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# Implementation of "Turning Points 2000" Recommendations: A Survey of Mid-Western Pennsylvania Middle Level Teachers' Beliefs and Practice

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# IMPLEMENTATION OF "TURNING POINTS 2000" RECOMMENDATIONS: A SURVEY OF MID-WESTERN PENNSYLVANIA MIDDLE LEVEL TEACHERS' BELIEFS AND PRACTICE

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Title: Implementation of "Turning Points 2000" Recommendations: A Survey of Mid-Western Pennsylvania Middle Level Teachers' Beliefs And Practice

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This study investigated middle school teacher perceptions toward, and practices in the implementation of, a comprehensive school reform called the *Turning Points 2000*. The second purpose of this study was to examine possible factors that influence middle school teachers' attitudes and practices toward implementation of the *Turning Points 2000* Recommendations. The third intent was to measure if middle school teachers are using effective instructional methods that are directly related to the *Turning Points 2000* Recommendations. Lastly, another area of research that was explored is whether Comprehensive School Reform models have been inadequately implemented.

Middle level teachers were surveyed in Midwestern IU 4 Pennsylvania public schools in grades 5-8. A 39% return rate was reached so the IU 4 middle level teachers became the target audience for this study with 121 teachers responding. Data were collected through the use of a modified survey entitled the Middle Level Awareness and Practice Questionnaire (MLAPQ). Cronbach's alpha was computed for 39 specific items in areas of both awareness and practice questions.

The study found five major findings from the analysis of the data. First, based on the years of experience of teachers it was apparent that staffing of schools with experts of the middle level was a concern. Second, the data points out the lack of middle level course work being taken by a majority of the teachers surveyed. On-going professional

development for teachers entering the middle level needs to occur to improve the subject area expertise and the pedagogical skills. Third, through the review of mean scores it became evident that teachers were aware and practiced *Turning Points Recommendations* to an average level. Individual and institutional factors influenced teachers from fully implementing all recommendations to the highest level possible. Fourth, teachers have changed to develop a good climate for the school through core recommendations but are not at the level for a cultural change to institute non-traditional reform strategies. Lastly, the data from this study points out the lack of on-going training in middle school philosophy and strategies which impedes the implementation of the *Turning Points 2000* recommendations.

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# CHAPTER I

## INTRODUCTION

Throughout American educational history, people have constantly pushed to make improvements with the final goal of providing the best possible education for the nation's children. The educational level that most recently has undergone drastic change is the middle level, considered grades fifth-eighth. The general public's lack of understanding about the nature of 10 to 15 year olds has kept educators from implementing what experience and research has demonstrated to be appropriate for young adolescents. The lack of understanding and knowledge of middle schools might be explained by inadequate implementation of the middle school concepts in most districts and schools. Core practices such as interdisciplinary team teaching and advisory programs tend to be weakly implemented with little attention to the underlying goals. A sufficient level of fidelity to many of the reform practices is not possible without substantial additional attention, resources, and long term support.

This study examined the evolving characteristics and goals of middle level education serving grades five-eight, especially in terms of most recent statements of purpose by major organizations in the field. Two of these organizations are the National Middle School Association (NMSA) and the Carnegie Council on Adolescent Development (CCAD). These organizations did research around the needs of students at the middle level. During the 1960s, the middle school emerged as an alternative to the junior high school, which was seen as similar in organizational make up and philosophy as the senior high school. However, a consensus definition of key characteristics was not

reached until the 1980s when the NMSA published *This We Believe* and the CCAD published *Turning Points.*

Under current pressure to improve student achievement, schools throughout the nation have, over the past 30 years, turned to comprehensive school reform (CSR). CSR is based on the idea that a school should have a coherent educational strategy that addresses all aspects of its operations and aligns them in a well-functioning delivery system.

## The Purpose of the Study

The challenge of middle level education today is to take the best available research and develop schools that place strong emphasis on curriculum, student assessment, and instruction (Jackson & Davis, 2000). This study investigated middle school teacher perceptions toward, and practices in the implementation of, a comprehensive school reform called the *Turning Points 2000*. The second purpose of this study was to examine possible factors that influence middle school teachers' attitudes and practices toward implementation of the *Turning Points 2000* recommendations. The third intent was to measure if middle school teachers are using effective instructional methods that are directly related to the *Turning Points 2000* recommendations.

Lastly, another area of research that was explored is whether CSR models have been inadequately implemented. There are accounting studies of CSR models that focus on the level and quality of CSR implementation by schools (Borman, Hewes, Overnan, & Brown, 2005; Comprehensive School Reform Quality Center, 2005; Faulkner & Cook, 2006; RAND a, 2004; RAND b, 2006). As this previous research on reform program implementation has been amply documented, the level and quality of implementation

determines the extent to which the desired outcomes may be realized. If there is no implementation or partial implementation of an intervention, the expected outcome is not likely to occur, or, if it does occur, it cannot be fully attributed to the intervention.

## Statement of the Problem

Some major problems that exist in implementing the necessary practices to service the physical, emotional, intellectual, and social needs of middle level students are first that teachers seem not to be prepared to instruct students. Teacher quality has become a national concern with the enforcement of the *No Child Left Behind Act of 2001*. A top priority in educational reform has become the raising of teacher expertise. Research affirms that mastery teaching is the single most important factor influencing student achievement, moving students well beyond family background limitations (Marzano, 2011; Reeves, 2004; Schmoker, 2006). Staffing all classrooms with highly qualified teachers, therefore, is a critical national concern. Secondly, teachers are improperly placed at the middle level and are not prepared to instruct this level. Furthermore some teachers are just not qualified to be at the middle level and would be best assigned to elementary or secondary level. Thirdly, as a result it becomes easy to see why a school's implementation of a CSR model may fall short of the design anticipated by model developers. Indeed, research has shown a large proportion of schools (up to one-third) discontinue the use of CSR models within the first few years of their adoption (Datnow, 2005; Taylor, 2005). These authors feel that the key to these studies is that middle level recommendations are not being implemented, and if they are being implemented it is not to a level that benefits students.

For these reasons, *Turning Points 2000* was developed to bridge the gap between academic research and classroom practice. There are few channels, however, for this information to reach middle grades educators. Districts interested in educational change might consider organizational changes supported by those closest to the delivery levels: the teachers. The current trend is to change grade configurations to six-eight and to call themselves middle schools without substantively changing their programs, policies, practices, instructional processes, or curricula.

"When we begin to more systematically close the gap between what we know and what we do, we will be on the cusp of one of the most exciting epochs in the history of education" (Schmoker, 2006, p. 65). With that goal in mind it does not seem we have gotten any closer several years after Schmoker's statement. This research sought to find what barriers exist that block the gap from narrowing and limit implementation of recommendations.

## Research Questions

1. To what extent do middle level teachers report being aware of the principles of *Turning Points 2000* recommendations?
2. To what extent do middle level teachers report practicing the implementation of *Turning Points 2000* recommendations?
3. What are teachers' perceptions of the on-going training they receive to help them be aware of the *Turning Points 2000* recommendations?
4. What are teachers' perceptions of how this on-going training is related to the practice and implementation of the *Turning Points 2000* recommendations?

5. How do individual characteristics, including age, gender, and educational experience influence teacher awareness and practice of the implementation of *Turning Points 2000* recommendations?
6. How do the school characteristics, including enrollment and setting, influence teacher awareness and practice of the implementation of *Turning Points 2000* recommendations?

## Theoretical Framework

### Change and Implementation Theories

During the early 1980s, the need for reform presented changes in public education. The youth of America were being criticized for failing to achieve. This is when experts like Lipsitz in 1980 started to call for school reform because educators were failing the middle level student. Nationally known educational experts followed, and called for change in the educational process (Yecke, 2003, 2005).

This study called upon the theories of Hall and Hord (2001; 2010) in their book *Implementing Change: Patterns, Principles, and Potholes.* In the book, the authors present a list of 12 change principles that they believe should be accepted as givens. It is from these principles that this author pulled from to build his theoretical framework for this study. For the past 25 years Hall and Hord have been leaders of an international team of researchers studying the change process in schools, colleges, businesses, and governmental agencies. They have been systematically charting what happens to people and organizations when they are involved in change. Their research approach is different from that of others in a number of ways, including their primary focus on people on the

front lines who have to implement the expected change, the teachers. Their secondary focus has been on how leaders facilitate change.

As people plan and lead change processes, they tend to be preoccupied with innovation and its use. They often do not think about the various actions and events that they and others take to influence the process, which are known as interventions. It is critical to distinguish between the concepts of innovations and interventions. Change process leaders tend to think only about the innovation and not to think sufficiently about interventions in terms of an overall plan for and during the unfolding of the change process; and many fail to appreciate the value of little interventions.

Abundant rhetoric has been, continues to be, and probably in the future will be given to reform, renewal, and restructuring of schools to attain better results. Despite all the focus on structures and strategies and other features of schools that could be changed, little attention has been given to the most powerful factor: people. What change is really about is people and their implementation of new practices in their classrooms, schools, school districts, and states.

Change is not only, however, about the implementers--those who will change their practices--but also about those who will facilitate the implementers in doing so. It is quite clear from the disciplined research on change and from accounts of successful school change efforts that were discussed in latter chapters, that ongoing, well-crafted facilitation must be present for implementing identified programs and practices, either small or systematic in scope. The skilled change facilitator helps people become ready for implementation and change through a personalized approach, and creates a context in which change flourishes. Classrooms and schools have an identifiable context in which

teaching and learning take place and in which change and improvement thrive or die. The issue of context and culture are addressed in more detail in Chapter II.

As more research was done in the years to follow, a new, more current book emerged in 2006 that tied into the same theory of change entitled *Breakthough* authored by Fullan, Hill, and Crevola (2006). When looking at change at the middle level one of the current reform movements that took a systematic approach similar to that mentioned in the book is *Turning Points 2000*. The challenge facing a local district is to find ways to share leadership and decision making with the school community and to model, mirror, and support the kind of risk taking and change that is expected of schools (Fullan & Hargreaves, 2008).

While many books and manuals exist containing effective interventions involving change, these tools are not being fully implemented to achieve successful school wide reforms. To explore the reasons for this occurring, the researcher also covered the current state of the science of implementation, and identified what it takes to transmit innovative CSR models and practices to be used in middle level schools. To do this research, data were provided from the National Implementation Research Network at the University of South Florida.

The authors of this study collected data through a review process which identified literature that reported efforts to collect data on implementation of practices or programs in any domain. The results of their literature review and synthesis confirm that systematic implementation practices are essential to any national attempt to use the products of science, such as evidence--based programs, to improve the lives of its citizens (Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005). The findings showed that the

purposes and outcomes of implementation might be categorized as being paper implementation, process implementation, and performance implementation. A conceptual framework was developed and reviewed in their study at produced stages in the process of implementing evidence-based practices and programs. The stages of exploration and adoption, program installation, initial implementation, full operation, innovation, and sustainability are reviewed in more detail in Chapter II. Thus, when looking at the implementation of the *Turning Points 2000* recommendations, change and implementation theory applies as a theoretical framework.

## Impact of *Turning Points*

In 1989 the Task Force on Education of Young Adolescents produced its groundbreaking report, *Turning Points: Preparing American Youth for the 21st Century*, which provided a comprehensive approach to educating young adolescents (Jackson & Davis, 2000). Many believed that the necessary focus and direction for middle school movement evolved from this report (Anfara & Buehler, 2005; de Jong & Chadbourne, 2007; Ference & McDowell, 2005; George & Alexander, 2002; Ingwalson & Thompson, 2007; Manning, 2002; National Association of Secondary Schools Principals, 2006). Drawing on the most effective middle grades practice and the best available research, the report urged a radical transformation of standard educational practices deemed developmentally inappropriate for children just entering the teenage years of ages 10-15.

The CCAD concluded that junior high and middle schools had not adequately responded to developmental needs of young adolescents. Jackson and Davis (2000) elaborated on those developmental needs by saying there is a crucial need to help adolescents at an early age to acquire a durable basis for self esteem, flexible and

inquiring minds, reliable and close human relationships, a sense of belonging in a valued group, and a way of being useful beyond one's self.

Building upon prior research and publications from the NMSA and National Association of Secondary Schools Principals (NASSP), *Turning Points* offered broad, forceful recommendations including not only the basic components of middle schools but also elements involving families and communities. The recommendations were comprehensive and intended to be fully implemented in their entirety. The *Turning Points* recommendations are listed with the *Turning Points 2000* recommendations in Figure 1.

In the intervening decades, *Turning Points* has elicited extraordinary nationwide interest and has helped to focus thoughtful attention as never before on the badly neglected subject of early adolescence. The approach taken in this original report and its follow-up activities not only sought basic improvement of the middle grades school, the pivotal institution of early adolescence, but also aimed to facilitate the personal development of these young people in and out of school. The reformulation of middle grades schools aligned with *Turning Points* recommendations can improve the success of youth from many backgrounds, may have in life, including those from poor communities.

| *Turning Points* | *Turning Points 2000* |
|---|---|
| | Goal: Ensure Success for Every Student |
| 1. Teaching a core of common knowledge | 1. Curriculum grounded in academic standards<br>2. Instruction designed for all students |
| 2. Preparing teachers for the middle grades | 3. Staff schools with expert teachers |
| 3. Create a culture for learning | 4. Organize climate of intellectual development and caring community |
| 4. Empower teachers and principals | 5. Govern by school staff members |
| 5. Improving grades through health and fitness | 6. Provide safe and healthy schools |
| 6. Involving families in the education of students | 7. Involve parents and community |
| 7. Connecting schools with communities | |
| 8. Ensure success for all students | |

*Figure 1*. Comparison of *Turning Points* and *Turning Points 2000* recommendations.

The Center for Collaborative Education serves as the National Turning Points Center, a New American Schools-recognized reform model for creating high-performing middle schools, based on the principles and practices for effective middle schools outlined in the national Turning Points report (CCAD, 1989). Member schools engage in improving learning, teaching, and assessment, building a professional collaborative culture, engaging in data-based inquiry and decision making, and creating structures that support high achievement and personal development. Most school districts however are not willing to pursue a complete commitment to the *Turning Points* process. This may be because that in order to work with the Center for Collaborative Education, a commitment of three years is essential to see true results. Also at a cost of $50,000 a year, most school districts cannot afford to allocate that amount of money in their budget. Even though there is a large cost associated with implementing reform models, *Turning Points* is currently in 16 states and has 8 Regional Centers around the country. Schools have seen the benefit of the model if there are 70 middle level schools that have made a full commitment to the *Turning Points* process in the United States. The service and support these schools receive from the Center for Collaborative Education comes in the form of on-site coaching, professional development, and networking, *Turning Points* conferences and institutes, the Turning Points Self Study, publications and technology, as well as accountability and assessment of student learning. Unfortunately there are no middle level schools in Pennsylvania that have made a full commitment to the *Turning Points* process.

Pennsylvania, however, has recently become a member of The National Forum to Accelerate Middle–Grades Reform, committed to promoting the academic performance

and healthy development of young adolescents. The Forum does support and advocate seven CSR models of which the Turning Points Design Model is one. The Forum hoped to impact schools at the classroom level, so in 1999 they developed the Schools to Watch (STW) program. Through the STW initiative four middle level schools across the United States are identified each year that meet their criteria of a true high-performing middle level school. The Forum has three main criteria when looking for high-performing middle level schools: first, that they are academically excellent; second, that they are developmentally responsive; and lastly, that they are socially equitable. All these characteristics are part of the *Turning Points* recommendations. Of the four schools selected for the STW award in 2007, one was from Western Pennsylvania.

## Implementation of *Turning Points* and *Turning Points 2000*

A history of prior research on *Turning Points* recommendations is in order to understand where we are today. Since the mid-1980s, several national surveys collected descriptive data on the degree to which middle schools had implemented suggested middle school practices such as advisory programs, heterogeneous grouping, teaming, and flexible scheduling (Alexander & McEwin, 1989; Cawelti, 1988; Epstein & Mac Iver, 1990; George & Shewey, 1994; McEwin, Dickinson, & Jenkins, 1996; Valentine, Clark, Irvin, Keefe, & Melton, 1993).

## History for Middle Level Education

### The Beginnings

At the beginning of the 1900s, early psychologists like G. Stanley Hall in 1905 (George & Alexander, 2002) suggested that schools should address the developmental needs of students. Hall's studies influenced Americans to accept that the field of

education should be grounded in psychology, and that adolescence should be given scientific study. In 1918, the Commission on Reorganization of Secondary Education (CRSE), recommended in its annual report the new organization should be a school system where the first six years should be devoted to elementary education designed to meet the needs of pupils approximately 6 to 12 years of age. The second six years of secondary education should be designed to meet the needs of pupils approximately 12 to 18 years of age (George & Alexander, 2002).

