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Entitled

Experience Versus Grade Level Taught: An Analysis of the Factors that Contribute to Student Achievement

By

Aalaa Mohammad Eldeib

Submitted as partial fulfillment of the requirements for The Master of Education in Educational Administration and Supervision

Advisor: Dr. Caroline J. Roettger

Dr. Lloyd O. Roettger

College of Education

Graduate School

The University of Toledo December 2005
An Abstract of

Learning: Students at the Center of their Education

Aalaa Mohammad Eldeib

Submitted as partial fulfillment of the requirements for
The Master of Education in Educational Administration and Supervision

The University of Toledo

December 2005

The purpose of this study was to determine the prevalence of teacher-centered or student-centered beliefs and practices based on the grade level taught and the years of teaching experience. The sample consisted of teachers in 5 schools in Northwest Ohio.

The *Education for the Future Initiative Staff Survey* was used to make comparisons. Instructions and conditions for administration were standardized. A sample was selected. The instrument was administered and the data collected. The data was then statistically analyzed by computer at The University of Toledo’s Accounting Department.

The most prevalent concepts related to student-centered environments that resulted from the study were individualization, collaboration, high expectations, and meaningfulness. The least prevalent concepts were in the
areas of assessments, interpersonal relationships, and relevance of content material.

Teachers with less than six years of teaching experience had slightly higher mean scores than those with more than six years, but there was no statistically significant difference between their mean performances. Teachers who taught grades 7 – 12 also had slightly higher mean scores than those who taught grades K – 6, but there was no statistically significant difference between their mean performances.

The findings shed some new light on the views about experienced teachers as well as those teachers with fewer years of teaching experience. It also poses for the reader a different way of looking at teachers, no matter the grade level they teach. More research needs to be done in this area, with the possibility of extending the sample regionally as well as nationally.
Dedication

This research is dedicated to the most supportive and loving husband, Riyad Abdel-Ghani, who has really kept me going throughout this entire journey. My husband’s continuous words of encouragement and his complete faith in my ability to excel were always a driving force to continue.

I dedicate this also to my sons, Mujahid, who is four, and Muhammad, who is one. I have missed them dearly as I have worked on this research. From coming with me to drop off my surveys, to playing with their Legos around my feet as I typed away, they truly did inspire me to succeed. It was always so nice to come home to their smiling faces, greeting me with their news for the day. I will never forget the day when Mujahid was telling Muhammad that he could no longer play with him because he had to go to class.

My mother and father, Dr. Adam and Dr. Eldeib, have always modeled for me what excellence in all endeavors looks like. Their dedication, hard work and continuous journey of lifelong learning have really encouraged me to widen my horizons and make them as proud as I could. I aspire to become the parents and people they are, valuing their wisdom, insight, and actions more and more each day.

My sisters, Iman, Duaa, Mariam, and my loving brother, Ahmmad were continuously checking on my progress and eagerly anticipated the completion, taking great pride in my accomplishments. I love them dearly.

Last, but certainly not least, I would like to dedicate this to the Khalil family, whose place in my heart is no less than my own family. I will forever
cherish and be indebted to them for their never-ending support and encouragement. Dr. Abbas and Khaltu Wafaa, Mohammed, Aya, Zeinab, and Ahmed are members of a family we strive to emulate. Our love for you has no end.
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Chapter One

Introduction

Introduction

A teacher who can arouse a feeling for one single good action, for one single good poem, accomplishes more than he who fills our memory with rows on rows of natural objects, classified with name and form (Goethe, from iphigenie auf Tauris, 1787 as cited in Towers & Porath, 2001, p. 205).

Learning and memory comprise more than half of the current research in the neurosciences (Merzenich, 2000 as cited in King-Friedrichs, 2001). Most educators will agree that the primary criterion in measuring the success of a school is the continuous growth and achievement of every student (Olson, 2005). If students are allowed to fail, some will. The only way to assure that all students succeed is to remove failure as an option (Corbett, Wilson, & Williams, 2005).
Even if a student has not become ‘proficient,’ their success should be celebrated when improvements have been made (Olson).

With an increased focus on assessment and accountability, teachers have significantly changed their instructional practices with teaching taking precedence over learning. Not realizing the negative impacts of their actions, this movement to a teacher-centered environment, where the focus is on the material taught rather than the information learned, becomes the problem. The teacher-centered instructional approach, with the belief that “one teaching style fits all,” is not working for an increasing number of diverse student populations. This requires a paradigm shift to implement a learner-centered approach, where learning becomes the constant (Brown, 2003).

This thesis reports on a mixed quantitative and qualitative study of the beliefs held by teachers who either hold a student-centered or teacher-centered focus. The purposes of the study were many. First, the researcher reviewed and reported on prior research and findings that identified the factors that lead to the creation of a student-centered learning environment. The importance of student-centered learning, as well as the ramifications of a teacher-centered focus, are further examined. The researcher sought to identify the characteristics and beliefs of teachers who felt that learning was the constant. This was in an effort to provide practical assistance to future teachers and administrators in assuring that all students succeed. Finally, the years of experience a teacher had and the grade level taught were further examined to see if a correlation could be drawn
between these factors and the likelihood of holding a student-centered belief system.

*Problem Statement*

With increasing pressures due to accountability and standardized testing, individual student learning needs have been minimized as the focus on the material to be taught has increased. Decisions are constantly being made that are not in the best interest of the student. More and more students are falling behind grade level, even failing, and are ultimately left behind without proper support and opportunities to learn.

This study seeks to determine the impact of grade level taught and the years of teaching experience on the beliefs and practices of a teacher. Therefore, the question that arises is what factors contribute to student learning and student success? Also, is there a correlation between the grade level taught and years of teaching experience in relationship to the creation of a student-centered learning environment in K – 12 schools?

*Identification of Variables*

Due to the nature of the study being experimental and because it was not feasible, the researcher will acknowledge that she did not manipulate the variables. The discrete and categorical independent variables in this study are the grade level taught and the years of teaching experience. The continuous dependent variable is the creation of a student-centered classroom or school as
measured by and demonstrated through teacher beliefs on the seven components that constitute, in this researcher’s opinion, a learning environment where learning is the constant and time is the variable.

The dependent variable will be measured according to how favorably the participant responded to seven components within the survey that were directly related to a student-centered learning environment. These components were collaboration, individualization, relevance of content, assessments, high expectations, interpersonal relationships, and meaningfulness of the curriculum to the student’s personal experiences. These components were identified within the literature, and each had questions that were associated with the component. To enhance the value of the study, two categorical variables will be considered. The first will be the years of teaching experience. The second will be whether or not the teacher teaches at the K-6 elementary level or the 7-12 secondary level.

Definition of Terms

The following terms will have controlled meanings and are herein defined for this study. The operational definition of student-centered learning is that the teacher’s focus is on the needs of the student. He or she will teach the materials, but in a manner in which the students will learn, differentiating instruction to meet the needs of the students. If a child does not learn, the teacher does not continue teaching, but instead provides further support and services to assure learning of the concepts at hand. A teacher who teaches in this manner values and utilizes the standards as a starting point for what the students must know to
succeed in their educational endeavors. The standards are used as minimum levels of achievement, with instruction and classroom activities providing greater challenge for the students. The teacher also continuously uses assessments to gather data to base decisions on. This teacher believes that all students can and will learn if given the chance, and therefore, will do whatever he or she can to assure that success. Learning is the constant here, with teaching as the variable.

In a teacher-centered classroom, the teacher’s focus is on the standards that must be taught, and nothing else. These teachers tend to be working on a fixed timeline that cannot be altered even if the students have not learned the material. The teacher will move on to make sure all of the material has been covered by the end of the year. At times, these teachers will continue to teach an entire textbook, although many of the concepts within the book are not essential materials for the students to learn. This in turn leads to a broad, but superficial, coverage of material.

Teachers also tend to teach in one manner, unconcerned for the diverse needs of the students within the classroom. Some teachers with this belief system do not see providing additional support and services to a student as a part of his or her job description. Assessments are carried out, but are not used as tools to learn from, or as a basis for decisions. Through the actions of this teacher, although he or she may not voice it, failure becomes an option and a reality for more and more students. This teacher is sending a hidden message to
the students that some of them are not important and deserving of success; essentially ‘it doesn’t matter to me if you don’t learn, I am moving on.’ Learning is the variable here, and teaching is the constant.

In a student-centered environment, seven components must be present: collaboration, individualization, relevance of content, assessments, high expectations, interpersonal relationships, and meaningfulness to student’s experiences. A definition for each factor follows.

Constitutively, collaboration is defined as working jointly with others (Mish et al., 2004). This means that teachers come together to share ideas, seek advice, and reflect constructively on student progress. With so many teachers actively concerned about the achievement of a student, tremendous efforts will be made to assist him or her to learn.

Individualization, or to individualize, is ‘to adapt to the needs of an individual’ (Mish et al., 2004). A student-centered teacher provides activities, experiences, support and services which are ‘custom-fit’ to meet the needs of the student. If the students do not learn the material, then the teacher will find another way to present it so that all of the students will understand.

The constitutive definition of relevance is ‘practical and especially social applicability’ (Mish et al., 2004). For a student-centered environment, the content to be learned must be relevant to the student. They must understand why they need to learn the material, and what application it has in their individual lives.
When this happens, students are more likely to find meaning in what they are learning, and therefore learn.

