity, no consistent finding was concluded from the study. The research found a significant difference in the student performance of Hispanic teachers. Non-Haberman selected teachers taught students that out performed students taught by Haberman selected teachers. However, for Anglo and African-American teachers, no significance was found even though each group's mean scores were higher for Haberman selected teachers. The outcome was consistent in reading and mathematics.

Darling-Hammond (2000a) cited the fact that teacher experience is positively correlated to student achievement. The National Commission on Teaching and America's Future (1997) reported that teacher experience was a significant factor in student reading

and mathematics scores. The study confirmed this finding and found a significant interaction between the teacher hiring method and the years of teaching experience. However, upon further analysis, the significant findings were not consistent between stratified levels of teacher experience. Teachers in the 11-15 year and 16-20 year levels were found to have significantly different scores in favor of teachers hired with traditional (non-Haberman) means. For teachers with 21+ years of experience, their student scores were significantly higher for Haberman interviewed teachers. No significant difference was reported for teachers with 0-5 years and 6-10 years of experience.

The same inconsistent outcomes were discovered in mathematics. Haberman selected teachers with 0-5 years of experience taught students who significantly outperformed students assigned to teachers hired using traditional (non-Haberman) methods. On the other hand, students taught by Non-Haberman teachers with 11-15 years of experience scored significantly higher than students taught by Haberman selected teachers.

The study concludes that the information provided on the interactions of the teacher hiring method and the specified demographic factors is of limited benefit. The issue of inconsistency between reading and mathematics scores is fairly critical at the elementary level. In many cases, elementary teachers are responsible for the reading and mathematics instruction to the same set of students unless the school incorporates departmentalization. However, the significance of the scores of beginning mathematics teachers selected with the Star Teacher Interview is worth mention.

The purpose of the current study was to determine if teachers selected using the Star Teacher Interview process have significantly higher student achievement than students of teachers selected utilizing traditional (non-Haberman) interview methods. The overriding finding was that student performance was not significantly dependent on the method of teacher selection. Likewise, the inconsistent information derived from studying interactions between the teacher hiring method and specific demographic factors is of limited value in drawing specific conclusions. Despite these outcomes, urban school systems should not be discouraged from using the Star Interview Process to hire teachers. It should be noted that the Star Interview Process offers benefits that go beyond quantifiable measures of student achievement and adhere to pedagogic principles related to how students learn. The Star Interview Process promotes the principles that effective teaching and good results in learning are directly related (The Education Trust, 1998; Goldhaber, Eide, & Lui, 2003) and that members of groups with different backgrounds have different styles and preferences for learning (Payne, 1995; Quail & Behm, 1997). Just the recognition of these principles and the development of processes that support these principles create a learning environment in which teachers are thoughtful and attentive. Under these conditions, any child and their parents know that they are valued. How could this not enhance the desire to learn?

Recommendations

The study was conducted in a metropolitan area school district in Texas. The school district is ethnically and economically diverse with 51.8% of its students of Hispanic origin and 51% of its students economically disadvantaged. The population of the research was drawn from fifteen urban elementary schools representing grades three,

four, and five. The study was purely archival in nature comparing the student

performance of teachers selected using the Star Teacher Interview and teachers hired

utilizing traditional (non-Haberman) methods. After reviewing the outcomes of the study,

the following recommendations are suggested for future research.

1.   Replicate the study in a larger urban school system with greater ethnic and

gender diversity in its teaching staff. Such a study would allow for a more representative

sample of different categories of the teaching staff and provide increased quality in the

analysis of these demographic factors.

2.   Replicate the study across several urban school systems to improve on the

analysis of ethnic and gender demographic categories.

3.   Conduct a qualitative study of urban elementary principals who use the

Star Teacher Interview to gauge their perceptions of its benefits. Such a study combined

with the outcome of the effect of the Star Teacher Interview on student achievement in

this study would afford the practitioner valuable information in regards to the continued

use of the instrument.

4.   Design a quantitative study to investigate the validity of the Star Teacher

Interview focused on teachers with 0-5 years of teaching experience. This would build on

the results of this study indicating a significant difference in scores for mathematics

teachers hired using the Haberman instrument.

5.   Conduct a study of teacher demographic factors not considered in this

study but identified in research as having a positive effect on student outcomes. For

example, the credentials of the teachers studied.

6. Conduct a study of high achieving schools and analyze the attributes that led to their success with an emphasis on the hiring methods of teachers. The organization of the study would ensure that a portion of the schools studied would have used the Star Teacher Interview process in teacher selection.