## The Junior High

As early as 1927, authors such as Koos called for reform because he felt schools failed to recognize and respond to the particular nature of early adolescence. According to George and Alexander (2002), "the junior high emerged, originally, as an attempt to satisfy the call for richer curriculum than the elementary school was able to offer, and a more personal atmosphere than the high school was able to develop" (p. 285). By the 1960s much of the literature on junior high noted that such schools had turned into "miniature high schools" (Johnson, Dupuis, Musial, & Hall, 1994). Indeed the call to reform junior high schools was heard as early as the 1920s, within two decades of their founding. Junior high schools became copies of their senior high schools in terms of credit and grading systems, methods of teaching, time schedules, and student activities. Eventually, by the 1960s, the call to reform the junior high schools had evolved into a call for the creation of developmentally responsive middle schools.

## Developmentally Responsive Middle Level Schools

In 1984 Joan Lipsitz, in her study of successful schools for young adolescents, examined four successful middle level schools. Her purpose was to describe how and

why these schools were successful in meeting the needs of young adolescents. What she found in these schools was a strong sense of purpose centered on making every practice in the school appropriate to the needs of their particular students. It was evident to Lipsitz that a major factor in these schools' success was not only their commitment to the needs of their students, but the clarity they had achieved about the purposes of their school and children they teach. Leadership was also an important factor in the success of these schools. Decisions were being made not on the basis of expediency, but for reasons of principle. Another factor of importance to middle level school success was positive school climate. Lipsitz described the development of school organization and structure as being "organic and evolving." The four principals had a vision of what schooling should be for young adolescents.

Despite the differences in the four schools in their make up and thought process, they were all responsive to their particular constituencies. It is this responsiveness that contributes to their success. Lipsitz introduced the term developmental responsiveness to describe schools and programs that were aligned with the needs of early adolescents.

The NMSA (1995) added that in order for middle level schools to be developmentally responsive, they "must be grounded in the diverse characteristics and needs of these young people" (p. 5). It then became the responsibility of the middle level educator to not only understand the unique physical, cognitive, and psychosocial characteristics of this age group, but to develop appropriate educational experiences in a caring environment that assisted the transescent in moving from childhood to adulthood (Manning, 2002).

## Conceptual Framework

Inducing change in the behavior and practices of an existing organization is both complex and difficult. Research suggests that achieving change in schools is no less complex and perhaps far more difficult than in any other type of organization (Berends, Bodilly, & Kirby, 2002). Different sets of behaviors on the part of students, teachers, principals, and administrators are expected; each group responds to and is driven by varying incentives, rules, and regulations.

Much research has been devoted to the process of change in schools and the understanding of factors that determine success or failure. Research focused on CSR models more specifically suggests that successful implementation may depend on a multitude of factors, including the model's complexity and specificity; the model's consistency with other school, district, and state policies; the type and level of assistance provided to the school; principal leadership and staff buy in; the amount of resources, including time allocated to teachers; and the amount of model-specific training and staff development provided (Datnow, 2005; Glennan, Bodilly, Galegher, & Kerr, 2004; Huss & Eastep, 2011; RAND, 2006).

## Definition of Terms

Early Adolescence – A unique period of life when children begin the complex process of making the transition to adulthood. It is a process that not only encompasses physical development, but also influences social, emotional, and intellectual development (George & Alexander, 2002).

Effective Schools – Schools that are assessed to have a safe and orderly environment, clear school mission, high expectations, instructional leadership, and careful monitoring of student progress (George & Alexander, 2002).

*Turning Points* – A landmark report published in 1989, which provided a comprehensive approach to educating young adolescents. Drawing on the most effective middle grade practices and the best available research, the report urged a radical transformation of standard educational practices deemed developmentally inappropriate for children entering the teenage years (National Association of Secondary Schools Principals, 2006).

*Turning Points 2000* – A follow-up, in-depth examination of how to improve middle education (Jackson & Davis, 2000).

Middle School – A middle school usually consists of grades six-eight but may also be comprised of grades five-seven, six-seven, five-eight, and seven-eight. Middle schools are based on the developmental needs (social and academic) of young adolescents (National Middle School Association, 1995).

Junior High School – A junior high school usually consists of grades seven-nine but may also be comprised of grades six-nine, and eight-nine. The junior high school was conceived primarily as a downward extension of secondary education organized by subjects and departments with a grade level configuration (Powell, 2004) that usually includes ninth grade.

Middle Level Education – The terms “middle level education” and “middle level schools” were first used extensively in the early 1980s by the Research Team of the Dodge Foundation/NASSP in Volumes I and II of the National Study of Schools in the

Middle (Valentine, Clark, Irvin, Keefe, & Melton, 1993). These terms have gained wide acceptance by middle level educators and are used to describe schools and educational programs that serve young adolescents attending school in any grade configuration of grades five-nine (Clark & Clark, 1994). Defining a middle level school involves several perspectives including purpose, separation, organization, curriculum, and program (Clark & Clark, 1994).

Differentiated Instruction – An alternative for heterogeneous classes in the form of different avenues for learning, based on their diverse levels of readiness, interests, and learning profiles (Tomlinson & Imbeau, 2010).

Transescent – A term to describe the transitional stage of development that begins prior to the onset of puberty and extends through the early stages of adolescence. Also referred to as early adolescent (Powell, 2004).

Team Teaching – Refers to teachers working together on common interdisciplinary teams in which they are given common planning periods to evaluate students and plan for instruction. An interdisciplinary team consists of two to five single subject teachers who have a common group of students. Teams have the ability to create flexible scheduling (Merenbloom, 2007).

Common Planning Time – Refers to teachers, on a team, meeting one period daily to plan strategies to meet school goals (Merenbloom, 2007).

Model Middle School Practices – Refers to recommended school practices specified by national reports on middle schools, most notably the Carnegie Council's *Turning Points* document (1989) and *Turning Points 2000* (2000).

Innovation – The development and implementation of new ideas by individuals who over time engage in transactions within an organization (Hall & Hord, 2010).

CSR – Comprehensive School Reform (Borman, et al. 2005).

Implementation – As a specified set of activities designed to put into practice an activity or program of known dimensions (Fixsen, et al., 2005).

Midwestern Intermediate Unit 4 – One of 29 Intermediate Units serving schools in Pennsylvania. The Intermediate Unit serves the 27 schools in Butler, Lawrence, and Mercer Counties in Pennsylvania. In addition to providing programs and services requested by area school districts, MIU 4 also implements programs mandated by the Pennsylvania Department of Education, the General Assembly, and the U. S. Department of Education http://www.miu4.k12.pa.us/common/index.asp

Statistical Package for the Social Sciences – Computer software used to analyze data.

## Significance of the Study

Surveys have been conducted on the national level to determine the level of implementation of recommended educational practices for middle schools (Cook, Faulkner, & Kinne, 2009; Faulkner & Cook, 2006; Meeks & Stepka, 2004). However, the effects of external variables on outcomes and poor research designs have been cited as reasons that such research has not been convincing relative to effects of new middle school practices (George, 2009; Lounsbury,2009).

When looking at how middle level schools implement recommendations, much of the knowledge provided in these reports advocates developing a framework in three main areas. First, this study should be used to assess whether schools are actually

implementing reform recommendations. If they are, then how can educators build on this framework? If not, what key components need to be initiated to guide practitioners in their efforts to implement proven strategies? The hope is that gathering the best available research can help bridge the gap between researchers and practitioners, putting practitioners in touch with research in the framework of a comprehensive and comprehensible model. The intent of this research was to make some improvement in education, which could benefit all middle level students.

Second, in other studies authors also stressed the importance of comprehensive implementation for increased student achievement (Goodwin, 2011; Protheroe, 2011). It was therefore significant that this study collected data on the implementation of *Turning Points 2000* recommendations. The *Turning Points 2000* document is widely accepted as the most comprehensive example of needed middle school reform since the original *Turning Points* document in 1989.

Lastly, very few studies have been conducted in Pennsylvania concerning the implementation of *Turning Points 2000*. The studies that have been completed have concentrated on the original *Turning Points* document (Steward, 2000), and not *Turning Points 2000*. As Pennsylvania proposes changes to teacher education and licensure at the middle level, the need for implementation data is essential, particularly as policymakers and universities make decisions concerning middle level teacher preparation. This study provides implementation data that can be used by decision makers and future researchers as they assess middle level reform efforts and propose future direction for middle schools in Pennsylvania and across the nation.

With the onset of the *No Child Left Behind Act* (NCLB) of January 2002, schools that receive federal education dollars can only implement programs that are backed by scientifically based research. *Turning Points* is a proven CSR model that is based on two significant sources: the landmark report, *Turning Points: Preparing American Youth for the 21st Century*; and 10 years of research and practices in middle level schools across the country, as documented in *Turning Points 2000*. Unlike most CSR models, *Turning Points* focuses solely on students in the middle-grades and their unique needs as young adolescent learners.

The most significant challenge to middle schools as they work to put NCLB mandates into practice is the implementation of teacher quality standards. Studies showed that the most dominant factor affecting student academic gain is teacher quality. Accordingly, more stringent qualification standards are currently set by NCLB for many middle school teachers. These mandates place a heavier burden on schools that are already strained in their efforts to attract highly qualified teachers. Schools with high poverty rates are particularly challenged in their attempts to recruit and retain qualified teachers, yet their needs are greatest. In high-poverty middle schools more than 50% of classes are taught by teachers who did not major in the course subject they instruct daily.

Middle schools are also treated differently under NCLB depending on whether they are designed as an elementary or high school; these variations in school classification can cause tremendous confusion. Middle schools that are designated as elementary schools might share the same testing or adequate yearly progress requirements as elementary schools, while the NCLB standards for teacher quality may differ if the middle school is in a K-12 institution but considered a separate "school

within a school." Teacher quality standards for middle schools designated as high schools demand that teachers hold a certification in each subject they instruct. These requirements present real challenges for school districts as they try to hire and retain middle school teachers.

The importance of teachers who are knowledgeable about and committed to early adolescents has been a basic doctrine throughout the history of middle level education. In *Turning Points 2000*, Jackson and Davis (2000) corroborate that tenet, stating that "increasing middle grades teachers' knowledge and skills before and during their tenure is critical to the success of middle grades education" (p. 94). NCLB (2002) adds the requirement that all middle level teachers be "highly qualified" in each subject area they teach.

This study could be cited and used by school boards, administrators, teachers, and parents to show support for or against the implementation of the middle level reform movement based on the data found within. It has better enabled the researcher to understand the perception of teachers and thus become an instrument to be used throughout his career in education. Lastly, it is hoped that other researchers interested in this topic will use the data to enhance their research.

## Limitations of Study

In conducting the survey for this study limitations need to be pointed out that have an effect on the final outcome. Several areas of a school's improvement or reform efforts had barriers to its implementation that need to be identified, addressed, and overcome (e. g., lack of training, lack of time to plan, lack of resources, and lack of school or district support).

The data for this study were collected entirely from 14 school districts in Mid-Western Intermediate Unit 4 of Pennsylvania; therefore, the data represents the perspective of Mid-Western IU 4 middle school teachers only. Their perspectives may not reflect the opinion of other members of the middle school communities across Pennsylvania or America. Non-public, community, non-chartered, and special population schools (e.g., vocational schools, school for the mentally retarded and developmentally disabled, schools for the deaf and blind, and schools in the Department of Youth Services) were excluded from consideration due to the nature and special needs of their populations and specialized focus of their academic programs.

Since *Turning Points 2000* recommendations are only 11 years old, it is questionable whether schools have had ample time to implement and observe the effects of their efforts in a measurable way. The survey used to assess the implementation of *Turning Points 2000* recommendations was designed to measure the breadth but not the quality of implementation. Lastly, this study may have encountered teacher responses that are not truthful and without bias. The survey sample may have answered what he/she felt the researcher wanted to hear.

## Conclusion

Under pressure to improve student achievement, schools throughout the nation have, over the past 25 years, turned to CSR. CSR is based on the idea that a school should have a coherent educational strategy that addresses all aspects of its operations and aligns them in a well-functioning delivery system.

Do *Turning Points 2000* recommendations work? An accepted level of success has not been determined to indicate if true success has been met. Research results have

been mixed. Some studies have measured a modest improvement in student achievement; others have found no effect on student achievement. This researcher approached the question of *Turning Points 2000* effectiveness by first focusing on an even more basic question: Have *Turning Points 2000* recommendations been implemented? A possible shortcoming of nearly all previous studies is that they have assumed that schools have implemented *Turning Points 2000* recommendations in their entirety.

But what if most schools have implemented the *Turning Points 2000* recommendations only partially or not at all? In such cases, improved student achievement cannot be expected, discipline referrals cannot decline, student needs cannot be met, and therefore *Turning Points 2000* recommendations should not be blamed for these failed attempts. Until we measure the level of implementation, we cannot determine whether *Turning Points 2000* works, or whether one CSR model works better than another.

To answer these questions the researcher developed six research questions that guided this study. These questions were answered by surveying the middle level teachers of 16 middle schools of the IU 4. The survey was designed to ask specific questions aimed at the implementation of *Turning Points 2000* recommendations.

The theories that guided this study developed around two areas of research discussed in Chapter II. The framework that was laid out builds upon the historical perspective for the middle level education movement. In order to understand the process necessary to instill these qualities in middle schools, research on Change and Implementation Theories was reviewed to support this study. Secondly, Middle Level

Theory was reviewed to point out the curriculum and recommendations necessary to guide educators toward developmentally responsive, equitable, and high achieving schools. A modified version of the Middle Level Practices Questionnaire (MLPQ), developed in 1996 by Myles Seghers, was used to gather responses. It had 63 questions in a Likert or multiple-choice format. Also, a short questionnaire was included to collect data related to teaching experience. This new modified study was identified as the Middle Level Knowledge and Practice Questionnaire (MLAPQ).

The results of this study provided middle grades practitioners, scholars, advocates, and policy makers with a firm foundation that links the middle school concepts recommended in *Turning Points 2000* to improve student academic development.

# CHAPTER II

# REVIEW OF LITERATURE

## Conceptual and Theoretical Framework

There were several key concepts and theories that were presented in the review of literature. Also provided in this chapter was a review of the framework that forms the historical perspective for the middle level education movement. Information was also presented as a review of specific curriculum and instructional procedures that address the developmental needs of the middle school students. Finally, the researcher explored the recommendations necessary to guide educators toward developmentally responsive, equitable, and high achieving schools.

The main goal was to show that the needs of middle level students are unique and require certain factors to be in place to service them. To firmly establish this, the researcher included an overview of the following components: (1) Historical development of the junior high school movement and subsequent reform actions taken in response to perceived inadequacies of the junior high school system; (2) Implementation and change theories that help or hinder progress in the area of middle level education; (3) The middle school concepts as related to the needs and characteristics of young adolescents; and, (4) A discussion of the base framework of the recommendations of *Turning Points 2000* with collateral citations. The main emphasis in this discussion was focused on follow-up research that has built on *Turning Points: Preparing American Youth for the 21st Century* (Carnegie Council on Adolescent Development, 1989). This is recognized by middle level educators (George & Alexander, 2002; Jackson & Davis, 2000) as the primary source for achieving consensus regarding middle level education.

The follow-up research to *Turning Points* took over 10 years to complete and lead to an in-depth examination of how to improve middle grades education. *Turning Points 2000* drew on lessons learned from the Middle Grade School State Policy Initiative (MGSSPI) and several other national middle grades improvement efforts on the latest research. Therefore, each of the seven recommendations from *Turning Points 2000* (Jackson & Davis, 2000) was examined in relationship to current literature. For the purpose of this study, emphasis on only these recommendations will be studied from the teachers' perceptions.

## Historical Development

As the United States of America came into being, education was mainly delivered in the private homes of colonists. It was soon determined that each state should develop plans to educate the children. Thus, our American education system developed an eight-four plan where students received eight years of elementary education and four years of high school education. Later, educators began to perceive an imbalance in the continuum of education.

In 1872, Charles W. Eliot, who was president of Harvard College, became concerned over the average age of entering freshman. This prompted him to investigate ways to improve and reduce the total program of elementary and secondary education prior to college admission. He pursued this issue throughout his chairmanship of the famous Committee of Ten on Secondary School Studies.

The Committee of Ten recommended, in 1893, that a secondary school program should begin two grades earlier with six years of elementary and six years of secondary education. This became a major issue for the next 20 years (Powell, 2004). Eventually,

the Committee on Economy of Time in Education, reporting in 1913, made the first specific mention of a separate junior division of secondary education. In years to come, school districts, all over the nation, experimented with either a six-six (six years of elementary then six years of high school) or six-three-three (six years of elementary school followed by three years of junior high school and finally three years of senior high school) programmatic divisions of the schools (George & Alexander, 2002).

The origin of interest in the middle school has been traced to the end of the 19th century. Momentum for the recommendation was gained when a series of studies conducted by Ayers, 1909; Strayer, 1911; and Thordike, 1904 investigated high dropout rates during the eighth and ninth grade. This led them to a discovery of a great disparity in methodology between the elementary school and high school.