The operational definition for assessments is anything given to a student, without stipulating the format, in which the student is able to show how well he or she has learned the given material. Student-centered teachers give these assessments for two reasons: to see how a student has progressed, and to find out where to go from the assessment. If students have mastered the concepts, there is no need to teach it again. It is then possible for more challenging and enrichment activities to be introduced. If the students have not mastered the material, then the teacher must analyze why learning did not occur, and try a different approach.

High expectations are defined operationally as pushing every child to excel. In a student-centered learning environment, success is no longer limited to those students who have understood the content the first time it was covered. Instead, all students are challenged to achieve, for it is expected of them. This is the culture of the school, and teachers are facilitators in making sure that learning happens. The standards are looked at as minimal levels of achievement, a starting ground for what students must know to succeed.

Interpersonal relationships, defined operationally, are those relationships between people within the school. These can be any relationship including student to teacher, teacher to administrators, students to students, teachers to teachers, as well as those built with parents. All relationships are valued in a
student-centered environment. When they are present, students achieve more. These relationships must be based on sincerity and kindness, truly relating to the needs and individual characteristics of the person. When these relationships are fostered within a school, the school becomes a place where everyone would like to be.

The last component that is essential in developing a student-centered learning environment is the meaningfulness of the curriculum, or how well the content relates to the student’s prior experiences. Meaningful is constitutively defined as how significant something is (Mish et al., 2004). In a student-centered learning environment, the teacher is constantly trying to make the content meaningful, tying it into the individual student’s prior knowledge and experiences. When this occurs, students can relate more to the material, being provided with the opportunity to add their own twist to the content, which shows the students that they are valued and important.

**Significance**

The significance of this study is tremendous; as it will help to identify the characteristics that student-centered teachers possess, one in which will likely increase student performance and learning. This will provide assistance to principals, administrators, and teachers in methods of increasing student performance and learning. A student-centered focus will assure that the teacher is aware of the individualized needs and abilities of each student. The study will also identify the teacher-centered traits and the ramifications of teaching in this
manner, serving as a tool to inform administrators of important factors to identify when seeking to employ a teacher. Also, evidence will be provided to illustrate that all students can learn and succeed when given the chance. Lastly, this study will examine the effects of grade level taught and years of teaching experience on the creation of a student-centered learning environment.

Hypotheses

The research hypothesis for this study is that teachers whose belief system produces a student-centered environment, where learning is the constant and time is the variable will have students who achieve a greater degree of success and learn more. The hypothesis relative to the categorical data for this study is that teachers who teach grades Kindergarten through sixth grade will reflect more student-centered beliefs and practices. The hypothesis relative to the categorical data for this study is that teachers who have six or less years of teaching experience will reflect more student-centered beliefs and practices. Teachers who teach seventh grade and above will reflect a more teacher-centered belief system, reflective within their practices. Teachers who have more than six years of teaching experience will also reflect a more teacher-centered belief system, reflective within their practices.

The research hypothesis is directional in that it predicts a significant difference in the teacher's attitudes and beliefs. The null hypotheses is that the belief system of teachers has no effect on whether or not a student-centered environment, where learning is the constant and time is the variable, is produced.
The belief system of teachers is not dependent on years of experience in teaching and as such has no effect on whether or not a student-centered environment exists in the classroom. The belief system of teachers is not dependent on the grade level they teach and as such has no effect on whether or not a student-centered environment exists in the classroom.
Chapter Two

Literature Review

Review of Relevant Literature

The Need for More

Learning needs to be the focus within today’s schools. Teachers always teach, but do they stop to make sure that students are learning before continuing with new material? Also, what do teacher’s use to guide them in educating students? Does instruction become a mere race in completing the book? The standards have been misconceived, and instead of being used as a starting point for instruction, too often become the end-all focal point. With standards in mind, assessments should be viewed differently. Assessments should measure the depth of knowledge gained, and utilized as a means of determining the level of understanding of essential concepts for each student. Data should be collected and charted to provide insight on student learning (Jenkins, 2004). In this manner, standards could be used to help direct the instructional focus, instead of as restrictive factors for instruction, at times limiting creative and higher order thinking skills to ensure that students are ‘prepared’ for their test. McDonald
(2002) states that at times teachers are driven to meet accountability standards, but sacrifice the needs of the students. Even schools that successfully meet their requirements could have large numbers of bright students who are insufficiently challenged and at-risk students who are allowed to remain decaying at the bottom (Olson, 2005). Schools need to hold themselves accountable; guided by a rigorous set of standards that would assure the fervent growth of all students and the accelerated growth of those students performing below standards (Olson).

If a concept is important enough to teach, teachers must educate themselves in every way possible to help students remember and understand it (King-Friedrichs, 2001). Questions arise as to what makes teachers go the extra mile to assure student success and whether the grade level taught and the years of teaching experience influence the teacher in becoming more teacher-centered or student-centered?

Learning

Every student possesses a different level of skill in the learning domains. These domains are the content subjects, like reading, mathematics, and social interaction (Fischer & Rose, 2001). Their different skill levels lead to differences in performance, which can be attributed to the student’s emotional state and the amount of immediate support the student receives. Extensive research has proven that each learner’s range of development can be defined by two upper limits of performance, the functional and optimal levels (Fischer & Bidell, 1998; Fischer, Knight, & Van Parys, 1993 as cited in Fischer & Rose, 2001). Students
tend to function less skillfully when they receive a low amount of support. At this low level of support, their highest competence becomes the functional level. This is the highest they will perform in most of their everyday functioning (Fischer & Rose). These students are basically in the survival mode. Teachers can make a difference by being familiar with the individual needs of their students. Students will achieve if provided with the appropriate level of support. As educators, teachers should always strive to challenge students to meet their full potential.

**Optimization**

When students are receiving a high amount of support, they perform at their highest level, their optimal level. This is their best performance because the teacher or parent is prompting the key components of the task for them (Fischer & Rose, 2001). The optimal level develops in spurts related to growth in neural networks in the brain during certain age periods (Fischer & Rose, 1998). This in turn affects their performance. A student’s performance on a test will depend on whether the test questions prompt the key components or not (Fischer & Rose).

**Providing a High Level of Support**

Students fluctuate from optimal to functional in their understandings throughout the day depending on the level of support they are given (Fischer & Rose, 1998). The primary goal of education should be the improvement of the functional level where students are able to produce the skills on their own. Nevertheless, the optimal level is a realistic target because students can achieve it if they are given high support (Fischer & Rose). This stresses the importance
of a student-centered environment, where teachers provide support based on individual student’s needs.

**Strategies to Improve Learning**

Brain research has enormous potential to help educators in improving student learning. Five important strategies were identified to ensure students’ retention of new concepts (Squire & Kandel, 2000 as cited in King-Friedrichs, 2001). First, new learning must be connected to a student’s prior knowledge and experiences. “When students are emotionally engaged with learning, certain neurotransmitters in the brain signal to the hippocampus, a vital brain structure involved with memory, to stamp this event with extra vividness” (Cahill, 2000 as cited in King-Friedrichs, 2001). Second, the information has to have personal relevance; students must see a reason for learning. Students want to see the relationship between what they are studying, their own experiences, and how it may impact their future (Strong et al., 2001).

**Making Meaning**

Third, if the information is going to move from a students’ short-term to long-term memory, it must make sense and have meaning (Sousa, 1998). The students have to understand what they are doing, and their work must be meaningful to them (D’Arcangelo, 2001). Children come to school from all different backgrounds and with different information. It is imperative that teachers adjust the way that they teach to fit the skills the students already possess. Otherwise, students already start getting left behind, even in their first year of schooling (D’Arcangelo).
Not only is it essential that a teacher makes the information meaningful, but the teacher must develop instructional practices that provide opportunities for reflection. Both the students and the teachers need to reflect on the learning. An example is found in the teaching of Mrs. Fuglie’s 4th grade classroom (Friedrichs, 2001). This school, although set in Saudia Arabia, completely utilizes an American curriculum and resources, serving basically as an American public school in Saudia Arabia.

Students within Mrs. Fuglie’s 4th grade classroom at the Asir Academy in Khamis Mushayt, Saudi Arabia, can be seen excitedly discussing what they are doing. They are beginning to develop conceptual understandings and practicing the words and semantic cues that will assist them to later tie their memories to their experiences. After their activities are completed, students write in their journals, providing a challenge in organization and articulation for what they have just experienced. Current research in neuroscience supports the necessity to increase the “strength of connections between neurons that participate in the encoding experience” because these are the experiences that have a high likelihood of being remembered later on (Brandt, 2000 as cited in King-Friedrichs, 2001). Mrs. Fuglie can be seen moving around the room, identifying what the students understand and what she needs to reteach to correct misconceptions. Also, by reading the students’ journals, she knows where to start the next day. This feedback is critical to the learning process, and should be consistent,
specific, and timely, occurring soon after the event (Jensen, 2000; Markowitz & Jensen, 1999 as cited in King-Friedrichs, 2001).

**Elaboration**

Fourth, key concepts must be elaborated. Neuroscientist Daniel Schacter states that, “Our recollections are largely at the mercy of our elaborations” (King-Friedrichs, 2001). Teachers are faced with the challenge of making the information and skills as elaborate and deep as possible. By receiving immediate feedback, students are able to practice correct responses, making their learning of new concepts more permanent (Wolfe, 1999 as cited in King Friedrichs, 2001). When students are taken on trips to supplement what they have learned, the experience of being there immerses all of the students’ senses within an environment that builds on their understanding (Kovalik, 1997 as cited in King-Friedrichs, 2001). Emotions add the adrenaline that will make these memories important and worth retaining.