7. Initiate a study focusing on the retention rate of teachers selected by the Star Teacher Interview process. The study would provide a comparison of retention rates between Haberman selected teachers and those chosen using traditional (non-Haberman) methods.

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Appendix "A"

Public Information Act Request #1

Duncan F. Klussmann
Candidate for Doctorate of Education
Seton Hall University
16210 Capri Drive
Houston, Texas 77040

June 25, 2003

(School District)
Custodian of Records
(Address)

Dear Custodian of Records:

Under the State of Texas Public Information Act, I am requesting the following information.

The *List of Testing Teachers* from the ASE Resources Data Management System (ADM) for the following schools for the 2001-02 testing year.

Buffalo Creek Elementary
Cedar Brook Elementary
Edgewood Elementary
Hollibrook Elementary
Housman Elementary
Pine Shadows Elementary
Ridgecrest Elementary
Shadow Oaks Elementary
Sherwood Elementary
Spring Branch Elementary
Spring Shadows Elementary
Thornwood Elementary
Treasure Forest Elementary
Westwood Elementary
Woodview Elementary

In addition, please provide me with the ADM report entitled *Percent Correct Objective by Teacher* for the Reading and Mathematics portions of the Texas Assessment of Academic Skills Test for grades 3-5 for the following schools for the 2001-02 testing year.

Buffalo Creek Elementary
Cedar Brook Elementary
Edgewood Elementary

Hollibrook Elementary
Housman Elementary
Pine Shadows Elementary
Ridgecrest Elementary
Shadow Oaks Elementary
Sherwood Elementary
Spring Branch Elementary
Spring Shadows Elementary
Thornwood Elementary
Treasure Forest Elementary
Westwood Elementary
Woodview Elementary

I understand that due to confidentiality the student's names will need to be removed from the reports requested. If you have any questions or need any clarification, please contact me at 713-896-6210 or 713-464-1511 x2400.

Thank you,

Duncan Klussmann

Appendix "B"

Public Information Act Request #2

Duncan F. Klussmann
Candidate for Doctorate of Education
Seton Hall University
16210 Capri Drive
Houston, Texas 77040

October 1, 2003

(School District)
Custodian of Records
(Address)

Dear Custodian of Records:

Under the State of Texas Public Information Act, I am requesting the following information.

1. The hiring method of the teachers listed.
2. The class taught during the 2001-02 school year.
3. The type of classroom taught during the 2001-02 school year.
4. The gender of each teacher.
5. The ethnicity of each teacher.

I am providing you a listing of the teachers for which I am requesting this information. The lists are sorted by school. In addition, I am enclosing an instruction sheet to help guide each principal in providing the information requested.

If you have any questions or need any clarification, please contact me at 713-896-6210 or 713-464-1511 x2400.

Thank you,

Duncan Klussmann

Appendix "C"

Public Information Act Request #3

Duncan F. Klussmann
Candidate for Doctorate of Education
Seton Hall University
16210 Capri Drive
Houston, Texas 77040

December 15, 2003

(School District)
Custodian of Records
(Address)

Dear Custodian of Records:

Under the State of Texas Public Information Act, I am requesting the following information.

      1.   The number of years of teaching experience in the school district.
      2.   The number of years of total teaching experience.

I am providing you a listing of the teachers for which I am requesting this information. The lists are sorted by school. In addition, I am enclosing an instruction sheet to help guide each principal in providing the information requested.

If you have any questions or need any clarification, please contact me at 713-896-6210 or 713-464-1511 x2400.

Thank you,

Duncan Klussmann

Appendix "D"

Data Collection Form

Identifying Successful Urban Teachers

A Research Study Being Conducting by Duncan F. Klussmann

Doctoral Candidate – Seton Hall University

Data Collection Worksheet

Campus _____

Person Completing Form _____

	Teacher Name	Grade Level	Haberman (Place an "X" in the box if the teacher was administered the Star Teacher Interview during the employment process)	Non-Haberman (Place an "X" in the box if the teacher was not administered the Star Teacher Interview during the employment process)	Class Taught Please indicate if this teacher was the teacher of record for Reading by placing an "X" in the box.	Class Taught Please indicate if this teacher was the teacher of record for Mathematics by placing an "X" in the box.	Total Years Teaching Experience	Years of Teaching Experience in SBISD	Gender	Ethnicity
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										