In order to meet the needs of young adolescents, Lounsbury (2009) cited the work of G. Stanley Hall (1905), a noted pioneer in the field of adolescent psychology. Lounsbury stressed that Hall believed that success is directly related to the quality of education that children receive during the critical years of adolescence. Those that accepted Hall's views saw the advantage of a new school structure for adolescents. By the 1920s, the concept of school reorganization for a separate junior high was in full swing.

## The Development of the Junior High School

Often considered a uniquely American institution, the junior high school concept actually originated in Europe, more specifically Denmark (Powell, 2004). Plans for the first junior high schools contained components that would be very familiar to today's middle school education. The school was to be based on the characteristics of young

adolescents and concerned with all aspects of growth and development. The junior high school would provide the final portion of general education and offer a transition to the high school years.

Two individuals who contributed information that helped to begin the junior high movement were Leonard Koos and Thomas Briggs who published books in 1920 (George & Alexander, 2002). The first junior high schools were influenced by factors and ideas other than what would constitute the most effective program. In many less populated states, junior high school became a substitute for the high school. In turn, the main goal became preparation for college; thus, junior high schools began taking on the characteristics of the high school. As a result, junior high schools became more and more of a high school replica.

Reform of the middle level started almost at the same time junior high schools became popular. The Commission on the Reorganization of Secondary Education recommended the "Seven Cardinal Principles" of content in secondary education in 1918, marking a major shift in educational thought about the education of adolescents (Schurgurensky, 2011). In the 1940s and 1950s, as efforts were made to bring about renaissance of the junior high school, some writers described what these schools ought to be like. The most influential statement about reform was developed by Gruhn and Douglass in 1947 (McEwin & Greene, 2011). They proposed and described six major functions: integration; exploration; guidance; differentiation; socialization; and, articulation. These functions remain today as a foundational framework for defining an effective middle level school. During the 1950s, junior highs began to be built to serve the problem of the "Baby Boom" and became viewed as miniature high schools, and

considered by many as an unsuitable fit for the needs and interests of early adolescents. These difficulties encountered by the junior high school led to substantial criticism, which in turn helped pave the way for the development of a new educational institution for middle level education. In order for this to occur people would have to be willing to do things differently and be open minded to a lot of change.

## Change Theory

In looking at the reform movement at the middle level, we see the definite resistance to change from traditional practices to new strategies. It is the fear of change that blocks a reform effort, which may be the case with the *Turning Points 2000* recommendations.

To clearly understand why teachers might fear change, we must review the research on change theory for clarification. The first recognized research on change started with Kurt Lewin in the mid 1900s. He identified three phases through which the change agent must proceed before the planned change becomes a part of the system. These stages include Unfreezing, Movement, and Refreezing. In Unfreezing, people must believe change is needed. Movement occurs when the change agent identifies, plans, and implements appropriate strategies. Finally, with Refreezing, the change agent stabilizes the change in the system so that it becomes integrated into the status quo (Fullan, 2003). The simple process provided the guidelines for organizations to successfully implement change. As time passed, other researchers further built on the ideas started with Change Theory.

**Hall and Hord Change Theory**

The model Hall and Hord (2010) developed assumes that there are 12 principles of change. From these 12 principles, they theorize that change occurs in stages of concern from zero-six. As such, there are also levels of use of an innovation that mirror the concern stages from zero-six. The implementation of the *Turning Points 2000* recommendations could fall somewhere within these stages of concern displaying the level of change present in the areas surveyed in this study.

Hall and Hord (2010) believe that these principles are no longer debatable points, for they summarize predictable aspects of change. The first assumption in their studies of change was that change is a process, not an event which they gained from the authors' Hall, Wallace, and Dossett's work produced in1973 (Hall & Hord, 2010). In other words, change is not accomplished by having a one-time announcement by an executive leader, a two-day training workshop for teachers in August, and/or the delivery of the new curriculum/technology to the school. Instead, change is a process through which people and organizations move as they gradually come to understand and become skilled and competent in the use of new ways.

The second principle is that development and implementation go together but serve different purposes. Development entails all of the activity related to creating an innovation, while implementation addresses establishing the use of the innovation in adopting sites. Development includes all of the steps and actions involved in creating, testing, and packaging an innovation; whereas, implementation includes all of the steps and actions involved in learning how to use it.

The third principle states that although everyone wants to talk about such broad concepts as policy, systems, and organizational factors, successful change starts and ends at the individual level. An entire organization does not change until each member has changed.

The fourth principle explains that when most people think or talk about change, they focus on what will be changed; in other words, they focus on the innovation. But other than being aware that there is an innovation, most school leaders do not seem to consider that there are ways to characterize innovations, and that they can vary in the amount of time, resources, and effort required for implementation.

As people plan and lead change processes, they tend to be preoccupied with the innovation and its use. They often do not think about the various actions and events that they and others take to influence the process, which are known as interventions. Interventions are the key to success of the change process. This is the fifth principle of change.

Many people seem to prefer to maintain a vertical perspective when thinking about organizations and how they work by seeing things as "top-down" or "bottom- up." The sixth principle explains that for change to succeed, a major shift in thinking by all the participants is needed. The vertical paradigm must be replaced with a horizontal perspective in which all of the actors are viewed as being on the same plane, with none higher or lower than any others.

A central theme of advocates for bottom-up change is that those nearest the action have the best ideas of how to accomplish the change. While the "bottom" may be able to launch and sustain an innovation effort for several years, if administrators do not engage

in ongoing active support, it is more than likely that change effort will die. This is the seventh principle and is proven in implementation research.

In the eighth principle, it describes one intervention called strategy, which is one that is more commonly known to people. A mandate is one kind of strategy that is used widely and has been criticized as being ineffective but can work quite well if used right. When a mandate is accompanied by continuing communication, on going training, on-site coaching, and time for implementation, it can operate quite well.

The ninth principle relates that although individuals are necessary to change, the key organizational unit for making change successful is the whole school. It must, however, work in harmony with district, state, and federal systems of education.

Embedded in all of the principles is an overriding principle that is the 10th. It states that there is a core belief that change is a team effort and all must help to facilitate the change process. Paired with that principle is the 11th which states that appropriate interventions reduce the challenges of change. If the process is facilitated well, change can be fun and rewarding. It certainly does not have to hurt or even be dreaded.

Lastly, the 12th principle involves the consideration of the school as a unit of change. As such, we can think of it as having two important dimensions that affect individuals' and organizations' change efforts through physical features and people factors. Physical features involve things such as the size and arrangement of the facility, and the resources, policies, structures, and schedules that shape the staff's work. People factors include the attitudes, beliefs, and values of the individuals involved as well as the relationships and norms that guide the individuals' behavior. An increasing body of literature on the influence of workplace culture has evolved from both educational writers

who study school improvement and from members of the corporate sector who are concerned with quality and its relationship to profits. This community of "professional learners," as labeled by Hord in 1997, embodies individuals who value change and seek change in order to increase their efficacy as teachers. Having such a learning-oriented staff can contribute profoundly to how the change process unfolds and ultimately succeeds in a given school (Hall & Hord, 2010)

**Stages of Concerns**

Feelings and perceptions about an innovation and change process can be sorted and classified into what Hall and Hord (2010) call concerns. In fact, there is a developmental pattern to how our feelings and perceptions evolve as the change process unfolds, which they named the Stages of Concern. These stages gave them a way of thinking about people's feelings and perceptions about change. The idea of calling one's feelings and perceptions concerns was originally proposed by Frances Fuller in 1969. Fuller proceeded to conduct a series of in-depth studies of concerns of student teachers. She then proposed a model outlining how, with increased experience in a teacher education program, the student teacher's concerns moved through four levels: unrelated; self; task; and, impact.

Unrelated concerns are found most frequently among student teachers who have not had any direct contact with school age children or clinical experience in school settings. Self-concerns tend to be most prevalent when student teachers begin their student teaching, or other, more intense clinical work. Task concerns show up quite soon after the start of student teaching, as the actual work of teaching becomes central. Impact concerns are the ultimate goal for student teachers, teachers, and professors. At this level

the concerns focus on what is happening with students and what the teacher can do to be more effective in improving student outcomes. Fuller (1969) proposed a different model for the content and flow of a teacher education program, which she named, personalized teacher education.

The same, unrelated, self, task, and impact pattern of concerns is found in people involved with all types of innovations and change processes. In addition, choosing the types of "interventions" that are to be done to facilitate the change process is based on the same personalization model. Through Hall and Hord's research, they identified and confirmed a set of seven specific categories of concerns about the innovation that they call Stages of Concern (SOC). These stages are from least concerned to most concerned: Awareness; Informational; Personal; Management; Consequence; Collaboration; and, Refocusing (Hall & Hord, 2010).

The original ideas of unrelated, self, task, and impact have been preserved, but based on their research findings, the self and impact areas have been clarified by distinguishing stages within each. Self concerns are now divided into two stages--informational and personal--and impact concerns are divided into consequence, collaboration, and refocusing.

SOC addresses the affective side of change that are people's reactions, feelings, perceptions, and attitudes. "Levels of Use" has to do with behaviors and portrays how people are acting with respect to specified change. Eight classifications, or levels, of how people act or behave with change have been identified and verified through the research. The first distinction to be made is whether the individual is a user or a non-user. Three non-use and five use levels have been identified. These Levels of Use of the Innovation

work together with the SOC from least to most use. The non-user levels are non-user, orientation, and preparation. The User levels are mechanical, routine, refinement, integration, and renewal (Hall & Hord, 2010). Looking at these levels, we can look at school reform and decide on what level is the district functioning and the change that is necessary for them to move forward in the change process.

A major reason that widespread change often occurs only modestly across a school is that the implementers, change facilitators, and policy–makers do not fully understand what the change is or what it will look like when it is implemented in the envisioned way. When there is such confusion, principals and other facilitators may give conflicting signals, and teachers will create their own versions of change as they try to understand and use the materials and processes that have been advocated.

Hall and Hord (2010) came up with a model that incorporates all the previous stages of change entitled the Concerns-Based Adoption Model (CBAM). The primary focus is the individual and individual's needs for understanding and support in the process of change. One important part of the thinking that was proposed in the original writing about concerns-based approach was to be sure to view the whole as well as the parts. The idea of systems thinking and especially the use of adaptive systems theory were emphasized. This systematic view has become much more widely accepted recently. Thinking about change processes in organizational settings as being systematic is important especially since there are so many pieces and interactive dynamics.

Typically the school wide change efforts have been short-term and lacking in participation by the entire staff. Encouraging the staff's motivation to change so that improvement in the school is ongoing has been a major challenge to school change

leaders. If the context of the school affects teachers' abilities and inclinations to change, what does the research tell us about such school settings? In review of the research on this topic Hall and Hord (2010) identified the five dimensions of these "professional learning communities" as following: (1) shared values and vision; (2) collective learning and application; (3) supportive and shared leadership; (4) supportive conditions; and, (5) shared personal practice.

**Fullan's Change Theory**

Since the time that Hall and Hord's (2010) book was published for the first time in 2003, another book was published that sheds some light on the change process and to why the *Turning Points* recommendations may or may not be implemented currently in middle level schools. This book is called *Breakthrough* by Fullan, Hill, and Crevola (2006). Richard Elmore describes how their theories apply to education by saying the following:

> The authors of this book describe a path, a process; a model that they think will take large educational systems from their current state of considerable effort but marginally successful improvements to a completely different state, a high functioning and powerful transformation unlike anything we have previously experienced. My work for the past thirty years has been shaped by the mantra, "steady work." My work has led me to an increasing appreciation of the power and resilience of the default culture of public schools the deeply rooted beliefs, structures, artifacts, and symbols of an increasingly dysfunctional and obsolete set of institutions. I am increasingly convinced that the work of reform is not about

'changing' the institutions and practices of schools but about deliberately displacing one culture with another. (p. xi)

When looking at previous models that influenced the *Breakthrough* model, we start with the Hall and Hord's CBAM. The strategies articulated in the model, and required of leaders for successful change, are those needed to guide and support individuals in their implementation efforts. Other models of that period used to establish *Breakthrough* have parallels to CBAM's focus on individuals and their concerns.

For instance, Bridges' 1991 work in the corporate sector describes the change process as three transition phases. The first of these is Endings, the second is a Neutral Zone, and third is Genuine New Beginnings. Similarly, Scott and Jaffe in 1989 proposed four phases of transition through change consisting of Denial, Resistance, Exploration, and Commitment (Fullan, Hill, & Crevola, 2006).

These models from Bridges, Scott, and Jaffe appear to concentrate mainly on pre-implementation period of the change process. Fullan's (2007) research and writing on change, however, much like Hall and Hord cover all stages. One phenomenon that comes from Fullan's model that may affect the *Turning Points 2000* recommendations is "implementation dip" (Fullan, 2007). The implementation dip is the period of time early in the implementation process during which productivity and morale both decline because of the tensions and anxieties generated as educators, parents, and students attempt to deal with unanticipated problems (Fullan, 2003). Many promising reforms have been discarded during this period.

Because of the "implementation dip" in the late 1980s and early 1990s, new policy-maker targets again emerged due to the fact that restructuring of schools was seen

as insufficient. The new cycle called for system wide changes, or in other words, systemic reform. At the federal level, one push was for state systemic initiatives. It was believed that such comprehensive models would fundamentally change how schools operate and would have wide impact.

Senge's (2006), thinking of work in a corporate setting, reported in *The Fifth Discipline*, has captured the attention of educational leaders who are struggling to persuade schools to become interested in change and improvement. Senge, looking to the work of Argyis in 1982, identified the factors that individuals and organizations collectively need to become a "learning organization." Five disciplines, or ways of thinking and interacting in the organization, represent these factors. They are first systems thinking which makes it possible to structure interrelationships more effectively. This discipline integrates the other four, fusing them into a coherent body. The other four disciplines are, building a shared vision, personal mastery, mental models, and the final discipline is team learning.

Elmore (2004) echoes a number of writers in commenting that schools have learned to change massively in their surface structures while changing little at their core. Wave after wave of reform initiatives constantly disrupt the surface life of schools but rarely penetrate deeply into the classroom to bring about systematic improvements in instruction. Fullan, Hill, and Crevola (2006) concur that it does not matter where the change starts as long as it is systematic thereafter. And systematic means a focus on establishing expert instructional systems that serve the needs of all levels.

Elmore (2004) has nailed the problem, but his solution is outlined only in broad strokes. Fullan, et al. (2006) feel we need to go from broad strokes to specific action

without falling into the trap of prescription. Prescriptive teaching often goes under the name of "direct instruction" and is used to refer generally to direct approaches to curriculum and instruction. In their meta-analysis of Comprehensive School Reform (CSR) designs, Borman, Hewes, Overman, and Brown (2003) indicated that, of the three models for which extensive research showed evidence of effectiveness for student achievement, two made extensive use of the direct instruction approaches.

Direct instructional approaches led to short-term gains, but a price is paid in terms of narrow control for teachers and little control for students. *Breakthrough* is an argument for changing the current model of classroom instruction to solve the very problems that direct instruction necessarily creates and reinforces. "Direct instruction creates a perverse dependency to achieve short-term results. Our *Breakthrough* solution--a system based on focused instruction--matches the short-term effects of direct instruction while building the conditions for longer-term effects that will be shown to be far more enduring than those of direct instruction (Fullan, et al., 2006).

Fullan's "Breakthrough Model" proves to be a more aggressive process that may be necessary to fully implement CSR in light of the NCLB mandates. The model is entitled the "Triple P Model" and consists of the following components: there are three inner core functions; personalization, precision, and professional learning. Six core functions support the three Ps: assessment literacy; school and classroom organization; classroom teaching; professional learning communities; intervention and assistance; and, home and school/community partnerships. Finally, there are leadership and coordination factors across the three levels of schools, districts, and the state that are required to orchestrate the first two layers.

"In a review of effective schools research from 1985, Michael Fullan focuses on the implications of these data in terms of change strategy. Fullan's model has potential for those involved in the full actualization of the middle school concept" (Merenbloom, 2007). In 1993, Fullan found that substantive change is both a time consuming and an energy intensive process. He concluded that the total time frame, from initiation to institutionalization, is lengthy. Even moderately complex changes take from three to five years, while major restructuring efforts can take 5 to 10 years.

There is another dimension of school and organizational change that has been given attention by the writers noted previously and that warrants some attention: the context in which the school as an organization operates. One part of that context is the school's own unique organizational environment that it has created, and the other is the larger context of district and state in which the school is located.

One of the keys to success in facilitating change in organizational settings is the type of climate or culture that is developed. There is confusion and inconsistency about the use of terms context, climate, and culture which a look at leadership literature will illustrate.

James and Jones (1974) as cited in Hall and Hord (2010) concluded that it is important to distinguish three concepts of climate:

1. Situational variables: The objectively observable features of an organization such as number of staff, building features, budgets, and policies.
2. Psychological climate: The individual's perceptions of aspects of organization that can be measured using statistically reliable questionnaires.
3. Organizational climate: The aggregation of individual's perceptions.