*Rehearsing and Replicating*

Fifth, students are to be taught how to rehearse retrieval cues. Squire and Kandel (2000) write of the importance of rehearsal to learning (as cited in King-Friedrichs, 2001). Also, replicated studies have shown that “cells that fire together, wire together” (Robertson, 2000 as cited in King-Friedrichs). Brain circuits that are continuously activated together become stronger; requiring less energy to activate as remembering becomes more automatic. Teachers must build into the learning retrieval cues, which can be visual, kinesthetic, musical, rhythmic, or written, that will assist the students when they need to recall the
concepts (Squire & Kandel, 2000 as cited in King-Friedrichs, 2001). Also, it is important to rehearse the cue in the context in which it will need to be recalled. Marzano (1992) states that we learn best when we need information to accomplish a goal, so a student will learn best if he or she is aware that the piece of information is needed to complete the task to come (as cited in Hardiman, 2001).

**Experiential Learning**

Brain-based research also provides more information about instructional practices. Students need to apply information in activities that require them to make decisions, investigate, conduct experiments, and solve real-world problems (Sousa, 1998). This type of experiential learning activates the area of the brain responsible for higher-order thinking. Significant chemical changes have also been shown to occur in the brains of students who have learning disabilities when they are exposed to enriched instruction, changes that indicate less exertion of effort in learning (Richards et al., 2000 as cited in Hardiman). Also, Bower (1999) declared brain efficiency improves when reinforcement of active learning occurs. This is what an education is all about, providing the most time on task with the most engaging lessons.

**The Right Strategy**

Even with a student who has attention problems like ADHD, the most effective strategy to use must have specific elements associated with usefulness, content, and design (Deschler, Ellis, & Lenz, 1996 as cited in Tannock & Martinussen, 2001). This needs to be applied across multiple settings,
addressing a frequent request and aiming for a common, but important, problem. In relation to content, the strategy should correctly and efficiently sequence steps, signal students to selecting, applying, and using appropriate skills or actions, and include only the vital steps. The effectively designed strategy that makes use of a remembering system, is simply worded, begins with action words, and also utilizes familiar words (Tannock & Martinussen).

*Learner-Centered Classrooms*

If the correct strategy is not used, problems arise when the teachers’ teaching style conflicts with students’ learning styles. More often, this results in either limited or no learning occurring (Brown, 2003). McCombs (1997) defined learner-centered as a “foundation for clarifying what is needed to create positive learning contexts to increase the likelihood that more students will experience success” (as cited in Brown, 2003, p. 50). Milambiling (2001) expanded the definition by characterizing it as context-sensitive. She emphasized the importance of the culture of the learning context and the methods used, recommending curricula that address the culture of the learner within specific learning contexts (as cited in Brown).

*Meeting the Individual Needs*

Teachers partner a command of content knowledge with flexibility to allow learners to construct their own learning. Although students are actively involved in their learning, the teacher’s expertise is still a powerful component of the learning equation (Brown, 2003). In a learner-centered classroom, students are placed in the center of the classroom organization, while focusing on the
individual learners’ “heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs” (McCombs, 1997 as cited in Brown, 2003, p. 50). This is all in an effort to get the students thinking about the content they are learning (Perkins, 1994). The specific needs and characteristics of the learner take precedence over the facts and skills, engaging the learners in learning for understanding and thinking, all in an effort to help them build their own interpretations. By differentiating instruction, the needs of all students are met.

Teacher-Centered Environments

Unlike the learner-centered approach, this approach tends to focus more on the transmission of knowledge and content rather than on student processing (Brown, 2003). It places control for learning in the hands of the teacher, with direct instruction as the predominant instructional practice. Boyer reported that only one percent of instructional time in a teacher-centered classroom is devoted to questions that invite thought-provoking responses (Perkins, 1994). Thinking becomes the primary responsibility of the teacher, they decide what they want their students to memorize, recite, and understand. Due to this, students’ performances have shown persistent misunderstandings and a need for further coaxing. Also, this does not help in developing an independent student who will succeed in the real world. The teacher may be knowledgeable in the content area, and tends to use his or her expertise to assist the learners in making connections. Unfortunately though, getting to know the individual learner and how he or she processes information, which is essential to learning, becomes a secondary concern (Brown, 2003).
Measures of Quality

Berliner (2001) stressed that ‘when teachers study one another’s lessons, visit each others’ classrooms, and present case studies about hard-to-teach students; the quality of professional growth will improve. But, McDonald (2002) explains, it is difficult to believe in children’s ability if one lacks a sense of how to work with it. Marzano (2003) poses three questions for a school to use to identify what worked and how to determine student achievement:

1. To what extent do we engage in this behavior or address this issue?
2. How much will a change in our practices on this item increase the academic achievement of students?
3. How much effort will it take to significantly change our practices regarding this issue (p. 58)?

No matter the approach, teacher-centered or learner-centered, assessment is critical in measuring the quality of programs, for it is the “balance that weighs how appropriately the teacher orchestrates learner characteristics and teaching practices” (Brown, 2003, p. 54).

Assessments

When the school environment becomes student-centered, learning will occur. This will reflect positively on assessments, which need to measure and report individual student growth. Results should be in relation to the state standards, but will also assist in instruction as well as identifying needed curriculum adjustments. (Olson, 2005). Teachers can also use this data to
evaluate their own effectiveness with individuals as well as the entire group (Olson). A system needs to be in place where data is collected to measure the effectiveness of the methods and strategies used, detailing for teachers how they provide instruction and the impact it has on student learning (Brown, 2003). Teachers are in need of supportive data to base decisions on, but by taking everything back to the needs of the students, school improvement has truly occurred (Olson). Achievement needs to be measured with more than objective tests, where students rarely construct their own learning. The data gained from these assessments can lead necessary action needed, helping to establish growth targets for each student (Olson).

Learning Tennis

Farley (2005) writes about his tennis coach, Tammy, whom he states taught him more about education than anyone he had met on his way to earning his advanced degrees in education. His goal was to master the skill of playing tennis because he perceived anything sports related as difficult and something he was incapable of doing. This is similar to some of our students with standardized testing, especially since the focus on them has become so heightened in the past few years. Tammy was a remarkable teacher because; “She modeled. She guided. She carefully observed. She created a safe learning environment, praised the slightest improvement and withheld judgment. She also watched me become a decent tennis player” (Farley, 2005, p. 27).

Suggestions Farley gives for the best student experiences include what most research has been reporting. There is a need for the teacher to provide the
best instructional practices, material that challenges the students, assure the availability of necessary resources, and assign homework and learning that are relevant and meaningful (Farley, 2005). Most importantly Farley states, “I believe that my teacher/coach believed that I could perform” (Farley, p. 27). The focus of instruction was always on him, and not merely the tennis instruction, which made him succeed at playing tennis. If the focus within the classrooms becomes the students, they will also succeed.

*Drive Theory*

Robert Marzano’s drive theory proposes that people are either success oriented or failure avoidant (as cited in Farley, 2005). Questions arise as to what the role of the teacher is in this development. If the classroom environment becomes focused on the needs of the students and their achievements, instead of content to teach, what opportunities are teachers opening up for students, especially those who are poor or minorities? Tammy instilled within her student, who was unsure of his abilities, that she believed he could succeed, and in turn he persevered until he did succeed. What a gift students are given when adults actually, with all of their hearts, believe in them and focus on what will make them succeed.

*Wisdom*

All teachers, whether effective or ineffective, begin teaching with a desire to make a difference in a child’s life. These are the teachers one remembers and wants to grow up to be like. They are the wise teachers, being distinguished as those who show true excitement about their student’s thinking and the meaning
they make of the curriculum, for they are willing to make discoveries with their students, and have a sense of what is important and what is not (Arlin, 1999). Their beliefs resonate into their actions. They are renowned for their willingness to:

- risk pushing the boundaries of their practice and to become actively involved with their students in learning – their comfort with uncertainty and their awareness of relativism and context – that moves some teachers beyond expertise and earns them the distinction of wisdom (Towers & Porath, 2001, p. 204).

**Findings on Wisdom**

Current research suggests that there is more to a wise teacher than intelligence (Towers & Porath, 2001). Baltes and Staudinger’s (2000) research affirms this, demonstrating that intelligence on its own does not predict wisdom. What is needed is interplay between three factors: intelligence, a personality that is open to experiences and personal growth, and psychological mindedness (as cited in Towers & Porath). Also, there exists no relationship between age and wisdom. Therefore, just because a teacher may be older, does not mean that he or she is automatically wiser. A young teacher may be wise if he or she possesses the three factors. Experience only contributes if the teacher is intelligent and has a good personality to begin with. A student is fortunate to have a wise teacher, as Albom states,

*Have you ever really had a teacher? One who saw you as a raw but precious thing, a jewel that, with wisdom, could be polished to a proud*
shine? If you are lucky enough to find your way to such teachers, you will always find your way back (Albom, 1997 as cited in Towers & Porath, 2001, p. 206).

**Sustaining Success**

Once a school succeeds, maintaining that growth year after year becomes the challenge. In a study involving low-performing schools in California’s academic reform program, only 83 out of the 430 schools were able to sustain growth for two consecutive years (Chrisman, 2005). Seventy-four of the schools showed no growth, and 273 had shown growth for only one of the two years. The schools in the study were compared using three criteria: analysis of test scores and school characteristics, interview responses from four teachers and the principal of eight sample schools, four from each group, and questionnaire responses from the 356 principals whose schools showed growth in at least one of the two years of the reform program (Chrisman).