More recently, many authors have been using the terms culture and context. In some cases, culture as a word seems to be interchangeable with the terms climate and context, while in other cases some important distinctions are made. Hall and Hord (2010) in order to simplify and clarify, offer the following definitions:

1. Climate is the individuals' perceptions of a work setting in terms of priori-established concepts that can be measured empirically.
2. Culture is the individually and socially constructed values, norms, and beliefs about an organization and how it should behave that can be measured only by observation of the setting using qualitative methods.
3. Context is comprised of (a) culture (as defined above) and (b) ecological factors (as defined in James and Jones's discussion of situational variables above). (p. 194)

Hall and Hord (2010) point out that the culture (people or human factors) and situational variables (physical or structural factor) interact to make up the context, and that these two sets of variables are difficult to separate in terms of their individual and collective effects in a setting during the change process. It is with the use of these key definitions that questions will be developed for the quantitative survey later in Chapter III.

## Implementation Theory

The previous sections show proven research of effective interventions involving change to achieve successful school wide reforms. To explore the reasons for this occurring the researcher also covered the current state of the science of implementation, and identified what it takes to transmit innovative CSR models and practices to be used in

middle level schools. To provide the needed research data for this study information was provided by the National Implementation Research Network at the University of South Florida.

The authors of that study collected data through a review process by identifying literature reporting any efforts to collect data on attempts to implement practices or programs in any domain. The results of their literature review and synthesis confirmed that systematic implementation practices are essential to any national attempt to use the products of science such as evidence-based programs to improve the lives of its citizens (Fixsen, et al., 2005).

The findings showed that the purposes and outcomes of implementation might be categorized as being paper implementation, process implementation, and performance implementation. Paper implementation involves putting into place new policies and procedures with adoption of an innovation as the rationale for the policies and procedures. Process implementation means putting new operating procedures in place to conduct training workshops, provide supervision, change information reporting forms, and so on with the adoption of an innovation as the rationale for the procedures. Performance implementation means putting procedures and processes in place in such a way that the identified functional components of change are used with good effect for consumers.

A conceptual framework was developed and reviewed in their study that produced stages in the process of implementing evidence-based practices and programs. Implementation has five essential components made up of a source, a destination, a communication link, and a feedback mechanism that operates within a sphere of

influence. The essential implementation outcomes that result are: changes in adult professional behavior; changes in organizational structures and culture both formal and informal that support the changes in adult behavior; and, changes in relationships to consumers, stakeholders, and system partners (Fixsen, et al., 2005).

As previously explained, implementation is a process, not an event. Implementation will not happen all at once or proceed smoothly, at least not at first. Based on the research the following appear to be clear stages in the process of implementing evidence-based practices and programs. The stages of the implementation process are exploration and adoption, program installation, initial implementation, full operation, innovation, and sustainability.

The information from this research provides an overview of the evidence of what works and does not work in the implementation process. First, information dissemination alone and training by itself are ineffective implementation methods. Second, successful implementation efforts require a longer-term multi-level approach. Third, although there is little evidence related to organizational and system influences, those involved with the implementation process note their extreme importance. Fourth, perhaps the most noticeable gap in the available literature concerning interaction effects among implementation factors and their relative influences over time (Fixsen, et al., 2005).

Based on the theories previously presented, Figure 2 illustrates the factors that influence middle level teachers' perception of and practices in implementation of the *Turning Points 2000* recommendations.

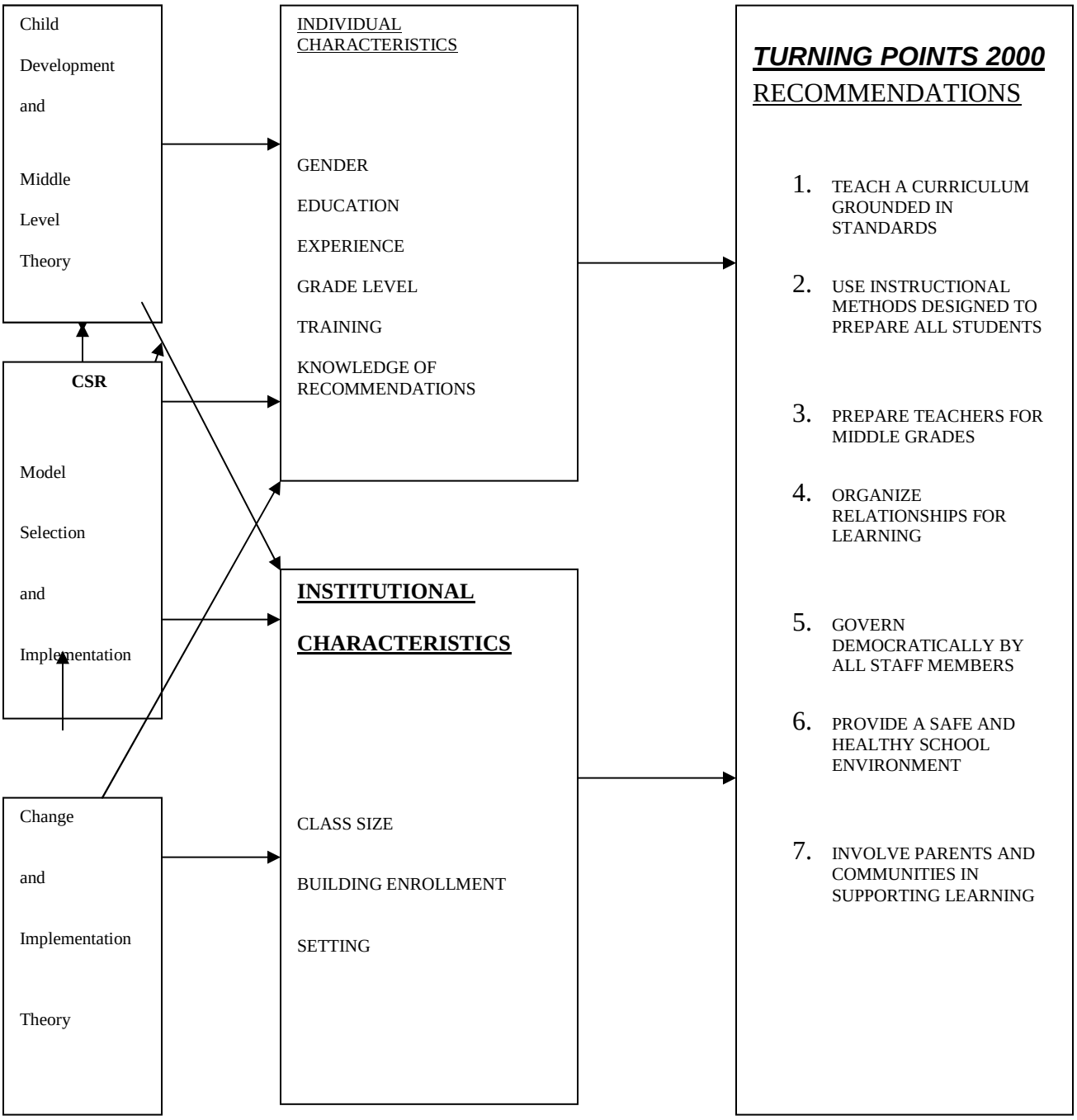


*Figure 2.* Factors that influence middle school teachers' perception of and practices in implementation of the *Turning Points 2000* recommendations.

With the onset of the NCLB of January 2002, schools receiving federal education dollars can only implement programs that are backed by scientifically based research. *Turning Points* is a proven CSR model that is based on two significant sources: the landmark report, *Turning Points: Preparing American Youth for the 21st Century*; and, 10 years of research and practices in middle schools across the country, as documented in *Turning Points 2000*. Unlike most CSR models, *Turning Points* focuses solely on students in the middle-grades and their unique needs as young adolescent learners.

*Turning Points* is a system of interacting elements, where change in one element requires change in other elements to be fully implemented and, in turn, causes change in other elements of the model that enables still other changes to occur. Together, the seven recommendations form a system, interacting and inter-dependent group of practices that form a unified whole. Each recommendation, or element, within this system influences the expression and reinforces the impact of other elements. Jackson and Davis (2000) sum this up by saying that the *Turning Points 2000* design system cannot be separated into self-contained components, where each can be addressed independently of the others. Instead, the design system they described, composed of the seven *Turning Points 2000* recommendations for improving middle grades schools, must be dealt with holistically, systemically, to ensure success.

## The Emergence of the Middle School

Now to better understand how these change theories can be put into effect in helping to implement the *Turning Points 2000* recommendations, one must first go back to the theories of how the middle level concept came about in education. In the 1960s, under the leadership of William Alexander, a middle school of grades five-eight or grades

six-eight was advanced as an alternative to the seven-nine junior high school, which had shown itself to be rather intransigent, dominated by the senior high school and not what Koos and Briggs envisioned in 1920. Major studies emerged from piloting these new schools to report on whether this configuration really worked. One such study as cited by George and Alexander (2002) was done by Eichorn in 1966 in the state of Pennsylvania. In his letter to the Pennsylvania Department of Instruction the following was stated as reasons to establish new grades six-eight:

1. From the physical and psychological point of view, it is a more natural grouping.
2. The social patterns are more nearly the same in grades 6,7 and 8 than in the conventional pattern of grades 7, 8 and 9.
3. The transition from the self-contained classroom to a departmentalized program may be more gradual. (p.26)

**Early Adolescent Stage of Development**

Early in the history of education in the United States, children were not understood and were compared with adults with the same capacity to think and act like adults. Little attention was given by teachers to the individual differences and needs of each student. This adolescent period of development gained slow acceptance, but it became a stage worthy of study following the publication of *Adolescence* by G. Stanley Hall (1904) by cited in George and Alexander (2002).

Early adolescence as a stage of development is relatively new in educational history. Much like adolescence, early adolescence, a developmental period between childhood and adolescence, achieved acceptance slowly in public education, but it gained

higher credibility when Havighurst (1968) suggested developmental tasks that must be achieved by students for this developmental stage. Thornburg (1983) described the unique physical, psychosocial, and cognitive developmental characteristics of 10 to 14 year olds. In addition, Eichhorn (1966) coined the term *transescence* to reflect the transitional nature of this unique stage of development. Eventually, Thornburg established the *Journal of Early Adolescence* as a forum for researchers and educational leaders to share research and theoretical articles on this developmental stage thus adding credibility to the movement (Manning, 2002).

There has been difficulty defining the dimensions of this age group because the events between childhood and adulthood do not follow a particular sequence (George & Alexander, 2002), and there is so much variability between individuals of the same gender and chronological age. It is at this time of change that most adolescents experience an abrupt change in their schooling experience from the child-centered methods of the elementary school to subject–centered focus of the senior high often resulting in loss of self-esteem and a decline in academic achievement.

**Physical Characteristics**

The young adolescent experiences rapid physical growth at varying rates. Around the ages of 12 and 14, for girls and boys respectively, a growth spurt marked by obvious skeletal and structural changes occurs (Andrews, 2008; George & Alexander, 2002; Manning, 2002). The lag or difference in development that young adolescents experience is awkward and embarrassing for them, and any physical development that is perceived as abnormal is cause for great concern. Those who mature early may develop a greater

sense of self-confidence, especially in physical activities, and those who mature later often feel insecure (George & Alexander, 2002).

Diversity in physical development is a concern for the middle level educator. To appropriately respond to the physical needs of 10 to 14 year olds, educators should provide frequent opportunities for physical movement, rest, and change of activity. They should also provide instruction in diet, nutrition, exercise, hygiene, and coping with physical changes (George & Alexander, 2002). Educators should emphasize self-understanding and self-acceptance of physical changes and provide intramural sports and other physical fitness and lifetime sports activities in which all students can participate.

**Cognitive Characteristics**

Educators generally use Piaget's (1973) theory of stages of development to describe the cognitive abilities of young adolescents. Intellectually, authors believe adolescents progress from Piaget's concrete operations stage to the formal operations stage of development (Manning, 2002). However, George and Alexander (2002) created some debate in their findings when they voiced that concerns exist with Piaget's stages. Where Piaget suggests that the transition from concrete to formal operations occurs around the age of 12, George and Alexander (2002), based upon their experience, believe that adolescents move into the formal operations stage later than Piaget proposed. In addition to providing a broad range of intellectual activities, suggestions arose that curricular and organizational practices should be adapted, possibly through the incorporation of exploratory programs, to accommodate the constantly changing interests and limited attention spans of the students. At this point in time research began to show that we each learn differently, which became the idea for "learning styles." Whatever the

label is to identify this approach (learning style, cognitive style, multiple intelligences) or styles themselves (auditory, visual, concrete/sequential), what matters is that "individual student differences are respected and accommodated" (Gardner, 2011).

**Psychosocial Characteristics**

Young adolescents experience diversity in social and emotional development as well. Socially, they are moving toward greater independence. They move gradually from the authority of parents and teachers to greater dependence on peers (George & Alexander, 2002; Manning, 2002). Close friendships tend to emerge during this period of development. Boys generally have large social networks, while girls tend to develop a few close friendships (Manning, 2002).

Emotionally, this time of transition from childhood to adulthood is crucial to the development of self-esteem. This age group is particularly sensitive and vulnerable, and they experience emotional peaks and valleys (George & Alexander, 2002).

To be responsive to the social and emotional needs of the young adolescent, George and Alexander (2002) suggest that schools provide opportunities for students to interact formally and informally with peers and adults. Middle level students should also have opportunities to be autonomous and accept responsibility. This is a time of great challenge and takes people who have unique abilities to work with adolescents. The NMSA also emphasizes the need for supportive adult guidance for this age group. With the redefining of the family structure every year, there is an even greater need for these students to have positive adult role models outside of the home (National Middle School Association, 1995, 2011). Attracting immediate interest, the middle school idea became

the focus of a reform movement, especially among those who earlier sought to reform the junior high school.

Two major factors emerged that greatly helped the middle level movement in the 1960s. The Sputnik induced space race between the Soviet Union and United States created a demand for academic excellence. This drive led many to establish a new math and science curriculum. Second is the research data received on pediatric and medical data that documented the earlier maturation of young adolescents (Steward, 2000). During the last 100 years, there has been a striking tendency for the time of adolescence, as typified by menstrual cycle or the growth spurt, to come earlier. Data of heights and weights of children show that the whole process of growth has been progressively sped up and that all children born in the 1930s or 1950s were considerably larger than those born in the 1900s.

For almost two decades, middle schools lacked an adequate definition. But, by the 1980s, education began to arrive at a relatively complete consensus on the characteristics of successful middle schools. A consensus definition of key characteristics emerged in 1982 when the NMSA published a position paper entitled *This We Believe*. Included in the document were ten "essential" elements of a "true" middle school (National Middle School Association, 2003).

To develop further the important ideas in the position paper and give readers more concrete advice about implementing them, a 12 part series was initiated in *Middle School Journal* under the title *This We Believe and Now We Must Act*. It began in September 1996 and culminated in January 1999. The book that was compiled attempted to further advance its recommendations and make them even more accessible and meaningful to

middle level educators and policy makers around the world. Authors joined together to discuss in greater depth those 12 characteristics that would lead to more effective middle schooling. Practicing middle level educators were asked to provide indicators that an observer might see, hear, or feel if a particular characteristic of a developmentally responsive middle level education was, in fact, present in a school (Anfara, Andrew, Hough, Mertens, Mizelle, & White, 2003; National Middle School Association, 2010).

There are remarkable parallels between the design elements in *Turning Points 2000* and characteristics of developmentally responsive middle schools found in *This We Believe*. *This We Believe* and *Turning Points 2000* are both grounded in values and perceptions about the nature and needs of children. They spurred the evolution of middle level education toward greater parity between statements of vision and actual policies and practices. The compelling messages of these two publications led many state education departments in the United States to develop coherent policy objectives for middle level education programs, spelling out an unambiguous vision for middle school practitioners in those states.

The *Turning Points 2000* recommendations are listed in this chapter in Figure 2 for the reader. To obtain a clearer understanding of the parallels here is a review of the 12 characteristics which are highlighted for the reader followed by an explanation of each. 1. Educators committed to young adolescents: Effective middle school educators make a conscious choice to work with young adolescents. They understand the developmental uniqueness of young adolescents and are as knowledgeable about their students as they are about the subject matter. 2. Developing and implementing a "shared vision:" A developmentally responsive middle level school is guided by a vision.