**Factors behind Success**

When examining the characteristics of schools, the successful schools actually had increased levels of student mobility, a smaller percentage of fully credentialed teachers, and tended to be larger than the unsuccessful schools (Chrisman, 2005). This is not to suggest that schools should promote increased student mobility, uncredentialed teachers, or a greater number of students to improve achievement. The study illustrates that the success was not based on the specific characteristics of the school nor the qualities of the students, but instead it was directly related to the quality of the leadership and the
effectiveness of the instructional programs and practices, how well they were focused on the specific needs of the students within the schools (Chrisman).

*Empowering Teachers*

In each of the four successful sample schools, strong teacher leadership was prevalent (Chrisman, 2005). They were given abundant opportunities to make decisions about teaching and learning. These teachers were also given time to meet as grade-level or subject-matter teams, with this time regularly used to review student work and progress, discussing how to strengthen their classroom instruction to better meet the needs of their students (Chrisman). Teachers also engaged in various forms of action research, using the students’ assessments to compare different instructional strategies and classroom environments to identify which strategies and environments truly encouraged student learning (Chrisman). By identifying these factors, they were able to create a continual improvement cycle for their instruction.

*Practice into Action*

Teachers also developed their own internal leadership structures, like team teaching, providing mentors for new teachers, and collaborating about lessons to serve as a support system for one another in assuring student achievement (Chrisman, 2005). Taking it a step further, these teachers also designed student intervention programs, like student learning groups, based on the skill weaknesses of the individual students. When deciding on professional development, teachers analyzed student data to determine where students needed academic support. Teachers within the successful schools spent
between one and four hours weekly both informally, during lunch or after school, as well as in formal weekly planning meetings, where they shared student assessment data, analyzed student work, and monitored their own progress in teaching the state standards. Teachers were even willing to alter their pacing calendars when their students were grasping new concepts either more quickly or more slowly than they had anticipated (Chrisman).

“All Students Can Learn…”

These alterations with the calendar, along with other modifications, are done in the best interest of the students, to make sure all students are learning. Unfortunately, a disparity exists in academic motivation and performance between underachievers and more advanced students (O’Neil, 2001). In a research project, where surveys and interviews with parents, students, teachers, and administrators were conducted to identify practices of teachers in assuring student success, one teacher explains the difference in philosophy. “My philosophy is that ‘All students can learn,’ not ‘All students can learn, but…’ The key is giving them enough time and support” (Corbett et al., 2005, p. 8).

Identical Practices, Differing Results

However, not all of the colleagues agreed, citing too much ‘hand-holding,’ lack of parental support, and dwindling student motivation as factors hindering student learning. Visiting different classrooms, the researchers identified teachers using identical best practices, like cooperative groups, checking for understanding, hands-on activities, and connecting new information to prior knowledge, but with contradictory results. The difference was found more within
the teachers’ attitudes than from any particular instructional method. The succeeding students had teachers who held them accountable for their actions, but refused to let them fail (Corbett et al., 2005).

*Nothing Less than Success*

Ballinger (2000) writes that ensuring failure is educational malpractice, not what professional educators should be about. He discusses the use of non-traditional methods like changing the school calendar, what some may see as drastic, to make more effective use of time so that student learning will be enhanced. Mrs. Franklin, an African American veteran 6th grade teacher who taught within a school whose student population was mostly minority students says,

> We don’t have any kids who cannot do it. They have been allowed to get away with it. I believe they will perform well if they know I am concerned about what they do. I do think we have a group that someone has given up on. It is real easy not to expect much. That bothers me. We’ve given them an excuse to not do well. One of my major things is, (even if a student is) learning-disabled or severely handicapped, in here, ‘we’ is all of us. You will do 25 problems (the full assignment), but you may need more help to do it. Kids aren’t the problem; adults are the ones finding the excuses. (Corbett et al., 2005, p. 9)

Mrs. Franklin’s grading policy was based on the idea that she did not ‘give’ grades, but instead students earned them. Any assignment receiving a grade lower than a C had to be done over. Her students, rather than resenting this
idea, actually appreciated it, for they knew it was for their benefit, putting the responsibility of passing directly on them.

My teacher never let people settle for D or E; she don’t let people get away with it. She give us an education. Other teachers don’t care what you do. They pass you to be passing. Here, I pass my own self. (Corbett et al., 2005, p. 10)

Knowing the Student

Another teacher, Miss Behrens, who had been teaching for less than five years, taught English in a large urban high school whose student body was approximately 50 percent minority (Corbett et al., 2005). She often worried about how to engage students into the learning, especially those who seemed to be detached from school. Although she had a more low-key personality than Mrs. Franklin, she was no less passionate, making use of diverse instructional strategies. However, it was her never let-up attitude that united their strategies. She emphasized active learning in groups and the importance of the meaningfulness of what was being learned, connecting classroom content to the lives of her students.

I believe in the student-directed classroom. Curriculum must be related to students’ own lives. They must be given the opportunity to make choices and participate in meaningful activities. When we studied Julius Caesar, the students could elect to portray meaning through art, a play, or a paper. For Othello, I asked them to write about a time when they were jealous or translate a passage from Shakespeare into Ebonics. Kids can prove
they’ve understood in different ways. I need to know what motivates and interests them. (Corbett et al., 2005, p. 11)

The students truly appreciated her efforts in making learning relevant and active, as one student says, “If you have fun, you are more likely to remember the material” (Corbett et al., 2005, p. 11).

The study clarifies that claims cannot be made that Mrs. Franklin’s and Miss Behrens’s students tested better than those in other classrooms observed, for they were going off students’ testimonials and the fact that none of them received D’s or F’s on any assignments in the two classes. But, these two teachers truly exemplified that best practices alone were not enough, “effective teaching meant giving students no other choice but success” (Corbett et al., 2005, p. 12).

*Individualized Education for Everyone*

The guiding philosophy behind student-centered is that all students can learn when given the opportunity, including special education students. The premise behind inclusion is that students are to be educated with their peers in the least-restrictive environment for as much of the day as possible (Merritt, 2001). The decision in putting the student in the general education classroom should be based on the individual student’s abilities and where he or she will most likely succeed, providing any needed support. The individualized education program (IEP) should clearly state and make available everything the student needs to assure a successful placement, as well as the support, services, and the time recommended for each support and service. Inclusion is individualized,
looking different for every student. In describing the benefits to all students, the author relates:

I also learned that checking for understanding helps all students; that accommodations made for one child can benefit others as well; that the little victories count; and that every student deserves the chance to be in a general education classroom for at least part of the day. (Merritt, 2001, p. 69)

**Involving the Student**

Schools need to assure that students with disabilities are aware of their program. IEPs should be clearly discussed with the student, for he or she has a great deal of knowledge about their special needs, but at times the student does not know that they know (Zickel & Arnold, 2001). When the students’ input is not sought, or they are not part of the program, the student begins to believe that the program is not useful to them, for it did not involve them, being left with no sense of ownership. Also, this sends the message that others, teachers and parents in particular, must take care of the students’ problems. Students need to feel like they have ownership and a sense of independence to be able to succeed in their future endeavors. When this occurs students will take responsibility for their own learning and success. This is what educators strive to instill within all students, the individual responsibility and desire to learn and succeed.

**Empowering Students**

Students are expected to reflect on their strengths and weaknesses at Montclair Elementary, a multiple-intelligence theme school located in Virginia.
Staff members also help students in creating their own cognitive profiles, teaching the student how to analyze the situation and make good decisions in light of their strengths, needs, and comfort levels, becoming their own advocate.

It is imperative that the passive program recipient becomes an actively involved learner who is able to write personal goals and work towards them (Zickel & Arnold).

**Succeeding with Bobby**

Educator Elizabeth Zylstra (2001) writes about her experiences with an autistic boy named Bobby. She began the year hesitant about having Bobby in her second grade classroom after the horror stories she had heard about his first grade experiences. At the end of the year, she describes what a joy the year ended up being and the great sense of fulfillment she felt because she changed her approach to assure that the individualized needs of Bobby had been met. Everything took place to assure his learning.

**Individualized Practices**

Routines and repetition, structured activities, and numerous opportunities to practice skills were provided (Whelan & Walker, 1999 as cited in Zylstra, 2001). Also, she collaborated with the school’s learning assistance and special education program teams to create meaningful activities customized to meet Bobby’s learning needs. Bobby felt secure in the classroom and was not overwhelmed with distractions like excessive noise or commotion, and therefore was able to challenge himself and perform many of the same activities as the other students. Eventually, Bobby was able to learn how to speak in complete
sentences, gaining an increased awareness of the world around him (Zylstra).
Imagine the difference Zylstra has made in his education and his life. He will never forget her.

More than a Learning Disability

A common problem teachers have in dealing with English for Speakers of Other Languages students (ESOL) is either referring too many students into special education services, or too few, with difficulties arising in the differentiation of ESOL issues and learning problems (Abrams, Ferguson, & Laud, 2001). Formal testing is inadequate at times (Cummins, 1984 as cited in Abrams, Ferguson, & Laud, 2001), and to solve this problem, teachers are advocating for the collection of more information on the whole child’s experiences in an effort to consider as many factors as possible in the child’s learning environment.