Research and practice over the past three decades provide middle level educators with a solid foundation that informs our vision of middle level education. 3. High expectations for all: Educators in developmentally responsive middle level schools hold and act upon high expectations for all students, and the students themselves have expectations of success. Successful middle level schools are grounded in the understanding that young adolescents are capable of far more than adults often assume. 4. Advisory: Advocacy for every student: Each student has one adult who knows and cares for that individual and who supports that student's academic and personal development. This designated advocate must be a model of good character and be knowledgeable about both young adolescent development and middle level education. 5. School, family, and community partnerships: Schools recognize and support families and community members as participants in school programs by encouraging their roles in supporting learning and honoring them as essential volunteers. Parent, families, and community members can enrich the curriculum and facilitate learning. 6. A positive school climate: The climate of a developmentally responsive middle level school is safe, inviting, and caring; it promotes a sense of community and encourages learning. The climate encourages positive risk taking, initiative, and building of substantive relationships. 7. Curriculum that is challenging, integrative, and exploratory: In developmentally responsive middle level schools, curriculum embraces every planned aspect of a school's educational program. Although learning occurs in many unanticipated ways, curriculum is intentionally designed to accomplish a school's mission. 8. Varied teaching and learning approaches: The distinctive developmental and learning characteristics of young adolescents provide the foundation for selecting teaching strategies. Since young

adolescents learn best through engagement and interaction, learning strategies feature activities that provide hands-on experiences and actively involve youngsters in learning. 9. Assessment and evaluation that promote learning: Continuous authentic and appropriate assessment and evaluation are essential components of the learning process at any age level, providing information that students, teachers, and family members need to plan further learning. 10. Flexible organizational structures: Developmentally appropriate middle level schools are flexible in grouping, scheduling, and staffing. Teachers design and operate much of the program, collaborate across teaching specialties, and share responsibility for literacy development, guidance/advocacy, and student life. 11. Programs and policies that foster health, wellness, and safety: Developmentally responsive middle level schools provide abundant opportunities for students to achieve and maintain healthy minds and bodies and to understand their own growth. 12. Comprehensive guidance and support services: Young adolescents live in an environment that presents them with many choices. Students bring events in their out of school lives to school. Developmentally responsive middle level schools, therefore, provide both teachers and specialized professionals who are readily available to offer the assistance many students need (National Middle School Association, 2010).

In 1989, the CCAD (1989) presented the findings of its task force on young adolescents. In *Turning Points: Preparing American Youth for the 21st Century* (1989), the task force made a number of recommendations that reinforced the path that middle school education had taken (Jackson & Davis, 2000; Powell, 2004).

The report was an almost complete and enthusiastic endorsement of the middle level concept. Totally rejecting the traditional, heavily secondary approach, the Carnegie

groups placed its recommendations squarely in line with what middle school educators had been saying for years. Both *This We Believe* and *Turning Points* pointed out the great disparity between statements of vision and actual school policies and practices.

The teachers and administrators at the middle level have a profound impact as to whether the recommendations are successful or not in schools. With a better understanding of their perceptions, it may be possible to bridge the gap between researchers and practitioners, putting practitioners in touch with research in the framework of a comprehensive and comprehensible model.

To better understand how to gather perceptions, we must call on research of current authors to form the questions to ask practitioners. Organizational trends and practices in middle level schools can be gained through studies from (Angelle & Anfara, 2006; Conklin, 2007; Styron, 2008). It is not just the shape of the building or the way rooms are arranged, but rather the practices that go on inside the classroom that make the difference. To get teachers to revise their practices takes tremendous revolution in their beliefs and values. Research must be sought that identifies the change process so teachers can better understand why they resist change. By overcoming this resistance, they can slowly begin to change.

One re-occurring theme, seen throughout the middle level reform, is the need for teachers to learn and understand the special needs of young adolescents. Teachers must be fully committed to their job and want to teach students with a wide range of developmental needs. Many teachers serving in the middle level grades have not been appropriately prepared for working with these students, and they do not understand what is involved in creating responsive educational programs. On the other hand, there are

many teachers who have not been prepared for middle level assignments but have found a great deal of satisfaction and intrigue in their work.

To prepare for teaching early adolescents, schools need to provide specialized pre-service teacher education programs (McCabe, 2004; McEwin, Dickinson, & Smith, 2004; National Middle School Association, 2006). Teachers, who are already in the field, need continuing professional education. The rapid growth of professional associations, at state and national levels, during the last two decades speaks to the urgency teachers themselves feel for further education. Assignment to a middle grade school is, all too frequently, the last choice of teachers who are prepared for elementary and secondary education.

Now more than ever we need to seek clarification to help define what it means to be an effective teacher. Three recent events help to accent this urgency. First, the NCLB (2001) legislation has focused much attention on the idea of highly qualified teachers. Policymakers should expand their concepts to include not only content knowledge, but also knowledge of pedagogical issues, classroom management, and the nature of the learner. What it takes to transform a marginal middle grades school is continuous, high quality pre- and in-service professional education that is integrated into teachers' daily work (Jackson & Davis, 2000).

Second, the topic of understanding effective teaching for young adolescents is important because effective teaching has been linked to student success in school. Research points to the positive impact on student achievement of using varied and appropriate strategies for learning and teaching (Mertens, Flowers, & Mulhall, 2005: Reeves, 2009; Tomlinson & McTighe, 2006). In *Turning Points 2000,* the authors point

out that to be effective, instruction must mesh with three other aspects of teaching and learning. One aspect is the curriculum, which is based on agreed-upon standards outlining what students should know and be able to do, the concerns of young adolescents, and how students learn best (Jackson & Davis, 2000). Another aspect is the assessments students will use to demonstrate their knowledge and skills. This includes ongoing assessment, both formal and informal, which should be used as a diagnostic tool revealing what students have learned and pointing out gaps in their understanding and skills that need to be filled (Wiggins & McTighe, 2005). Lastly, the needs, interests, and concerns of students themselves must be considered. To ensure the success of every student, instructional practice must address learners with diverse levels of readiness, rates of learning, and preferred means of learning (learning styles), experiences, interests, and cultural backgrounds (Gardner, 2011).

Third, while the number of states that have middle grades licensure/certification historically has increased from 2 states in 1968 (Pumerantz, 1969), to 25 in 1982 (McEwin & Allen, 1983), to 33 in 1992 (Valentine & Mogar, 1992), to 43 and Washington D. C. in 2002 (Gaskill, 2002), only about half of these states require this license. Clearer understanding of effective middle grades teaching may help in advocating for specific middle grades licensure and facilitate its implementation as a prerequisite for teaching in middle schools (Andrews, & Jackson, 2007; Mertens, Flowers, & Mulhall, 2005).

## Implementation of Recommendations

There were several national studies in the 1990s that collected descriptive data on the degree to which middle school practices have been implemented. These studies have been done by Irvin and Hough (1997), Cawelti (1988), Alexander and McEwin (1989), McEwin, Dickinson, and Jenkins (1996), Epstein and MacIver (1990), Valentine, et al. (1993), George and Shewey (1994). After reviewing the national survey data from that decade, it would be easy to conclude that middle schools, in greater numbers, were implementing recommended middle school practices in an effort to more effectively respond to developmental needs of young adolescents; however, after closer investigation, this did not prove to be the case currently (George, 2007; Haselhuhn, Al-Mabuk, & Gabriele, 2007; Yecke, 2005).

In order to determine the efficacy of middle school recommendations, the degree of implementation of these recommendations must be determined. Several national surveys of middle schools found that most middle schools failed to achieve the goals of the middle school movement. Several authors indicated that few middle schools had implemented many of the recommended practices, and even fewer had implemented them at all (Anfara, 2005; RAND, 2004, 2006).

The CCAD recommendations were accepted by members of the education community as the focus for the middle school reform (George & Alexander, 2002; Manning, 2002). It was assumed logical to expect widespread levels of implementation, but few recommendations were actually practiced in schools. Implementation studies began to surface dealing with statewide implementation in individual states (Cook, Faulkner, & Kinne, 2009; Faulkner & Cook, 2006; Huss, & Eastep, 2011; Meeks &

Stepka, 2004). Despite claims of success from some, the surveys verified most researchers began to see results that were not quite as promising.

Ferguson, Hackman, Hanna, and Ballantine (2010) studied schools that made rapid and substantial progress. They found that "implementation most strongly sets the featured schools apart from other schools" (p. 23). The principals and other staff members at these schools "skillfully and relentlessly implemented plans, monitored quality, and provided appropriate supports and incentives" (Ferguson, Hackman, Hanna, & Ballantine, 2010, p. 23). Goodwin (2008) supported the importance of high-quality implementation. "What is in your plan is probably less important –as long as it focuses on using research-based strategies to address student needs-than how well your staff implements it" (p. 1).

In their regional study on implementation of the middle school concept Faulkner and Cook (2006) found that some of the concepts were being implemented while others were not implemented. Results from the McEwin and Greene (2009) study revealed, however, that many middle schools have failed to fully implement developmentally responsive programs and practices. This situation has led to criticism of middle level schools and the middle school concept (Fixsen, 2005; Goodwin, 2011). However, the problem does not lie in a lack of knowledge about the components of developmentally responsive middle schools; the real problem lies in the failure to fully implement these features in ways that benefit all young adolescents (McEwin & Greene, 2011).

With this concern, the research on implementation began to go to individual districts and regions to drill down whether the recommendations had an effect on student achievement. In 1996 a dissertation was written by Myles Seghers in which he began by

writing, “There is little evidence, however, that schools that educate young adolescents are implementing the Carnegie recommendations at a high level, nor is there much evidence that the recommendations are related to positive student and school outcomes” (Seghers, 1996). His study assessed the level of implementation of the Carnegie recommendations in Louisiana where middle level education specialists and advocates endorsed and publicized them in 1989. In addition, the study investigated whether implementing the Carnegie recommendations was related to desirable student and school outcomes.

Seghers (1996) gathered that researchers were identifying three themes that are prevalent in middle level literature. During the decade leading up to his study, one theme had been the essential characteristics needed for schools that effectively educate students in the middle. A second theme concerns the attempt to determine the degree to which the exemplary characteristics have been implemented in schools. A third theme of middle level research in that decade was to accurately interpret the effects of implementing exemplary characteristics on desirable educational outcomes.

A first step toward measuring the level of implementation of the Carnegie (1989) recommendations was to find an appropriate instrument. Because a search by Seghers through the literature and agencies such as the NMSA failed to reveal an instrument that served this purpose, he developed the MLPQ. It consisted of 36 questions and was set up based on a 5 point Likert scale. Seghers used the MLPQ to survey principals in Louisiana public schools that serve sixth and/or seventh grade in four grade configurations (pre-K-6 and K-6, middle schools with grades 6-8, high schools with grades 7-12, and combined pre-K-12 or K-12). He also identified the school’s setting

(rural, suburban, and urban) and socioeconomic status (SES) of students based upon the percentage that receives free or reduced lunch.

The results of Seghers (1996) study into the levels of implementation conflicted with prior national studies. Seghers' study regarding the level of implementation in Louisiana schools was not nearly as promising. Middle level scholars (George & Alexander, 2002) include advisory programs, interdisciplinary teaming, and exploratory courses as key ingredients to a successful middle level program. Results from Seghers, however, indicated that means for these practices were among the lowest mean scores for the 28 MLPQ items (Seghers, 1996). He speculated that the low mean scores for these practices were the result of the specificity of the statements on the MLPQ for these practices as compared to the other statements on the instrument; consequently, the means for the other statements were inflated.

Also disappointing were the results in relation to grade configuration, SES, and school setting. Despite the fact that middle schools (grades six-eight) have been identified as the best organizational structure to meet the needs of transescents (George & Alexander, 2002; Jackson & Davis, 2000; Manning, 2002), "the middle school configuration (grades six-eight) had lower mean for the total score on the MLPQ than the elementary school configuration (pre-K-6)" (Seghers, 1996, p. 311). The MLPQ indicated "no relationship for the effect of SES" and "very few statistical differences . . . for the effect of school setting" (p. 311-312).

Despite the low level of implementation on key middle level practices, these results provided some empirical evidence that implementing long-recommended middle level practices is related positively to academic achievement and negatively related to

proportion of suspensions, expulsions, and teacher turnover. This information added to the limited amount of empirical evidence that had been reported in literature. However, more evidence was needed to further research in this area.

Seghers (1996) made recommendations for further research that has guided researchers to select key areas to study: 1. Examine more than just 6-8 middle schools and different configurations should be studied. 2. Research should focus not only on level of implementation but also on the quality of implementation. 3. Determine if some recommendations are more desirable than others. 4. If it is best to determine a specific order to implement to be more successful. 5. Monitor what we say we want to do and what we are actually doing. 6. Continue to search for evidence that supports positive effects of recommended programs on desirable educational outcomes. 7. Conduct research for the betterment of the teaching/learning situation in our schools and the "moral obligation" of educational research (p. 336-337).

Several dissertations followed that focused their research on the implementation of *Turning Points* (1989) recommendations or nationally accepted Middle Level Practices. These dissertations all contributed valuable research information as to whether implementations of characteristics were occurring, and if they aided in raising student outcomes. Some dissertations that lent information for this researcher were Warren, (2004) and Miller (2004). This researcher, however, centered his focus on dissertations and articles that assessed implementation of recommendations using the Seghers MLPQ survey.

Four dissertations where identified that used the MLPQ survey, but did their research prior to 2000. The main emphasis of this study is after the year 2000. These

dissertations included: Becker (1999); Charbonnet (1999); Steward (2000); and, Shofner, (2001). The dissertations dealt with implementation of recommendations of *Turning Points* (1989) and various areas of research within schools that contribute to student achievement. For the purpose of this study, findings from more current dissertations that involve research into *Turning Points* (1989) and *Turning Points 2000* were sought and were used in this literature review.

An implementation study by David A. Johns surveyed principals in Ohio using the MLPQ to determine the level of *Turning Points* implementation in Ohio middle schools because no formal study had been conducted in Ohio. Johns also examined the effect of teaching experience, professional development, and professional experience on reported implementation by the principal. Lastly, Johns made the first attempt to examine whether the levels of implementation differentiated between high and low achieving Ohio middle schools based upon scores on the Ohio Proficiency Tests (Johns, 2001).

In Ohio, Johns found a moderately high level of implementation of *Turning Points* recommendations according to the principals' perceptions. The responding principals indicated that 97% had middle school oriented professional development, and 40% had participated in non-required middle level graduate coursework. Eighty-four percent had previous middle school teaching experience. None of these factors, however, correlated with higher levels of implementation. On the other hand, the principals' years of experience in their present school and overall experience in their school both showed a positive correlation to *Turning Points* implementation. Lastly, Johns found that levels of

implementation did not differentiate between high and low achieving schools (Johns, 2001).

Interpretation of Johns' (2001) results, however, was affected by five significant limitations.

1. Middle schools from the eight large urban school districts in Ohio were excluded due to high administrative turnover and much lower proficiency test scores.
2. Only middle schools of 5-8 and 6-8 grade configurations were included.
3. Only principals with three or more years of experience in their building were included.
4. Only schools in the 2nd and 3rd quartile of per-pupil expenditure were included.
5. Only the perceptions of principals were surveyed. (p. 16)

Johns suggested that future research include data from the large, urban districts in Ohio. He also believed that investigating the relationship between SES and implementation would be beneficial. Furthermore, Johns suggested gathering data from other sources such as teachers in order to address his final limitation. In his opinion, teachers' perceptions of implementation could potentially differ from principals' perceptions since teachers generally implement the vision that principals initiate. Viewing implementation through both lenses could help to inform the discussion and provide a more accurate assessment of the status of *Turning Points* implementation in Ohio.

Based upon the recommendations for future research from John's dissertation, another dissertation followed using the MLPQ written by Shawn A. Faulkner in 2003. The purpose of his study was two fold. The first purpose was to determine the degree to which public middle schools in Ohio had implemented the *Turning Points* recommendations. While examining implementation, the study sought to improve upon previous studies by collecting survey responses from both principals and teachers to address the need for multiple data sources. The second purpose was to examine the potential relationships between implementation and school enrollment, per-pupil expenditure, and academic achievement.

The study solicited responses from 567 middle schools in Ohio using the MLPQ (Seghers, 1996). Using 28 specific statements and 8 global statements requiring Likert-type responses, the MLPQ addressed each of the 8 constructs of *Turning Points.* Rasch analyses of responses from 231 principals and 474 teachers representing 278 different schools (49%) reveal a relatively high level of *Turning Points* implementation in Ohio's middle school with few differences between the responses of principals and teachers. In addition, analyses revealed only slight positive correlation between a school's level of implementation and enrollment, per-pupil expenditure, or academic achievement. Schools of all sizes and funding levels reported implementation of *Turning Points* recommendations, and implementations of the reform initiatives did not hinder academic achievement (Faulkner, 2003).

Interpretation of Faulkner's results, however, was affected by six significant limitations. First, survey data collected for his study only included responses from building principals and teachers. Data were not collected from others who have a vested

interest in the success of middle school reform efforts (e.g., parents, students, and community members). Second, this investigation was limited to public schools in Ohio identified by the Ohio Department of Education as middle schools. Third, the MLPQ was designed to measure the breadth of implementation, not the quality of implementation. Fourth, while item separation statistics indicated a good spread in the items on the MLPQ, a person separation of 2.89 suggested that the instrument was not exceptionally successful in differentiating levels of implementation. This lack of distinction limited the usefulness of the results. Fifth, Rasch analyses revealed seven dysfunctional items on the MLPQ, five of which were designed to measure key middle school components. While other MLPQ items and global statements remained to assess overall implementation, removal of the dysfunctional items limited the ability of the instrument to measure these key components. Though the results of the study were limited, Rasch analyses provided a basis for perfecting the MLPQ for future studies. Lastly, a lower than expected response to the MLPQ from the comprehensive sample combined with the self-selected nature of the sample posed a potential limitation. Only half the middle schools in Ohio responded to the survey (Faulkner, 2003).

Faulkner suggested a number of recommendations for future research based on the findings in his study. First, future studies should include a broad based examination of implementation in all middle schools including junior high schools, private schools, and other special schools. Second, future research should seek improved methods of measuring *Turning Points* implementation. While improvements to the MLPQ were suggested, including the revision of the items deleted from the analyses, other data collection instruments should be developed, incorporating not only means of measuring

the breadth of implementation, but also the quality of implementation. Third, this study began to address the need for additional data sources by surveying the perceptions of both principals and teachers. Future studies should include data from other stakeholders in the reform process (students, parents, community members, and business leaders) and qualitative data such as observations and interviews. Fourth, the study sought to examine the relationship between school size, per-pupil expenditure, and academic achievement. Future studies should also examine the potential relationships between implementation and other factors of interest to educators such as student and teacher attendance, tardiness, referrals for discipline, graduation rates, staff and student morale, and overall internal school environment. A fifth recommendation was to examine key middle school components and their relationships to various professional development practices to determine which professional development practices enhance implementation. Sixth, to more adequately assess implementation in rural and urban settings, future studies must develop an instrument that measures non-traditional methods of implementation often found in rural and urban schools. Lastly, after addressing the stated limitations, future studies should duplicate this study in Ohio and in other states to perfect the means by which overall implementation is assessed. In addition, duplication would permit comparative analysis to determine which states are implementing model practices to a great extent, and if so, how and why (Faulkner, 2003).

Several dissertations followed using elements of the *Turning Points* (1989) that lent knowledge to this research, but they did not involve the use of the Segher MLPQ survey. In Massachusetts, Rabinovitch (2004) sought to find if two schools with *Turning Points* and its attention to social and emotional needs were successful at addressing high-

stakes testing or if two schools without were more successful. He found that the schools with *Turning Points* characteristics were similar to the other schools in high stakes tests, thus they were also addressing the social and emotional needs at the same time.

In Missouri, Goodman (2006) sought to find out what the relationship was between individuals, collective programs, practices, and achievements. He created a survey to seek demographics, programs and practices to be identified, and the relationship between programs, practice, and achievement in the subjects of math and communication arts. The model used in the schools as a reform model was *Turning Points*. His findings showed that in math and language arts achievement was influenced similarly. In the area of learning environment there was a significant high level in math. In curriculum rigor, there was a significant higher level in communications arts. In the areas of disposition, professional development, and team maturity, the levels were similar in both math and communication arts.

The researcher did a search using the ProQuest data base service and found no other dissertations after 2000 dealing with *Turning Points* or *Turning Points 2000* that used the MLPQ survey. The search did produce 41 studies dealing with teacher perception and implementation of middle level practices. Narrowing the results down to the last five years the researcher was able to review six dissertations that yielded findings that helped the reader see current trends in middle level implementation.

Trenkamp (2007) did a study that described the conditions under which educational reform can be implemented and sustained, and the conditions under which educational reform can be hindered and restrained. The results indicated that one significant factor that influences teachers' implementation practices is whether they

believe their students learn more as a result of the reform. Findings revealed the reform being studied had no impact on higher student achievement.

Walters (2007) did a study to explore the factors influencing teachers' motivation and their perceptions toward change in initiating and implementing a new program. The results showed teachers became involved at first through conversations with other teachers. The degree of implementation varied based on motivation, ability, and effort of the teachers. Teachers' experience with the new model increased over time based on the belief that implementing the innovation would help students.

Crowley (2009) did a study to see the relationship between the implementation of middle grade level reform and student achievement. The results of his study found that the middle school model they used did have results that were highly significant in helping to raise test scores.

Johnson (2010) did an investigation of middle grades teachers' knowledge of early adolescent development. The areas of knowledge surveyed were adolescent characteristics of physical, social, emotional, and cognitive. Results indicated teachers had a mid-level to high knowledge of student needs which was gained through observation in classrooms. Recommendations were made to develop a comprehensive staff development training to broaden the teachers' knowledge in order to benefit students.

A study by Lyle (2010), involved exploring the teacher and administrator perceptions of responsibilities for implementing a school reform model. The findings of this study identified leadership challenges that impeded sustainability. Leaders need to

address potential change barriers and assume non-traditional leadership roles and responsibilities.

Finally, Fry (2010) did a study to examine educators' perceptions of a school reform and the change in pass rates on test scores. The findings failed to support the notion that the reform affected student achievement as measured by the change in the pass rates. The study supported the need for subsequent work in the development of comprehensive school reform programs that closely align elements of the instructional process.

Most educational reforms assume that teachers will add new skills and, at the same time, change their values and attitudes that shape practice. Some of the attitudinal change is rooted in tradition. Replacing practice, then, involves modifying deeply held views about "best practice" and relinquishing long-term beliefs about instruction. This departure from traditional practice is both upsetting and threatening to teachers.

Based on the two theories presented earlier, it can be determined that the level of implementation of *Turning Points 2000* was mostly dictated by adult learning and level of change teachers are displaying. As teachers continue to look at middle level reform, they must learn appropriate methods to address students' developmental needs and overcome the fear of change. Overall, the focus for educators should be on student success. Educators will find barriers when implementing change in schools. Educators must continue to identify, implement, and analyze the variables needed for every student to succeed.

Staff development is an essential element in the successful implementation of the middle level process. This study sought to discover whether teachers know the middle

level essentials and ultimately if they are practicing those characteristics. Prior to embarking on this broad topic, there must be a focus on the change process itself. Educational leaders must be fully aware of dynamics involved in creating change. Beyond writing goals and objectives, there must be a clear focus on how people involved will be affected, respond to change, and ultimately facilitate the change process (Merenbloom, 2007).

## *Turning Points* Framework

*Turning Points* (1989) strengthened an emerging movement, then largely unrecognized by policy makers, building support for educating young adolescents through new relationships among schools, families, and community institutions, including those concerned with students at risk.

Adolescents make choices affecting their health, their education, and the people they will become. The recommendations of the original *Turning Points* report address this challenge in middle grade schools, while recognizing that the schools cannot do what needs to be done in the future without the cooperation of everyone involved with youth.

The 1989 publication by Carnegie CCAD of *Turning Points: Preparing American Youth for the 21st Century* was a milestone in the course of the middle level reform movement (Jackson & Davis, 2000; Manning, 2002). The task force that was created made eight recommendations intended to "vastly improve the educational experiences of all middle level students" (p. 9).

The Carnegie Council (1989) recommended that middle schools follow these eight recommendations. 1. Large middle grades schools should be divided into smaller communities for learning. This allows each student to receive sustained individual

attention. 2. Middle grades schools should transmit a core of common, substantial knowledge to all students. Teachers should instruct in ways that foster curiosity, problem solving, and critical thinking. 3. Middle grades schools should be organized to ensure success for virtually all students. Schools can address this area by utilizing cooperative learning and other techniques suitable for this developmental phase. 4. Teachers and principals should have major responsibility and authority to transform middle grades schools. The power should not fall to distant administrative or political organizations. 5. Teachers for the middle grades should be specifically prepared to teach young adolescents. Teachers should also be given opportunities to continue to learn more through staff development and be recognized distinctively for this accomplishment. 6. Schools should be environments for health promotion, with particular emphasis on the life sciences and their applications. By writing curriculum that covers these areas, the education and health of young adolescents must be inextricably linked. 7. Families should be allied with school staff. This can be accomplished in a spirit of mutual respect with ample opportunities for joint effort. 8. Schools should be partners with various kinds of community organizations in educating young adolescents. Partnerships will greatly aid students in becoming aware of a variety of jobs while involving them in the experience of carefully considered service learning.

There are some reasons few reports on education have been so widely read. First, the task force itself was highly credible. It was composed of a group of scholars and expert practitioners who brought a rigorous, independent perspective to middle grades education. It addressed concerns that paralleled the experiences of millions of middle grade educators who were concerned about their students. It drew on research and the

best practices of middle grades scholars and advocates. Finally, the content and organization of the report helped make sense of middle grades education.

Several trends have come about because of the recommendations in *Turning Points*. There has been a rise in five-eight and six-eight grade configurations. Teacher and student teams have been developed, resulting in common planning for the teachers. Numerous studies have shown that *Turning Points* have made a great difference in the lives of young adolescents (Mertens, Flowers & Mulhall, 2005; Slavin, Daniels, & Madden, 2005).

Most of the recent articles that attack the middle schools cite evidence that is mounting from national studies like the Third International Math and Science Study (TIMSS). TIMSS is the largest international comparative study of educational achievement to date with data on approximately 500,000 students from 41 countries. In his review of the TIMSS 1995 results, Silver (1998) found "a persuasive and intolerable mediocrity in mathematics teaching and learning in the middle grades" (p. 1). Whitmire (1998), voicing similar opinion, writes, "U.S. students stagnate in seventh and eighth grades, leaving them unprepared and unmotivated for the stiff high school . . . classes looming ahead" (p. 1).

In a recent review of the TIMSS 2007 results by the researcher from the TIMSS website the following comparisons where noted for middle level students. The average mathematics scores for eighth grade students were higher in 2007. The average science score for the eighth grade students were not measurably different from 2007. The data would indicate that middle level learning has improved but is it because of the CSR models currently being implemented? (TIMSS, 2011).

As a result of this criticism in the late 1990s, research was needed to validate what was missing in middle level practice. Dr. Anthony Jackson lead a Carnegie team in a decade-long follow up effort, the Middle Grade School State Policy Initiative (MGSSPI), to foster adoption of the recommendations, assess the implementation of these recommendations, and determine the nature and extent of any benefits associated with implementation. *Turning Points 2000* draws on the lessons learned from the MGSSPI from several other national middle grades improvement efforts and on the latest research. After reviewing the best available research, *Turning Points 2000* was written to help bridge the gap between researchers and practitioners, putting practitioners in touch with research in the framework of a comprehensive and comprehensible model. Schools grounded in the *Turning Points* design are dedicated to excellence and equity and to being responsive to the developmental needs of all young adolescents.

*Turning Points 2000* recommends that middle grade schools implement seven recommendations that reflect what has been learned in the decade since the first report's publication. *Turning Points 2000* now calls for middle grades schools to: 1. Teach a curriculum grounded in rigorous, public academic standards. These standards should be developed to show what students should know and be able to do, relevant to the concerns of adolescents and based on how students learn best. 2. Use instructional methods designed to prepare all students to achieve higher standards. The end result should be to help students become lifelong learners. 3. Staff middle grades schools with teachers who are experts at teaching young adolescents. The instructional staff whether new or experienced should become adult learners by engaging teachers in ongoing, targeted professional development opportunities. 4. Organize relationships for learning to create

a climate of intellectual development. The best strategy to accomplish this goal is to develop a caring community of shared educational purpose. 5. Govern democratically, through direct or representative participation by all school staff members. It only makes sense to place the decision making power in the hands of the adults who know the students the best. 6. Provide a safe and healthy school environment. School staff members can set an action plan of improving academic performance and developing caring ethical citizens. 7. Involve parents and communities in supporting student learning and healthy development. Students at the middle level ages can benefit from the participation of family and businesses in supporting their educational opportunities (Jackson & Davis, 2000).

At first glance, one may think these are the same recommendations as the original *Turning Points* (1989). But in contrast, one will see five crucial changes to form a new design. First, "ensuring success for every student" is no longer a recommendation but becomes the overall goal of all seven recommendations. Second, the authors reordered the list to focus on teaching and learning. That is not to say there is any particular order to implementing the model. Third, they changed "teaching a core of common knowledge" to "teaching a curriculum grounded in standards" to reflect that standards should be flexible. Fourth, a new recommendation came from the "core of common knowledge" to "use of instructional methods designed to prepare all students." Finally, they have combined two original recommendations into a new one. The recommendations of "re-engaging families" and "connecting schools to communities" are now "involving parents and communities in supporting learning" since they, naturally, go hand in hand.

All of the recommendations flow into each other and cannot be separated into independent components. Therefore, the recommendations must be dealt with holistically and systemically to ensure success. So, now, we have seven recommendations, much the same as the original 8 from 10 years ago. *Turning Points 2000* has been brought to national attention by numerous research studies and eager reform advocates.

In 2000, Jackson stressed that schools need to get into motion the goals of ensuring success for every student, recognizing the interaction within his design system of recommendations, and identifying the leverage points that engage the school in an upward spiral of continuous improvement. When Jackson speaks of leverage, he refers to Peter Senge, organizational expert and author of *The Fifth Discipline*, who recommends identifying points of high leverage in a system (Senge, 2006).

The main purpose of this study becomes the following, without a change in what is being taught, how it is being taught and who is teaching it, little or no advancement in student achievement will be obtained.

## Conclusion

As explained at the beginning of this chapter, students at the middle level have unique needs that must be addressed in the schools. It has been established through the conceptual framework presented within this chapter that in order for students to reap the benefits of the *Turning Points 2000* recommendations, a strong emphasis must be placed on curriculum, student assessment, and instruction. Even though tremendous gains have been realized in school organizational structures, there has not been sufficient

improvement in academic achievement (Davis, 2001). These structural changes must be accomplished by substantial improvement in teaching and learning.

With this framework solidly in place, it is teaching and learning that the researcher would like to target by seeking the teachers' perceptions of the level of implementation and the effects the *Turning Points 2000* recommendations have on them in the areas of instruction and teacher preparation.

The recommendation "use instructional methods designed to prepare all students" will be emphasized in the development of variables to be placed in the survey.

The other recommendation to be emphasized in the variables in the survey will be "prepare teachers for middle grades." Raising teacher quality has become education reform's top priority. Research affirms that teaching quality is the single most important factor influencing student achievement, moving well beyond family backgrounds' limitations (National Association of Secondary Schools Principals, 2006).

A quantitative survey was developed by this researcher to solicit the responses of teachers in the Western Pennsylvania IU 4 who currently teach middle level grades. The survey was adapted from the Segher (1996) survey MLPQ. Based on the need to find data that shows teachers' perceptions of the *Turning Points 2000* recommendations, the survey was developed to seek the teachers' levels of knowledge and practice of these recommendations.

These were done through the survey created for this study entitled the Middle Level Awareness and Practice Questionnaire (MLAPQ). This process will be discussed in more detail in Chapter III dealing with methodology.

# CHAPTER III

# METHODOLOGY

## Introduction

This chapter presented the procedures and methodology of research study design. It contained an overview of the research design, the sampling procedure, a description of the instrumentation and materials, specific procedures of data collection, and the data analysis plan.

The first step was to develop the plan and format utilized by the researcher to secure evidence to answer the six research questions developed for this study. "Research is an original work that reports the methods and findings from the systematic collection and analysis of empirical data" (Hough, 2003). More specifically this writer used the survey research method in this study. This study is a descriptive research using a quantitative survey. Anderson (2005) defines research in education as a disciplined attempt to address questions or solve problems through the collection and analysis of primary data for the purpose of description, explanation, generalization, and production. This study was a descriptive research which can be both qualitative and quantitative. For the purpose of this study a quantitative description which is based on counts or measurements which are generally reduced to statistical indicators such as frequencies, means, standard deviations and ranges. The two basic kinds of surveys are cross sectional and longitudinal. This study utilized the cross-sectional survey design, involving middle school teachers.

The Carnegie (1989) *Turning Points* recommendations for middle level education were widely accepted as the most comprehensive reform proposal for improvement of

education at the middle level (Andrews & Jackson, 2007; George & Alexander, 2002; Manning, 2002; Thompson & Homstead, 2004). With this expert backing, it was a safe assumption that there would be high levels of implementation of these recommendations across the country. The literature, however, does not appear to support such expectations (Manning, 2002; Yecke, 2006). There were few research studies existing providing evidence that schools have fully implemented the recommendations of *Turning Points*. Without such evidence, the efficacy of middle school reform efforts and practices could not be fully explored.

Schools adopted a middle school organizational structure for a variety of reasons. Many districts changed their organizational structure to include middle schools rather than junior high schools. For some, the choice to restructure was a matter of convenience. Others, however, embraced the middle school philosophy and attempted to establish programs that demonstrated the ideals of the middle school movement as expressed in *Turning Points.* In order to address the cry for more in-depth implementation of the *Turning Points* recommendations that were mature, comprehensive, and conducted with a high degree of fidelity, a follow-up report was developed called *Turning Points 2000.* Little, if any, studies have been done to determine the level of implementation of these revised recommendations in the areas of knowledge and practice.

## Research Design

This research study surveyed middle level teaching of teachers in 14 Mid-Western Pennsylvania school districts. Middle level teachers were surveyed in Midwestern IU 4 Pennsylvania public schools in grades five-eight. Being an administrator in a

neighboring Intermediate Unit, the researcher was familiar with several districts. A count of the number of teachers in the eligible middle level schools that could have been a part of this study came to 600.