Issues Faced by ESOL Students

Although some ESOL students who have difficulty with reading and writing did have learning disabilities, a majority just needed a more structured learning environment with organizers like semantic maps (Gersten, 1999). Others who were fluent in their native languages, but who might have suffered from decoding and spelling difficulties, only needed more direct instruction in phonetic awareness and spelling to succeed. Still other students had psychological issues that impeded progress, like having just arrived from a war-torn area, or having to have left loved ones behind in home countries, but with counseling, these students were able to exit the program and have made solid progress (Abrams et al., 2001).
Collaboration for Individualized Support

If an ESOL student has a learning disability, he or she will need individualized support (Abrams et al., 2001). If the student does not have a learning disability, the learning problems will not persist, but the student will need time to develop further language proficiency. Researchers recommend greater collaboration between the ESOL and special education teachers to assure proper diagnosis and intervention (Board of Education of the City of New York, 1994; Brice & Roseberry-McKibbin, 1999; Rosa-Lugo & Fradd, 2000 as cited in Abrams et al.). Increased collaboration between teachers does not only help the ESOL or special needs children; it helps all children. The focus becomes the students instead of just the material to be taught. Teachers join forces to assure that the individualized needs of the students are being met.

Meeting the Needs of the Gifted

Like the ESOL student, many preconceptions block a teachers’ ability to teach the gifted child (Callahan, 2001). Teachers have also failed to recommend children from diverse populations in the numbers they truly represent within the population (Smith, 1998 as cited in Gould, Thorpe, & Weeks, 2001). The old concept of giftedness, applied to only one kind of learner, has been done away with, and now multiple talents are recognized. Some gifted students are advanced learners in several subjects, and may achieve above grade level on standardized testing. Others may demonstrate giftedness in a single area, like creative writing or advanced mathematical reasoning, but not in others. New concepts of intelligence, like that of Gardner, do not limit talent to traditional
school disciplines. Sternberg (1986) describes still other talents, like creative intelligence, where students are able to develop innovative ideas to extend the subject matter, or to create new methods of challenging traditional interpretations (as cited in Callahan, 2001).

Addressing the Needs

All gifted learners show advanced understanding or the ability to learn at a more rapid rate. These students also have different interests, learning styles, and things that motivate them. The teacher’s challenge becomes how to hook the learner through interesting and personally relevant learning without under or overestimating the learner. All students, whether gifted or not, will live up to the established expectations of them. “It is far better to err by setting high expectations and see students’ talents emerge than to set low expectations and never give students the occasion to excel” (Callahan, 2001, p. 43). Teachers need to conduct continuous assessments for students who are achieving above grade level to ensure that those students continue to learn new content, or familiar content with greater depth and complexity. By challenging the gifted stereotype, through assuring continual assessments and creative instructional strategies, classrooms will be able to address the learning needs of all students, including the many types of talents gifted learners possess (Callahan).

Conclusion

In the teacher-centered environment, teachers work alone or in disjointed groups to attempt to make sense of curriculum changes due to standards or legislation. Commitment cannot be seen from the top down or bottom up.
Teachers tend to “follow the waves rather than charter courses” (Brown, 2003, p. 54), feeling overwhelmed by the magnitude of the students’ problems (Haycock, 2003). A commitment must be made to reflect, create thinking-centered learning, and continuously assess the quality of the instructional program. A teacher must know how the students think and why they struggle. Schools need standards that keep the focus on achievement, but also the time and flexibility to pay attention to the individuals in their classroom (Strong et al., 2001).

The review of relevant literature provided fundamental background information, which further justified the need for this study. The literature also stressed the need for research in this area. Many studies have confirmed that student-centered and teacher-centered environments do exist. However, only a few studies were found which sought to identify the impact of both on learning. A review of the relevant literature also revealed that there was presently no adequate study on the impact of grade level taught or years of teaching experience on the development of a student-centered learning environment.

After this review of relevant literature, questions still arise regarding how to assure student-centered teachers are found within a school, and if they are not, how to foster their development. Also, as a future administrator, how does one approach a teacher whose beliefs and practices tend to be teacher-centered and assist him or her into focusing more on the needs of the students? This topic is crucial to the success of every school, for when the school’s focus becomes the students instead of the material taught, everyone will work, hand in hand, to do whatever it takes to assure the individual needs of the students are met.
Chapter Three

Methods

Sample Population

The ultimate target population of this research was K – 12 classroom teachers. However, due to sampling constraints, generalization to that population was not possible. The sampling constraints resulted because of a limited accessible population. The accessible population consisted of two Northwest Ohio districts, one being a large urban district and the other was a midsized suburban district. A non-random convenience sample was developed from those teachers in the two districts that chose to return the survey instrument used in this study. The teachers were asked to respond to several queries relative to their characteristics, i.e. grade level taught and years of teaching experience. Therefore, the external generalizability is limited.

To assure compliance with the laws stated in the Family Education Rights and Privacy Act (FERPA) of 1974 and the Committee on Scientific and Professional Ethics of the American Psychological Association (APA), the
following safeguards were set in place to ensure the ethical treatment of all participants. First, this project was without the possibility of harm or danger to participants. Seconds, the teachers who participated faced no risk due to the anonymity of the instrument. Third, everything was done to ensure ethical practices throughout the research. All of the results received were reported as well as the limitations to the research. Fourth, all teachers knew that their participation was voluntary, and all results were reported anonymously. Fifth, the researcher clearly and personally communicated to the principals of the different schools that any teacher had the right to decline participation. Sixth, participating in the research involved filling out a survey, which could in no way cause any physical or mental discomfort, harm or danger. Seventh, which is also due to the nature of the study, no undesirable consequences to the individual could occur because of the anonymity of the process. Last, since there are no connections between the individual and their results, there would be no issues of confidentiality.

Instrumentation

The purpose of the instrument was to collect data concerning the beliefs of current teachers based on the grade level taught and the years of teaching experience. The instrument used for this research study is the Staff survey created by the Education for the Future, originally found in the book by Dr. Victoria L Bernhardt entitled Data Analysis for Continuous School Improvement (1998). The final copy of the survey was retrieved by permission electronically from the website http://eff.csuchico.edu/books/. See Appendix B for permission
letters. The researcher included two short answer questions to provide an additional area where teachers would be able to elaborate more on their thoughts. The instrument was selected because it measures the dependent variable of this research. *Education for the Future* states that the items on the questionnaire were created from “research about student learning and what students, teachers, and parents tell us have to be in place in order for students to learn” (Education, 2005, p. 4).

The instrument contained 63 items. All sections, with the exception of the short answer section, used a 5-point Likert scale scoring method, with answers varying from ‘strongly disagree,’ ‘disagree,’ ‘neutral,’ ‘agree,’ and ‘strongly agree.’ This type of instrument was used as an evaluative piece of teacher’s beliefs and how that played out in their actions. In addition to demographic data, grade level taught and years of teaching experience, teachers were also asked to respond to questions in numerous areas. The categories stated related to how they felt about their school, their relationship with colleagues and administrators, opportunities for development within the school, beliefs for increasing student achievement, what they love, whom they work effectively with, perceptions of morale, and personal reflections.

Other relevant details are that the current instrument is a modification of the original, varying the short answer questions in an effort to direct the teachers to the focus of the study. Teachers were asked to respond to two short answer questions: “Do you feel like a student-centered classroom or school environment is important, i.e. where the focus is on student learning instead of material
taught? Why or why not?” and “In what ways can a student-centered atmosphere be fostered?” Even with this revision, the original conception was not altered.

Due to the survey being one that was produced by an outside agency, the reliability of the measurements was difficult to locate. No reports were found after an extensive search through the Mental Measurements Yearbook, Tests in Print, and ERIC. This was surprising because this survey is administered nationwide. The only reliability quotients to report were obtained from the Education for the Future Initiative, the organization that originally developed the instrument. They reported a 0.86 reliability quotient for the staff survey (Education, 2005).

Design

A causal-comparative research design was used to collect descriptive and qualitative data so as to compare the causes or consequences of differences in belief systems and actions that exist between groups of teachers. The research would be considered ex post facto because the effects and the causes have already occurred, and in turn are being studied in retrospect. The variables studied were not manipulated. A cross-sectional survey will be used to collect information from the sample population during one time period. This type of survey is useful when the sample population is dispersed over a large geographical area. Tentative conclusions, as this will be an exploratory study, reflecting current experiences and practices, will be drawn from this type of survey. Teaching methodologies or experiences occurring earlier than the
previous year are not specifically reflected in the responses and their impact may or may not be reflected in the responses as well. A weakness of a survey research design is that different inferences may be drawn from future research studies due to changes in school organization, teaching assignments, instructional methodologies, and professional development activities that occur after completion of the survey.

An alpha level of 0.05 was selected due to the dynamic nature of teacher beliefs and attitudes on student learning. Unexpected or unaccounted for experiences could affect the overall experience. The Type I error of rejecting a true null hypothesis is better avoided in this study than a Type II error of rejecting a false null hypothesis. A 5% chance of not rejecting a false null hypothesis will not have a significant effect on the performance outcomes of the instrument.

**Threats to Validity**

The most common and serious limitation to a causal-comparative study is the lack of control over threats to internal validity. This occurs because the independent variable has already been manipulated. As with any causal-comparative study, considerable caution must be taken when interpreting the outcomes of the study. Relationships may be identified, but causation cannot be fully established.

Two additional weaknesses exist when conducting causal-comparative research: lack of randomization and the inability to manipulate an independent variable. Random assignment of subjects to groups is not possible because the
groups are already formed without the input or direction of the researcher, i.e. the grade level taught and the years of teaching experience. Also, manipulation of the independent variable is not possible because the researcher did not dictate the learning environments that were created by the teachers.

Another threat, which could be avoided, is instrument decay. Instrument decay is defined as “changes in instrumentation over time that may affect the internal validity of a study” (Fraenkel & Wallen, 2003, p. G-4). To avoid this, the researcher made sure that all instruments used were carefully examined and any alterations found were corrected.

Mortality, defined as “the possibility that results are due to the fact that subjects who are for whatever reason ‘lost’ to a study may differ from those who remain so that their absence has an important effect on the results of the study” (Fraenkel & Wallen, 2003, p. G-5) was also avoided. The only solution was to make every effort to get the cooperation from all subjects within the groups. All principals were personally contacted and were very supportive of the study. Also, every teacher within the schools was provided with a survey, giving everyone an equal opportunity to participate.

Statistics

The instrument that was administered had a total of 63 statements and 2 short answer questions. Due to the large number of variables that were seen throughout the statements for this single study, a need arose to reduce the number of variables by grouping those that were moderately or highly correlated with one another into factors. This technique allowed the researcher to
determine if many of the variables could be described by a few factors. The mathematical calculations in this technique involve a search for the key clusters or variables that are the most strongly correlated to each other. Each cluster then becomes representative of a factor.

A correlation was also undertaken to determine if a relationship existed between the grade level taught and the years of teaching experience in relation to whether a teacher was more student or teacher-centered. A correlation coefficient, designated as $r$, was figured to express the degree of relationship (Fraenkel & Wallen, 2003). A positive relationship occurs when high scores on one variable are accompanied by high scores on the other. For example, if a teacher answered the questions relating with collaboration with 4’s or 5’s, then that would illustrate that teacher’s strength in one component out of seven that relate to student-centered learning.

Assumptions, Limitations, and Delimitations

The first assumption made for this study is that responses provided by teachers will honestly reflect their true beliefs. The researcher also assumed that the terms that were used were clear. The instrument used was selected for its simplicity in terminology. Another assumption was that the sample size was appropriate. A fourth assumption is that the measurements are accurate. This could be a limitation because of inaccuracy. A fifth assumption was that the subjects answered each of the questions to the best of their ability. Last, it was assumed that the instrument used to measure student-centeredness would render reliable and valid results.
A limitation of the study was the assumption that the teachers would respond honestly. This may not have been met. Also, not all teachers were able to take the test at the same time and under identical conditions. Another limitation was the percentage of return for the survey due to only receiving about one-third of the distributed surveys. These respondents could have been only those people who were interested or concerned about the topic. This led to the non-generalizability of the results.

This study was delimited in numerous ways. First, the target population was composed of only teachers within two northwest Ohio districts. This target population was obtained from teachers who taught grades K through 12. The researcher did not develop the testing instrument used in the study, but it was used because it is administered nationally, and the questions met the needs of the research. The testing instrument was delivered to every teacher, giving everyone who chose to, the opportunity to participate. Participation was done on a voluntary basis. Principals from local schools were contacted, and those of them that chose to participate, administered the surveys to the teachers in their buildings. There were no ramifications for not participating.

Summary

The procedures for conducting this investigation were established by using several logical steps in the research process. The first step was to select an instrument that assisted in assessing whether a teacher tended to be more student-centered or teacher-centered. Permission was then sought from the publishers to use the instrument. The next step was to select a population to
study. The researcher contacted several principals of local schools to inquire about the possibility of having their teachers participate in this study. Five schools were available, including The University of Toledo (UT), which opened up opportunities to survey a wider array of teachers. Each teacher from UT represented one of 19 different schools. The instrument was delivered to all of the principals, who then administered it to their teachers. The researcher personally administered the surveys to the students at UT. The responses were then examined for improper marking or omissions. The responses that were incorrectly marked were removed from the sample because the respondent had omitted critical information relevant to the grade level taught and the years of teaching experience. The final sample consisted of 75 teachers. The surveys were submitted to The University of Toledo Accounting Department for data tabulation and analysis.
Chapter Four

Analysis and Results

This investigation was conducted in order to determine if the prevalence of student centered learning beliefs and practices were affected by the grade level taught or the years of teaching experience of K – 12 teachers within five groups of Northwest Ohio schools. The Education for the Future staff survey was given to 300 K – 12 teachers. Ninety-five teachers returned their surveys. Not all instruments were filled out properly; some teachers did not indicate the grade level taught or the years of teaching experience. Since this project uses those two descriptors to categorize the respondents, the twenty incomplete surveys had to be discarded.

The data in this study were analyzed by computer at the Accounting Department at The University of Toledo, in Toledo, Ohio. The objectives of the statistical analysis were to determine two things. One, the researcher wanted to examine the effect of the grade level taught and the years of teaching experience on the beliefs and practices of teachers, and if the impact of either made them more teacher or student-centered. Second, the researcher wanted to determine
if there were any significant differences in the mean scores of the two groups, teachers who either taught grade levels K – 6 and 7-12, and those who taught for less than six years or seven years or greater.

Spearman-Brown Prophecy Formula, Kurtosis, factor analysis, correlations, covariance, and validity were computed for the purposes of supporting the assumption of reliability and validity. The Spearman-Brown Prophecy Formula was used to determine correlations between the data and to establish reliability. A Kurtosis test was done to measure the extent in which the questions asked clustered around the seven main concepts that were used to differentiate between a student-centered and teacher-centered classroom.

A factor analysis was also carried out to identify the principal components within the survey, again to assure that the questions clustered around the seven concepts and to identify the significant relationships among the data. This was also done to help explain the pattern of correlations within a set of observed variables. Also, because the survey was long, consisting of 65 questions, a factor analysis was used to reduce the data to identify a small number of factors that explain the variance. A correlation matrix was used because the variables in the analysis were measured on different scales. A covariance matrix was also useful because the researcher wanted to apply the factor analysis to multiple grounds with different variances for each variable.

Due to the survey being one that was produced by an outside agency, the reliability of the measurements was difficult to locate. No reports were found after an extensive search through the Mental Measurements Yearbook, Tests in
Print, and ERIC. This was surprising because this survey is administered nationwide. The only reliability quotients to report were obtained from the *Education for the Future Initiative*, the organization that originally developed the instrument. They reported a .86 reliability quotient for the staff survey (Education, 2005).

**Descriptive statistics**

Means, variances, percentages, percentiles, and standard deviations were also computed for the purpose of making comparisons within the sample. A t-test for the significance of differences between means, utilizing the critical value of t, was computed for each of the comparisons. The level of significance for rejecting the null hypothesis was set at 0.05.

The total population of 75 teachers in Northwest Ohio consisted of 24 teachers who taught grades K-6, 3 who taught grades 7-8, and 48 teachers who taught grades 9-12. Within the sample there were also 31 teachers who had 6 or fewer years of teaching experience and 44 that had more than 7 years of teaching experience. This break up of teachers allowed for a comparative analysis of the teacher’s beliefs and practices based upon how strongly they agreed or disagreed with the provided statements.

Table 1 lists the numbers of responses from teachers based on the years of teaching experience. This data was gathered directly from the survey instrument, and was critical to the research. Twenty teachers did not respond to the grade level taught or the years of teaching experience. These teachers were not included in the analysis or the following depictions of the data.
Table 1

*Breakdown of responses from teachers by years of teaching experience*

<table>
<thead>
<tr>
<th>Years of Teaching Experience</th>
<th>No. of Teachers</th>
<th>%</th>
<th>Greater than 6 years</th>
<th>No. of Teachers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 6 years</td>
<td>31</td>
<td>41</td>
<td>44</td>
<td>59</td>
<td>20</td>
</tr>
</tbody>
</table>

Thirty-three out of the total of 44 teachers who had more than 7 years of teaching experience actually had 11 or more years. This was approximately 44% of the total sample with over 11 or more years of teaching experience. A greater number of the teachers had more than seven years of teaching experience.

Figure 1: *Number of responses from teachers at each category of experience*

This difference in experience levels was ideal to show if the years of teaching experience really did affect whether the teacher was more student or teacher-centered. The percentage of responses was calculated using 75 as the total number of teachers. Approximately 60% of the teachers had more than 7 years of teaching experience. This was in contrast to the 41% of teachers who...
had 0–6 years of experience. A first year teacher would be categorized as having 0 years of teaching experience.

Figure 2: Percentage of responses from teachers at each category of experience

Almost 59% of the sample had greater than 7 years of teaching experience. This was in contrast to the mere 41% of the teachers who had less than seven years of teaching experience. There was also a large difference in the teachers depending on the grade level taught.

Table 2
Breakdown of responses from teachers by grade level taught

<table>
<thead>
<tr>
<th>Grade Level Taught</th>
<th>%</th>
<th>7th Grade and Above</th>
<th>%</th>
<th>No response</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–6th Grade</td>
<td>24</td>
<td>51</td>
<td>68</td>
<td>20</td>
</tr>
</tbody>
</table>

There were a greater number of teachers who taught grades 7 and above. In actuality, there were approximately 48 teachers, who were high school teachers, providing instruction for students in grades 9 through 12. Only 3 of the
total teachers sampled identified themselves as middle school teachers, teaching grades 7 – 8.

Figure 3: *Number of responses from teachers by grade level taught*

A greater percentage of the teachers were teachers in middle school and high school. The elementary teachers represented a smaller portion of the total sample of teachers.

Figure 4: *Percentage of responses from teachers by grade level taught*
Using the staff survey developed by the *Education for the Future*, the researcher identified 28 multiple choice and 2 short answer questions that related to a student-centered learning environment. Due to the nature of the questions, statistical analysis was only done on the 28 multiple-choice questions. Qualitative coding was done for the 2 short answer questions. Listed below are the questions that were representative of the key concepts that led to a student-centered classroom and teaching practices.