The three counties in IU 4, had a wide array of socioeconomic groups, minority representation, grade configurations, school sizes, and state student achievement scores. There are 27 school districts in IU 4 throughout the three counties. Prior to conducting the survey, permission was secured from the 14 superintendents of each selected district that had middle level schools that met the NMSA definition for middle level school. All teachers in middle level schools in the district were sent a survey to complete. To query middle level educators concerning their perceptions toward, and practice in, the implementation of the Jackson and Davis (2000) recommendations, a survey was developed. A 35% or higher return rate was sought by the researcher in order to conduct the research.

In the case that the 35% return rate was not reached from two mailings to IU 4 teachers, a contingency plan was developed to seek permission from superintendents from 11 school districts to survey the 530 teachers who were classified as middle level teachers in Beaver Valley IU 27 in Beaver County. This IU has the same array of socioeconomic groups, races, grade configurations, demographics, school sizes, and state student achievement scores. Beaver County is in Western Pennsylvania so it falls within the specifications of the study as far as location.

A 39% return rate was reached so the IU 4 middle level teachers became the target audience for this study. There was no need to go to the contingency plan of seeking additional permission from the Beaver Valley IU 27.

The MLPQ, developed by Seghers (1996), was designed to assess the perceived level of implementation of the Carnegie recommendations for middle level schools improvement in Louisiana and to determine whether a relationship exists between the perceived level of implementation of these recommendations and desirable educational outcomes. The development of the MLPQ and its validity and reliability was described in the Instrument and Materials section of this chapter. The survey found that key middle school concepts were not perceived as reaching a high level of implementation. Seghers found he agreed with the Carnegie (1989) recommendations emphasizing that teacher dissatisfaction cannot continue. In fact Seghers (1996) stated:

> The success of the transformed middle grades school will stand or fall on the willingness of teachers and other staff to invest their efforts in the young adolescent students. Teachers must understand and want to teach young adolescents and find the middle grade school a rewarding place to work. (p. 58)

Johns (2001) and Faulkner (2003) followed Seghers research by using the same MLPQ survey in Ohio with adjustments specifically geared toward the research they were doing for their dissertations. In Ohio, Johns found a moderately high level of implementation of *Turning Points* recommendations according to the principals' perceptions. The responding principals indicated that 97% had middle school oriented professional development, and 40% had participated in non-required middle level graduate coursework. Eighty-four percent had previous middle school teaching experience. None of these factors, however, correlated with higher levels of implementation. On the other hand, the principals' years of experience in their present school showed a positive correlation to *Turning Points* implementation. Lastly, Johns

found that levels of implementation did not differ between high and low achieving schools (Johns, 2001).

Johns (2001) suggested that future research include data from the large, urban districts in Ohio. He also believed that investigating the relationship between SES and implementation would be beneficial. Furthermore, Johns suggested gathering data from other sources such as teachers. In his opinion, teachers' perceptions of implementation could potentially differ from principals' perceptions since teachers generally implement the vision that principals initiate. Viewing implementation through both lenses could help to inform the discussion and provide a more accurate assessment of the status of *Turning Points* implementation in Ohio.

Based upon the recommendations for future research from Johns's dissertation, Faulkner (2003) produced a follow-up dissertation using the MLPQ instrument. The purpose of his study was two fold. The first purpose was to determine the degree to which public middle schools in Ohio had implemented the *Turning Points* recommendations. The study sought to improve upon previous studies by collecting survey responses from both principals and teachers to address the need for multiple data sources. The second purpose was to examine the potential relationships between implementation and school enrollment, per-pupil expenditure, and academic achievement.

Faulkner suggested a number of recommendations for future research based on the findings in his study. First, future studies should include a broad based examination of implementation in all middle schools including junior high schools, private schools, and other special schools. Second, future research should seek improved methods of

measuring *Turning Points* implementation, including the revision of the items deleted from the analyses. Other data collection instruments should be developed, incorporating not only means of measuring the breadth of implementation, but also the quality of implementation. Third, this study began to address the need for additional data sources by surveying the perceptions of both principals and teachers. Future studies should include data from other stakeholders in the reform process (students, parents, community members, and business leaders) and qualitative data such as observations and interviews. Fourth, the study sought to examine the relationship between school size, per-pupil expenditure, and academic achievement. Future studies should also examine the potential relationships between implementation and other factors of interest to educators such as student and teacher attendance, tardiness, referrals for discipline, graduation rates, staff and student morale, and overall internal school environment. A fifth recommendation was to examine key middle school components and their relationships to various professional development practices to determine which professional development practices enhance implementation. Sixth, to more adequately assess implementation in rural and urban settings, future studies must develop an instrument that measures non-traditional methods of implementation often found in rural and urban schools. Lastly, after addressing the stated limitations, future studies should duplicate this study in Ohio and in other states to perfect the means by which overall implementation is assessed. In addition, duplication would permit comparative analysis to determine which states are implementing model practices to a great extent, and if so, how and why (Faulkner, 2003).

A previous attempt to determine the level of *Turning Points* implementation in Western Pennsylvania schools analyzed the perceptions of a limited sample of middle level teachers (Steward, 2000). Steward reported a very low implementation of the recommendations based on his survey of 160 teachers. Survey results showed that 55% of the respondents had no knowledge of the recommendations at all, and 25% of the teachers had no formal middle level training.

This researcher's study differed from Steward (2000) in that it broadened the scope of the investigation to include the perceptions of twice as many teachers over a larger geographic area. Also a different survey was used to gather data than was used in the Steward research. The focus was expanded to include the recommendations for *Turning Points 2000* that were just being published at the time Steward's dissertation was being approved.

This work was the latest in a reoccurring pattern of examining these recommendations. Based on the four authors cited who have given recommendations for future studies, this researcher selected a research design with the following components incorporated into its structure. To examine more than sixth-eighth grade configured middle schools by involving different public school configurations. This survey not only asked participants respond to what standards a middle level school should be doing, but whether they were implementing them. To survey teachers' perceptions, not just principals, so a more accurate assessment of the status of implementation can occur. Improve the method of measuring outcomes by including more than just knowledge level of teachers but the actual implementation by looking at the level of practice too. The levels were documented by showing the highest to lowest rating in each recommendation

area. The survey involved the state of Pennsylvania not just the states of Louisiana and Ohio where most prior research has occurred, and in areas that were rural, to see if any non-traditional methods were being used to develop middle level recommendations.

## Sampling Procedure

Schools were selected by consulting the Pennsylvania Department of Education (PDE) website under School Profiles. Schools that met the definition for middle level schools (National Middle School Association, 1995) and were located in Intermediate Unit 4 were approached for participation. The participants in this study were a sample of middle level teachers who work in Midwestern IU 4 Pennsylvania public schools in grades five-eight. Being an administrator in a neighboring Intermediate Unit, the researcher was familiar with several districts that were approached. The target population excluded schools identified by PDE as community, joint vocational, non-public, or special schools (schools for the deaf or blind, etc.).

A complete listing of names of all school buildings within the established parameters was extracted from the PDE website directory (http://www.edna.ed.state.pa.us/reportsearch.asp). The following descriptors were used to extract the desired data: report selection (Public Schools); select categories (School District); public schools (Regular Elementary/Secondary); select county or intermediate units (Midwestern IU 4); select status (Open); and, submit. The search generated a listing of all public schools in IU 4. Since there was no distinction for middle school provided as a selection, the researcher proceeded through the list by hand and selected the schools that met the definition of a middle level school (National Middle School Association, 1995). Middle level schools usually consists of grades six-eight, but may also be

comprised of grades five-seven, six-seven, five-eight, and seven-eight. Junior high schools were included if they were separate buildings from the high school. Buildings that were junior/senior high schools combined were not included in the selection of middle level schools. The end result produced 16 school buildings, which were placed into an Excel file to generate mailing labels and to aid in analyses.

## Instrumentation and Material

The survey that was used in prior studies (Faulkner, 2003; Johns, 2001; Shofner, 2001) dealing with *Turning Points* (1989), was the MLPQ. Unable to locate an instrument specifically designed to measure *Turning Points* implementation, Seghers (1995) developed the MLPQ for his dissertation at the University of New Orleans for which he received the National Association of Secondary School Principals Middle Level Dissertation Award in 1997.

The MLPQ, which was used to measure the level of implementation of Carnegie recommendations, consists of 36 questions. Participants responded to each item by using a 5-point Likert scale. Development of the MLPQ consisted of four phases. Generation of survey items used in the MLPQ was reflective of current literature for that period of time (Clark &Clark, 1990). Appraisal of face validity and item revision took place by a panel of experts (three professors of education) reviewing the survey. This review took place at the respective professor's university after being sent the survey via United States mail. All suggestions for revisions were simply placed on the survey and returned to the author. A pilot test to determine internal reliability was then administered to a panel of 14 principals. Items retained for the study were then based on the analysis of pilot test results, with a standard deviation of less than .5. In addition, revisions were made based

on the recommendations from the pilot test participants. Pilot test participants wrote suggestions directly on the pilot test or verbally gave feedback to the researcher who recorded them with a tape recorder.

For each Carnegie recommendation, a set of items was created to measure the level of implementation of that practice. Factor analysis in the field study did not support grouping according to the eight *Turning Point* goals. Regrouping items into empirically supported and conceptually sound factors yielded these subscales: curriculum and instruction; governance and decision making; parent involvement; variety of learning opportunities; commitment to young adolescents; safety and resources; health promotion; and, ability grouping.

Reliability in the pilot test of 14 principals was determined by Cronbach's alpha, and found to be statistically significant (alpha = .77, $p <. 01$). Thus, the instrument appeared to have adequate internal consistency to proceed. Likewise, the coefficient alpha reliability estimate in the field study of 154 principals was found to be statistically significant (alpha = .85, $p < .01$). Seghers (1996) reported that although the correlations between the global items and priori subscales are statistically significant, it has very little practical significance because of low common variance thus providing construct validity. In order to assess internal consistency reliability of the revised subscales, coefficient alphas were computed which indicated alpha coefficients for the revised subscales that lie higher than the alpha coefficients for the a priori subscales. Subscales with four or more items either exceed or approach the minimum value of .70. Subscales with fewer than four items have lower alpha coefficients; however considering the limited number of items, these coefficients are acceptable. Construct validity was supported when Seghers

(1996) wrote that with the exception of one subscale, all subscales reported have low to moderate correlations. This evidence supports the independence of the constructs of the new subscales.

Dr. Seghers was contacted by letter (February 16, 2008) to seek permission to use the MLPQ survey and to be able to modify it for this study. This researcher received written permission to use the survey on (February 19, 2009) and (January 14, 2009). A single instrument was developed by the researcher to measure middle level educators' perception of their awareness and the practice of the *Turning Points 2000* recommendations. The adapted survey instrument was named the MLAPQ.

The MLAPQ was revised to better align with the *Turning Points 2000* recommendations. In order to achieve alignment, this researcher removed questions 13, 34, and 35. Question two was split into questions two and three. Question three was split into questions four and five. The wording on question six was changed to be more current. Question 8 was split into questions 11 and 12. The order of the questions was changed so similar questions were not back-to-back. The scale was changed from the All or None scale to two different scales to seek knowledge and practice. The scales measured Extreme Awareness to No Awareness at all, and Great Extent to Not Practiced. Question 25 was added to seek information on an area not covered by the MLPQ. Questions were modified to reflect the six research questions for this study. A Likert scale then was implemented to analyze the variables present in this study in the two areas of knowledge and practice.

The most important suggestion to come from the researcher's dissertation committee was to go over all materials making sure to stress implementation as the key

issue in the study. In the Literature Review, the researcher was asked to provide more research by adding to the change theory section to make it more relative to educators and how they go through the change process. The committee suggested that the researcher should develop Chapter III with more information on the analysis phase. Add details of how reliability and validity will be gained. Express more on the findings of previous authors and their suggestions for future studies. Be certain that what is in Chapter III is in the Institutional Review Board (IRB) methodology. Adjust timeline from completion of study in first semester to second semester. Several revisions in the materials in the appendices were communicated especially in the area of letters that were mailed out to seek permission to do the study in school districts. Lastly they reviewed the survey pointing out several important corrections to the MLAPQ that would make it more understandable to the teachers. The researcher then modified the survey based on the suggestions, and communicated with the professors to assure the corrections were appropriate.

To evaluate the survey for reliability and appropriateness, a group of 14 middle level teachers were selected from a district in close proximity to IU 4. The middle school teachers were asked to respond to the survey and to provide verbal feedback related to the survey. The surveys were administered to the teachers at their middle level school on September 23, 2008 to read and review. A Pilot Test Evaluation form was distributed to record their suggestions. Responses were analyzed and the survey was revised upon the incorporation of feedback from teachers.

As a result of the pilot testing, several revisions were made to the MLAPQ survey. A space was added to the top right hand corner of the first page of each survey to

allow coding for the researcher's information. Next directions were revised to make them more understandable. Several corrections were also made throughout the survey to correct sentence structure and additional words were underlined to identify them as key terms. Directions for Part 2 were rewritten to make them more understandable to the survey taker. Question number 50 was reformatted so the question and answers were together on the same page. Directions for questions 51-62 were rewritten to make the recording of answers more clear. N/A (Not Applicable) was added as a choice in the directions. Furthermore, question number 63 was completely rewritten so it was clearer to the teachers taking the survey. The original pilot test and the final MLAPQ survey are shown at the end of the dissertation for comparison purposes.

To determine whether the overall instrument was reliable, Cronbach's alpha was computed for 39 specific items in areas of both awareness questions and practice questions. The alpha in the pilot test of .93 for the awareness questions and .87 for the practice questions was statistically significant ($p < .01$). Thus, the instrument appeared to have adequate internal consistency to proceed.

The final survey included 63 items divided into two parts. The first section of the final survey instrument contained 39 questions referring to awareness and practice. The awareness section of the survey asked middle level educators to indicate the degree of awareness they have with middle level instructional practices that are recommended in the *Turning Points 2000* book. The practice section on the other hand, asked middle level educators to indicate the degree of perception they have that *Turning Points 2000* recommendations are actually taking place in their schools. The development of questions utilized current research and literature on adolescent characteristics and

developmentally responsive middle school practices. Responsive middle schools base their practices on the unique characteristics of the middle school student. This philosophy ties directly to the recommendations of *Turning Points* and *Turning Points 2000,* and is supported by the NMSA through *This We Believe* (1992), *This We Believe:* And *Now We Must Act* (2001). Each of the questions that focus on the middle school teachers' perception are related to *Turning Points* and *Turning Points 2000* recommendations.

The second, and final, part of the survey instrument included questions on individual characteristics and data on each teacher's perception of their middle level school. The individual characteristics questions asked gender, educational degree, years teaching, current grade being taught, and middle level training. The institutional characteristics in this part of the survey were assessed in three areas: the total school enrollment, class size, and school setting. Demographic information was assessed from previous institutional questions.

Participants were assured that items on the questionnaire were coded and no identifiable information was reported.

## Data Collection

School superintendents from 14 school districts were notified by mail and given a detailed description of the proposed study. Next 16 middle level schools that were contacted due to the fact that a few districts had more than one middle school in the district. The introductory letter included the title of researcher's study, an invitation for the district to participate, a cover letter to middle level educators, and a copy of the MLAPQ survey instrument. A response form, to indicate approval or disapproval of the

study to be conducted in the district was also included in the superintendent's letter, along with a self-addressed stamped envelope for the superintendent's response.

Principals in each of the middle level schools were contacted via telephone to secure permission for teacher participation and to discuss any questions they may have had about the study. The researcher discussed a time and date that surveys and cover letters were to be delivered to their schools. Upon verbal agreement from each principal, a total number of surveys that each school needed was assembled and personally hand delivered by the researcher to each middle level school principal to distribute to their teachers in the identified schools.

Middle level teachers in the participating schools were given a copy of the survey, cover letter and a self-addressed stamped envelope for ease of return. Since the informed consent and invitation to participate was included in the cover letters, the return of surveys indicated an individual's willingness to participate in the study. All participation in the study was voluntary. Educators, who do not wish to participate, simply did not return the survey. The number of educators in each school was identified and labeled. The total enrollment for participating schools was identified and noted in this study.

Surveys were coded to calculate the number of responses from each school. If needed a second set of surveys would have been delivered by the researcher to each school as a follow-up to the first distribution of surveys. There was a follow-up letter enclosed for those participants who had not responded. Once 35% or more of the projected teachers who were willing to participate were identified, the researcher then accepted this as an acceptable rate to proceed to the Data Analysis phase.

## Data Analysis

Descriptive analyses, including frequencies, percentages, means, and standard deviations were used to organize and summarize data. A reliability coefficient was computed for the *Middle Level Awareness and Practice Questionnaire*. Chi square procedures were utilized to determine differences among comparison groups. Linear regression was used to determine the relationship, if any, between the perceived knowledge of *Turning Points 2000* and the degree of implementation of *Turning Points 2000* recommendations. An alpha level of .05 was used in determining statistical significance. The *Statistical Package for the Social Sciences* (SPSS) was used to analyze the data.