Collaboration was identified throughout the literature as a precursor to student-centered learning. Teachers who came together to discuss students were able to meet their individual needs and work together to assure the success of their students. The selected questions asked the teachers to reflect on the extent to which they felt that their opinions were listened to and how important shared decision-making was within their school.

Table 3a

*Questions corresponding to collaboration*

<table>
<thead>
<tr>
<th>Key Concept</th>
<th>#</th>
<th>Corresponding Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>10</td>
<td>I work with people who listen if I have ideas about doing things better</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>My administrators support shared decision making</td>
</tr>
</tbody>
</table>

Individualization was another key concept. Student-centered teachers were not only familiar with the material that their students needed to master, but they also were aware of the best way to instruct and meet the individual needs of
each student. This was a priority for them, something they viewed as critical to educating their students. Individualization was the driving force behind their actions and served as the basis for support services.

Table 3b
Questions corresponding to individualization

<table>
<thead>
<tr>
<th>Key Concept</th>
<th>#</th>
<th>Corresponding Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individualization</td>
<td>20</td>
<td>I believe student achievement can increase through differentiating instruction</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>I believe student achievement can increase through the use of varied technologies</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>I believe student achievement can increase through addressing student learning styles</td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>I believe every student can learn</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>I believe this school provides an atmosphere where every student can succeed</td>
</tr>
<tr>
<td></td>
<td>48</td>
<td>I work effectively with special education students</td>
</tr>
<tr>
<td></td>
<td>49</td>
<td>I work effectively with English learners</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>I work effectively with ethnically / racially diverse students</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>I work effectively with students who live in poverty</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>I work effectively with low-achieving students</td>
</tr>
</tbody>
</table>

Relevance of content was another key component for student-centered teachers. Achievement improves when students understand why it is the
information they are learning is important. Some of the statements within the survey corresponded to the state standards. For their students to be successful, students must master these concepts. Both student-centered and teacher-centered teachers must use these as springboards for instruction, as minimum standards for achievement. Teacher-centered teachers tend to use the standards as the end all for instruction, and may look at education as teaching to the test.

Table 3c
Questions corresponding to relevance of content

<table>
<thead>
<tr>
<th>Key Concept</th>
<th>#</th>
<th>Corresponding Question</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22</td>
<td>I believe student achievement can increase through integrating instruction across the curriculum</td>
</tr>
<tr>
<td>Relevance of Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>I believe student achievement can increase through teaching to state standards</td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>Student outcomes for my class(es) are clear to me</td>
</tr>
<tr>
<td></td>
<td>58</td>
<td>Student outcomes for my class(es) are clear to my students</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>I know the state standards</td>
</tr>
<tr>
<td></td>
<td>61</td>
<td>I teach to the state standards</td>
</tr>
</tbody>
</table>

The use of ongoing assessments to assure the progress of students was another key concept used to identify student-centered learning. Assessments were to be given continuously throughout the year to assure that the material had
been mastered. If the material had not been mastered, a student-centered teacher would find other means to differentiate instruction so that the students learned the concepts. In essence, the assessments would be used to evaluate progression on the content material and as a means of ensuring student learning. Assessments would be used to provide the data that would drive decision-making.

Table 3d

*Questions corresponding to assessments*

<table>
<thead>
<tr>
<th>Key Concept</th>
<th>#</th>
<th>Corresponding Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessments</td>
<td>30</td>
<td>I believe student achievement can increase through using ongoing student assessments related to state standards</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>I believe student achievement can increase through self-assessments</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>I believe student achievement can increase through teacher use of student achievement data</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>I love seeing the results of my work with students</td>
</tr>
</tbody>
</table>

High expectations were another key concept that led to student-centered teaching. These expectations need to be weaved throughout the district philosophy and for all children. From the vision, to the mission statement, all stakeholders should know what the expectations are and strive to achieve them. Instructional practices should provide sufficient challenges to the students, which enable them to excel. These expectations should be held for all students,
whether able-bodied, special needs, gifted, or ESOL. With high expectations, students have a goal to meet, and celebrations need to occur when their goals are reached.

Table 3e

*Questions corresponding to high expectations*

<table>
<thead>
<tr>
<th>Key Concept</th>
<th>#</th>
<th>Corresponding Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Expectations</td>
<td>36</td>
<td>I believe the instructional program at this school is challenging</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>I believe quality work is expected of all students at this school</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>I believe the vision for this school is clear</td>
</tr>
</tbody>
</table>

Interpersonal relationships are not only key to student-centeredness, but are also critical to the school climate. Teachers were asked to respond to statements concerning how they felt people they worked with felt about them. However, the relationships between the staff are not the only ones of importance. Students need to feel like their teachers and classmates also care about them. When this occurs, students are able to excel without peer or social pressures.

Table 3f

*Questions corresponding to interpersonal relationships*

<table>
<thead>
<tr>
<th>Key Concept</th>
<th>#</th>
<th>Corresponding Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Relationships</td>
<td>2</td>
<td>I feel that the staff cares about me</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>I work with people who treat me with respect</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>I believe student achievement can increase through close personal relationships between students and teachers</td>
</tr>
</tbody>
</table>
The last identified concept was meaningfulness. This concept was not depicted on the survey. The researcher added two short answer questions that provided the teachers with a section to reflect. As was anticipated by the researcher, the meaningfulness of the curriculum was identified by many of the teachers as a way to foster student-centered learning.

Table 3g

*Questions corresponding to meaningfulness*

<table>
<thead>
<tr>
<th>Key Concept</th>
<th>#</th>
<th>Corresponding Question</th>
</tr>
</thead>
</table>
| Meaningfulness | SA 1 | Do you feel like a student-centered classroom or school environment is important, i.e. where the focus is on student learning instead of material taught?  
|              |      | Why or why not?                                                                         |
|              | SA 2 | In what ways can a student-centered atmosphere be fostered?                           |

*Inferential statistics*

After examining the responses, a factor analysis was conducted to analyze the correlation of the seven identified key concepts with the significant statements. Out of the 63 multiple choices statements, 28 of the items had been identified as representative of student-centered learning. Thirteen, or 46%, of those 28 items were identified as significant. Statement 15 was counted twice because it was both significant for grade level taught and years of teaching experience.
A copy of the instrument may be found in Appendix C. The two short answer questions, which asked for a more reflective and extended response, were examined separately. Since these questions were optional, not all of the respondents answered both the multiple choice and the short answer questions. Table 4 lists the significant concepts, the category to which they were significant, whether grade level taught or years of teaching experiences, as well as their level of significance.

Table 4

*Correlation of key concepts and significant questions*

<table>
<thead>
<tr>
<th>Key Concept</th>
<th>Area Correlating Statements</th>
<th>Robust Significance</th>
<th>Significant Significance</th>
<th>Slight Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>Grade Level 10, 15</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Years of Experience 15</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Individualization</td>
<td>Grade Level (K-6) 25, 28, 35, 52</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Individualization</td>
<td>Grade Level (7-12) 37, 49, 50, 51</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>High Expectations</td>
<td>Grade Level 36, 41</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
As is depicted in the table, the two most prevalent concepts out of the total 7 were in the areas of collaboration and individualization. A majority of the comments mentioned the importance of the meaningfulness of the content. When asked how important teachers believed a student-centered environment was, statements such as: giving the students “the reason to learn thus increasing desire and motivation which promotes more learning,” and knowing the “students background and interests – (and) relating to material taught” implied the importance of the meaningfulness of the curriculum.

Sixteen out of the total 28 items, or 57%, which related directly to the seven key concepts that fostered a student-centered environment failed to meet the suggested criteria for statistically acceptable items. The items are listed below in Table 5.

Table 5

**Questions not found to be significant**

<table>
<thead>
<tr>
<th>Key Concept</th>
<th>Question #</th>
<th>Correlating Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individualization</td>
<td>20</td>
<td>I believe student achievement can increase through differentiating instruction</td>
</tr>
<tr>
<td></td>
<td>48</td>
<td>I work effectively with special education students</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>2</td>
<td>I feel that the staff cares about me</td>
</tr>
<tr>
<td>Relationships</td>
<td>9</td>
<td>I work with people who treat me with respect</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>I believe student achievement can increase through close personal relationships between students and teachers</td>
</tr>
</tbody>
</table>
Table 5 (continued)

Questions not found to be significant

<table>
<thead>
<tr>
<th>Key Concept</th>
<th>Question #</th>
<th>Correlating Questions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance of Content</td>
<td>22</td>
<td>I believe student achievement can increase through integrating instruction across the curriculum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>I believe student achievement can increase through teaching to state standards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>Student outcomes for my class(es) are clear to me</td>
<td></td>
</tr>
<tr>
<td></td>
<td>58</td>
<td>Student outcomes for my class(es) are clear to my students</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>I know the state standards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>61</td>
<td>I teach to the state standards</td>
<td></td>
</tr>
<tr>
<td>Assessments</td>
<td>30</td>
<td>I believe student achievement can increase through using ongoing student assessments related to state standards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>I believe student achievement can increase through self-assessments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>I believe student achievement can increase through teacher use of student achievement data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>I love seeing the results of my work with students</td>
<td></td>
</tr>
<tr>
<td>High Expectations</td>
<td>38</td>
<td>I believe quality work is expected of all students at this school</td>
<td></td>
</tr>
<tr>
<td>Interpersonal</td>
<td>2</td>
<td>I feel that the staff cares about me</td>
<td></td>
</tr>
<tr>
<td>Relationships</td>
<td>9</td>
<td>I work with people who treat me with respect</td>
<td></td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>I believe student achievement can increase through close relationships</td>
<td></td>
</tr>
</tbody>
</table>

Many reasons could exist for these questions not receiving significance.

One example is question 30 that related to assessments. Questions 30 wanted
to know how strongly a teacher believed student achievement could increase through the use of ongoing student assessments related to the state standards. Based on how one defines the word assessments relates to how the question is answered. The word assessment was used to mean a continuous method to assure that students were learning the key concepts necessary and that improvements were being made. This can also be seen in a different light. Someone reading the statement may think that what was meant was teaching to the test, where the test serves as the sole driver for instruction. Other examples include statement 32 and what could be meant by the usage of student achievement data.

The final step in data analysis was to test the null hypothesis. The t test was used to test for significant differences between the mean scores of teachers who taught grade levels K-6 and those who taught 7-12.

Table 6
Comparisons between the mean performances of teachers who taught grades K – 6 and those who taught 7-12

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Scores</th>
<th>Standard Deviation</th>
<th>Standard Error of Difference</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>K – 6</td>
<td>4.00</td>
<td>0.57</td>
<td>0.12</td>
<td>4.00</td>
</tr>
<tr>
<td>7 – 12</td>
<td>4.21</td>
<td>0.51</td>
<td>0.07</td>
<td>4.08</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Difference in Mean Scores</th>
<th>Difference in Standard Error</th>
<th>Degrees of Freedom</th>
<th>Level Required for Rejection at the 5% Level</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.21</td>
<td>.05</td>
<td>41</td>
<td>1.68</td>
<td>1.53</td>
</tr>
</tbody>
</table>
A t test for significance of difference between the means was utilized in the comparison between teachers who taught grades K-6 and 7-12. The difference in means scores was found to be 0.21. The standard error of difference was determined as .05. The level required to claim significance of difference was established as 1.68. Since the obtained t value did not fall outside the critical region of the five percent level of confidence for rejection, no significant differences for performance could be claimed. Therefore, the null hypothesis was judged to be tenable.

Table 7

Comparisons between the mean performances of teachers who had less than 6 years and those with more than 7 years of teaching experience

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Scores</th>
<th>Standard Deviation</th>
<th>Standard Error of Difference</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 6 years</td>
<td>4.18</td>
<td>0.68</td>
<td>0.12</td>
<td>4.02</td>
</tr>
<tr>
<td>7 or more years</td>
<td>4.12</td>
<td>0.14</td>
<td>0.06</td>
<td>4.22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Difference in Mean Scores</th>
<th>Difference in Standard Error</th>
<th>Degrees of Freedom</th>
<th>Level Required for Rejection at the 5% Level</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.06</td>
<td>0.06</td>
<td>46</td>
<td>1.68</td>
<td>0.44</td>
</tr>
</tbody>
</table>

A t test for significance was used. The obtained t value was 0.44. Since the obtained t value did fall within the critical region of the 5 percent level of
confidence for rejection, no significant differences for performance could be claimed. Therefore, the null hypothesis was judged to be tenable.

Summary

This research study sought to determine the prevalence of student-centered teaching beliefs and practices within teachers based on the grade level taught and the years of teaching experience. The objectives of the statistical analysis were to determine the extent to which a teacher reflected more teacher-centered or student-centered beliefs and practices and to determine if any significant differences existed. A t test of significance, employing the critical value of t, was utilized in this comparison. The level of significance for the rejection of the null hypothesis was set at .05.
Chapter Five

Summary

The purpose of this study was to determine the prevalence of student-centered or teacher-centered beliefs and practices subscribed by K – 12 teachers in two Northwest Ohio school districts. This research also sought to determine the extent to which grade level taught and years of teaching experience affected how student-centered a teacher’s beliefs and practices were.

The procedures for conducting this investigation were established by several logical steps in the research process. A reliable and valid survey instrument was used by permission from the Education for the Future Initiative. Standardized instructions and conditions for administering the instrument were formulated in the interest of objectivity. The subjects for this study were obtained through the generosity of 5 principals in different schools and 3 instructors of education classes during the summer term of 2005. The inventory was administered to each teacher willing to participate. The inventory was personally administered to the classes at UT. Only those teachers who were current
teachers in the schools that volunteered to participate in this research were used in this study. The surveys of the sample were examined for improper markings or omissions. The instruments that were incorrectly marked were removed from the sample. The final sample consisted of 75. The instruments were submitted to The University of Toledo’s Accounting Department for data tabulation and analysis. Means, variances, standard deviations, and percentages were computed for the data. The selected variables were then compared in order to determine likeness and differences between them.

A t test for the significance of difference between grade level taught and years of teaching experience for student-centeredness, utilizing the critical value of t, was computed. Due to the inability to test for homogeneity of variance between the sample results and any previous results or established norms, the standard t test could not be used. In order to handle this situation in an accurate, statistical approach, an alternate t test was utilized. The level of significance for rejecting the null hypothesis in the computation was set at the .05 level of confidence.

Findings

Within the limitations of the study the following findings were established. With an obtained reliability coefficient of .86, the *Education for the Future Staff Survey* proved to be a reliable instrument for measuring the student-centeredness of a teacher. Only 15 out of the 28 items failed to meet the criteria for a statistically valid item. The mean performance of the teachers sampled who
taught grades K – 6 was found to be 4.00. The standard deviation was 0.57. The mean performance for the teachers sampled who taught grades 7 – 12 was found to be 4.21. The standard deviation was 0.51.

The mean performance for teachers who had less than 6 years of teaching experience was 4.18. The standard deviation was 0.68. The mean performance for teachers who had greater than 6 years of teaching experience was 4.12. The standard deviation was 0.41.

Out of the 7 key concepts most prevalent in fostering student-centered learning, four arose with statements of statistical significance. These were collaboration, individualization, high expectations, and meaningfulness. Meaningfulness was represented in the written comments. The most prevalent area was individualization of services and resources. The next most prevalent was collaboration between the stakeholders within the school. The concepts with the least statistical significance from the allotted statements were assessments, interpersonal relationships, and relevance of content material.

No significant difference was found in the mean performance of teachers who taught for less than 6 years or those who taught for more than 7 years. The variances between the two groups were significantly different. This means that the group with less than 6 years of teaching experience was more undecided about student-centeredness versus teacher-centeredness. They were also in less agreement internally. The teachers with more than 7 years of teaching experience were in greater agreement about student-centeredness.
There were no significant differences between the mean performances of teachers who taught grades K – 6 and those who taught 7 – 12. The researcher assumed that the higher their total score was representative of a more positive view of student-centeredness. Again, a lack of agreement was found within all of the groups, grades K – 12. Overall there was more agreement within the teachers who taught grades 7 – 12, indicative of how their results were more clustered around the mean.

Recommendations

The results of this study support previous recommendations of related research, which strongly suggest the need for a district-wide student-centered approach. With an increased focus on assessment and accountability, teachers have significantly changed their instructional practices with teaching taking precedence over learning. Teacher-centered practices that are hindering student progress, achievement, and the ability of a student to reach his or her full potential need to be eradicated. Not realizing the negative impacts of their actions, great problems arise. This movement to a teacher-centered environment, where the focus is on the material taught rather than the information learned, widens the achievement gap. The teacher-centered instructional approach, with the belief that one teaching style fits all, is not working for an increasing number of diverse student populations. This requires a paradigm shift to implement a learner-centered approach, where learning becomes the constant (Brown, 2003).
The findings in this study shed a new light on the views about experienced teachers. Conversations about these teachers often fall around the ideas that these teachers are burned out, that they are apathetic, and they just do not care about the students anymore. These teachers are portrayed as individuals who are eagerly anticipating retirement, and would just like to survive until that day comes. Also, these teachers tend to be looked at as not eager to embrace change, wanting to do things the way the have been done for the previous 20 years. The practice of teaching in the same method to all students is very much an example of a teacher-centered philosophy. Teachers with fewer than 6 years of experience are often thought of as fresh, motivated, and eager to try new things. These teachers are often thought of as those with more student-centered practices.

Teachers who teach grades K – 6 are often portrayed as focusing only on the students and not on the material to be taught. When asked about their classroom, many of these teachers will state that they have 18 students, not mentioning what they instruct them in. Their counterparts, those who teach grades 7 – 12, often identify themselves with their subject matter. “I teach Biology,” or “I teach Drama,” but fail to mention their students.

This research showed that this was not true for the sample studied. There was no significance in the student-centeredness of a teacher based on the grade level taught and the years of teaching experience. Teachers in all four of the groups were either teacher-centered or student-centered. Student-centered teachers could be found within those teachers who taught both grades K – 6 and
Also, teachers with less than 6 years of teaching experience and those with more than years were also either teacher-centered or student-centered. This showed that, at least within the sample, being an experienced teacher did not mean that they cared less about the students. Experienced teachers, as well as those with fewer years of experience, do think children can succeed, and strive to assure it. Also, all teachers cared about their students, not just the material that needed to be taught. There had to be an equal balance of meeting the individual needs of the students as well as making sure they learned the material that was needed.

Other research should be conducted to further examine the relationship between grade level taught and the years of teaching experience as they relate to the student-centeredness of a teacher’s beliefs and practices. Similar studies regionally and nationally utilizing a larger sample with equal numbers of teachers in each category for the purpose of generating reliable tables of norms should be conducted. Also, comparisons could be made to teachers in inner city and suburban districts. The researcher is interested in conducting further research in this area in future doctoral work.
References


*Educational Leadership, 62*(6), 8 – 12.


Appendices
Appendix A

Informed Consent
Appendix B

Artifacts