Teacher responses were recorded in an SPSS statistical software database**.** After all responses were recorded, surveys were double checked for accuracy of data entry. Any items, which were not answered, were recorded with a missing value of 0.00. Only the researcher recorded all data and had access to any survey responses.

Once the survey data was recorded, values via SPSS software were assigned for the section of the survey (questions 1-39) that require Likert scale type answers. Numerical values on the frequency scale were recorded so that in section I, which asks to determine the amount of knowledge and degree of practice, a value of five was assigned to "Extreme Awareness" or "Great Extent." A value of one was assigned to the response "Not aware at all" or "Not practiced." When analyzing these responses, the higher the mean value, the more frequently the educational practice was known or practiced.

For section II (questions 40-63), dealing with either personal qualifications or demographics, teachers were asked to check off items or circle the appropriate response.

The researcher assigned numerical designation so it could be recorded properly in the SPSS database.

Cronbach's alpha was used to assess the reliability of the MLAPQ. This study measured a population of teachers. Consequentially, appropriate descriptive statistics were used to address the research questions. Measures of central tendency, measures of variability, correlation coefficients, and effect sizes were used to report the results of the six research questions. Data collected from the teachers using the MLAPQ were analyzed.

Using SPSS software, descriptive statistics were run to obtain frequency distributions. These responses were presented in Chapter IV through the percentage that responded to each answer choice. The descriptive data were presented in three sections: Demographics, *awareness* of educational practices that can be used and level of agreement by teachers regarding *practices* actually occurring in their schools. The awareness and practice scales were compared to each other to determine differences through mean scores. The demographic information was analyzed using the Chi squared methodology. This occurred with all 39 statements which dealt with *Turning Points 2000* recommendations on the survey. The purpose of Chi squared statistical test is to examine the association of two categorical variables.

Reports, tables, graphs, and figures were an effective way to present the results of this quantitative survey study. Displays were helpful in two ways. First, they helped the researcher organize the results of a data analysis and plan the next stage of analysis. Second, the displays were used in the quantitative study to present research findings so they were easily comprehended by the reader.

Following the descriptive data summaries, quantitative statistics were presented. It became necessary to use hypothesis testing to compare knowledge with the actual practice of recommendations. Hypotheses are statements of relationships among variables that a researcher intends to investigate. Hypothesis testing involves drawing conclusions about the general population based on observations of a sample group within that population. This empirical evidence is used to determine if there is a difference between that which is observed and the theoretically expected findings. In hypothesis testing, the difference is the formation of a null hypothesis (there is no difference between two groups of subjects or that variables are not related) and an alternative hypothesis (is generally the opposite of the null hypothesis). Researchers then test the null hypothesis against the alternative hypothesis.

Results for each survey statement, as well as comparison of awareness of recommendations with practice of recommendations, were analyzed and discussed in Chapter IV.

Chi squared was also used to determine if significant differences in level of implementation by individual characteristics, including age, gender, and educational experience, and school characteristics, grade configuration, and school setting exist. Finally a factor analysis of the knowledge and practice of recommendations by teachers was conducted.

In educational research, according to Wiersma (1991), .05 and .01 are the most commonly used levels of significance. A predetermined level of significance of .05 was utilized in this study.

## Conclusion

Chapter III provided a description of research design, sampling procedures, instrumentation and materials, data collection, and data analysis procedures used. All procedures were reviewed and approved by The Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects.

Through this method of quantitative research, data were collected from middle level teachers that enabled this researcher to generalize their perceptions of the *Turning Points 2000* recommendations. In conclusion, the findings pointed out some characteristics of what teachers were aware of and currently practicing. The findings are presented and analyzed in Chapter IV to determine the level of implementation of suggested recommendations. Use of this data identified some information that, in the end, will contribute to improvement in education at the middle level.

Superintendents were contacted to seek permission for the survey to be distributed in their school district. Principals were called to seek teacher participation in responding to questionnaires. Consent forms and questionnaires were given to those teachers who volunteered for the study. Questionnaires included descriptive items and Likert items. Methods of analysis included: (a) using descriptive statistics to summarize teacher and school variables and instructional practices; and, (b) using correlation statistics to identify how change in knowledge, attitudes, and practice correspond to one another. Proper procedures were used to solicit district and teacher input and to collect and record teacher responses. A statistical analysis was conducted according to proper procedures using SPSS software. The detailed results of the data analysis and findings are presented in Chapter IV.

# CHAPTER IV

# RESULTS

Chapter IV presents the results of data collection and statistical analysis related to the implementation of *Turning Points 2000.* To do this, the researcher created six research questions to guide the study and gather data. The results of these questions were reviewed by presenting data from the survey developed by the researcher and given to teachers at the middle level.

The data was analyzed to see if middle level schools in Western Pennsylvania placed strong emphasis on curriculum, student assessment, and instruction. This study investigated middle school teacher perceptions toward, and practice in the implementation of, a comprehensive school reform called the *Turning Points 2000* recommendations. The second purpose of this study was to examine possible factors that influenced middle school teachers' attitudes and practices toward implementation of the *Turning Points 2000* recommendations. The third intent was to measure whether middle school teachers used effective instructional methods directly related to the *Turning Points 2000* recommendations. The last areas of research explored included whether CSR models were adequately implemented; and whether the necessary practices to service the physical, emotional, intellectual, and social needs of middle level students were used by teachers to instruct students. Staffing all classrooms with highly qualified teachers was also explored through the data results.

The chapter begins by presenting descriptive statistics of the independent variables. This chapter concludes with a presentation of the findings related to the research questions proposed in Chapter I.

## Description of the Sample

To collect the necessary data for assessing the implementation of *Turning Points 2000* in Midwestern Pennsylvania, and for addressing the purposes and research questions pertinent to this study, the MLAPQ was originally targeted for distribution to 16 middle level schools in fourteen different school districts.

Of the 16 middle schools, 8 superintendents granted permission for the study to be conducted in their school district. After contacting principals of all the middle schools to establish how many teachers were in each school, 316 surveys were mailed to teachers.

A total of 121 questionnaires were completed and returned, representing a final sample that included 38% of the original distributed questionnaires. The predetermined response rate of 35% was met, therefore the study was continued and data were collected from the questionnaires.

## Descriptive Statistics

Statistical methods are especially useful for looking at relationships and patterns, and expressing these patterns with numbers. Descriptive statistics describe these patterns of behavior, whereas inferential statistics draw on probabilistic arguments to generalize findings from samples to populations of interest.

In order to develop descriptive statistics of the participants in the study the researcher asked personal demographic questions dealing with age, gender, ethnicity, highest degree earned, number of years in education, number of years just at the middle level, type of Pennsylvania certification, number of college courses devoted directly to middle level education, and membership in any of five nationally known middle level professional organizations. Also included are descriptive statistics on associative

demographics such as grade configuration in building of employment, its enrollment, and the number of hours of professional development received in the last two years if the school district offered these opportunities.

In section II (questions 40-63) of the MLAPQ survey, dealing with either personal qualifications or demographics, teachers were asked to check off items or circle the appropriate response. The researcher then assigned each a numerical designation and recorded it properly in the SPSS database.

In traditional settings in the public school it has been known that male teachers are predominant at the secondary level, and female teachers are predominant at the elementary level. The reasons vary for this situation, but most people would believe it may result because a more motherly influence occurs at the elementary level and a more specialized subject expertise at the secondary level. The results of this survey show in Table 1 that a majority of teachers surveyed were female.

Table 1

*Gender of Respondents*

| | Female | Male |
|---|---|---|
| Gender | 69% (83) | 31% (37) |

The determination of a person's age can be a significant factor based on several indicators such as pre-employment schooling**,** lifestyles**,** background, teaching experience, and personal viewpoints. A quick look at the descriptive data for

respondents' age in Table 2 shows fewer respondents in the 21-30 and 41-50 and more in the 31-40 and 51+ age groups. It is important to note the largest group of teachers is in the most elder category, which proves to be a factor on the rest of the data in Chapter IV.

Table 2

*Age of Respondents*

| | 21-30 | 31-40 | 41-50 | 51+ |
|---|---|---|---|---|
| Age | 22% (27) | 27% (32) | 19% (23) | 32% (39) |

The number of years a person has worked at a certain profession can be a large determination on the amount of knowledge and skill a person possesses in teaching. Important to remember, however, is just because a person has experience teaching does not necessarily mean they have expertise in middle level practices. Even though the previous table indicated that the largest group was the group comprised of the oldest people, Table 3 shows that the oldest teachers have fewer years of total teaching experience. This would suggest that the older a teacher is, the more years of experience they would have in education. Instead, the majority of teachers have 1-20 years experience.

Table 3

*How Many Years Have You Been in Education Total, Including this Year?*

| | 1-10 | 11-20 | 21-30 | 31+ |
|---|---|---|---|---|
| Total Years Teaching | 38% (46) | 27% (33) | 22% (27) | 13% (15) |

What becomes even more interesting to note in Table 4 is that even though the largest age group was 51+, over half of teachers have only been teaching at the middle level for 1-10 years. This data indicates that although teachers have been teaching numerous years, they have just recently come to the middle level to teach. Written documentation also supports the fact that true middle level practices have only been emphasized by school districts in the past 20-30 years.

Table 4

*How Many Years Have You Been a Teacher in this Middle Level School, Including this Year?*

| | 1-10 | 11-20 | 21-30 | 31+ |
|---|---|---|---|---|
| Years Teaching Middle Level | 52% (63) | 27% (32) | 11% (13) | 10% (3) |

Looking at the results in Table 5, it is apparent that 72% of the people who responded to the survey questions have an advanced degree. It would seem to indicate that teachers therefore have received middle level training with a higher degree. It may take up to 6 years to earn the 24+ credit hours of formal education to receive an Instructional II/permanent certification in Pennsylvania. Most higher education institutions require 30 credits to earn a master's degree, however a quarter of the teachers in this study still have a bachelor's degree, indicating their relative newness to the teaching profession. Only 2% of the teachers went beyond a master's degree and have enough credits to possess a doctorate.

Table 5

*What is the Highest Level of Education You Have Earned?*

| | Bachelor of Science | Master of Science | Doctor of Education |
|---|---|---|---|
| Highest Degree | 26% (31) | 72% (87) | 2% (3) |

One major factor impacting the teaching setting and instruction is the number of students in the building. In the book *Turning Points 2000,* the authors advocate that very large middle level schools be redesigned as smaller institutions. They believe from their observations over a decade of research that no school should exceed 600 students. Smaller enrollments are repeatedly found to benefit students' achievement, attitude toward school, social behavior, interpersonal relationships, and self-esteem. It is important to note in Table 6 that the group with the largest percentage (40%) has an enrollment of 1,000-1,499, which is not recommended by the NMSA.

Table 6

*Approximately How Many Students are Currently Enrolled in Your School?*

| | 1-499 | 500-699 | 700-999 | 1,000-1,499 | 1,500+ | No Response |
|---|---|---|---|---|---|---|
| Enrollment | 29% (35) | 20% (24) | 9% (11) | 40% (48) | 1% (2) | 1% (1) |

Effective programs and practices, not grade configuration, determine quality schools. Researchers found that middle grades practices most responsive to the needs of young adolescents were found in schools with grades six-eight. Such practices address

social, personal, and academic development through strong advisory programs, activity periods, cooperative learning, interdisciplinary teaming, and exploratory classes (Thompson & Homestead, 2004). Byrnes and Ruby (2007) concluded that grade configuration makes a real difference in the education of young adolescents because middle schools (six-eight and five-eight grade configurations) implement more of the recommended middle level practices.

In Table 7 it is important to note that of all the schools surveyed, one school had the largest number of respondents and is comprised of just grades seven-eight. With 41% of the data coming from this school, teachers' opinions about the awareness and practice of *Turning Points 2000* recommendations had a major influence on the final statistics.

Table 7

*What Grades are Included in the Middle Level School of Which You Teach?*

| | 5-6-7-8 | 6-7-8 | 7-8 | 7-8-9 | No Response |
|---|---|---|---|---|---|
| Configuration | 26% (32) | 12% (15) | 57% (68) | 4% (3) | 1% (1) |

To get a perspective of the professional background of respondents, teachers were asked about their area of certification. It is important to note that at the time of the survey, there was no official certification for the middle level. Therefore it is crucial to identify the certification that teachers possess when assigned to the middle level. Table 8 shows that very few teachers report having elementary certification, and 41% possess secondary certification (grades 7-12). The remaining 41% of teachers listed their background as K-12, which does not give the reader a true indication if a teacher's teaching background is more elementary or secondary oriented.

Table 8

*What Type of Pennsylvania Teaching Certification Do You Hold?*

| | Elementary | Secondary | K-12 |
|---|---|---|---|
| Pennsylvania Certification | 18% (22) | 41% (49) | 41% (49) |

In addition to professional certification, it is imperative to see how many courses teachers completed in order to prepare them to instruct a very unique middle level group of students. As Table 9 indicates, a vast deficiency in teacher preparation exists, with 44% of the respondents never taking a course in middle level education. Even when they did take courses, the largest group of respondents only took two courses to prepare to teach a very demanding age group.

One *Turning Points 2000* recommendation advocates for middle level schools to hire teachers who are experts in middle level instruction. A number of studies have shown that middle grades teachers and principals support the specialized professional preparation of middle grades school teachers (McEwin, Dickinson, & Smith, 2003; Mertens, Flowers, & Mulhall, 2005).

Table 9

*How Many College Courses Have You Taken that were Devoted Mainly to Middle Level Education?*

| | No Response | One | Two | Three | Four | Five | Six+ | None |
|---|---|---|---|---|---|---|---|---|
| Middle Level Courses | 3% (4) | 7% (8) | 20% (24) | 11% (13) | 7% (8) | 4% (5) | 4% (5) | 44% (54) |

To see how much time school districts were providing professional development for enhancing teachers' knowledge and background in the current middle level recommendations, teachers were asked how many hours of professional development they had participated in over the past two years. In Table 10, 45% acknowledged having participated in 1-5 hours of training, 21% of teachers received 21 hours or more of training, 17% received 11-20 hours of training, and16% indicated 6-10 hours of training. Finally, 1% did not respond to how many hours they received in the past two years.

Table 10

*How Many Hours of Middle Level Professional Development Have You Participated in Over the Past Two Years?*

| | 1-5 | 6-10 | 11-20 | 21+ | No Response |
|---|---|---|---|---|---|
| Hours of Professional Development | 45% (55) | 16% (19) | 17% (20) | 21% (25) | 1% (2) |

Schools cannot get high academic achievement for every student, or even reasonably expect such high achievement, without high quality in-service professional education that is integrated into the daily work of middle grades teachers. The results in Table 10 indicate that the teachers surveyed will not be able to achieve substantial improvement in their middle level students' performance until they are provided with more opportunities to continuously advance their instructional practice.

Even if teachers do not have adequate pre-service training specialized in middle level education, there could still be support through various national and state education associations that provide instruction to teachers on CSR models. Teachers could find

themselves being placed at the middle level after having started their teaching career in an elementary or secondary school, and still gain tremendous amounts of research and best practices from these educational organizations on middle level.

In the survey, teachers were asked to identify whether they belonged to any of five organizations known to promote "whole school change" models. Of 121 respondents, seven (5.8%) belonged to the Pennsylvania Middle School Association (PMSA), and six (5%) were members of the National Middle School Association (NMSA). The remaining organizations, including Turning Points Design Model, National Staff Development Association, and the National Forum to Accelerate Middle–Grades Reform, received no entrees. Therefore, only 13 teachers (11%) belonged to a middle level association that advocates beneficial reform models. One hundred eight (89%) were not members of any middle level association.

Table 11

*Membership of Middle Level School Associations*

| | NMSA | PMSA | TPDM | NSDA | NFAMGR | None |
|---|---|---|---|---|---|---|
| Associations | 5.8% (7) | 5% (6) | 0% | 0% | 0% | 89% (108) |

## Research Questions

This survey asked participants to respond to whether they were aware of Middle School recommendations and whether such recommendations were acted upon.

This study was based on the following research questions:

1. To what extent do middle level teachers report being aware of the principles of *Turning Points 2000* recommendations?
2. To what extent do middle level teachers report practicing the implementation of *Turning Points 2000* recommendations?
3. What are teachers' perceptions of the on-going training they receive to help them be aware of the *Turning Points 2000* recommendations?
4. What are teachers' perceptions of how this on-going training is related to the practice and implementation of the *Turning Points 2000* recommendations?
5. How do individual characteristics, including age, gender, and educational experience, influence teacher awareness and practice of the implementation of *Turning Points 2000* recommendations?
6. How do the school characteristics, including enrollment and setting, influence teacher awareness and practice of the implementation of *Turning Points 2000* recommendations?

Once the survey data was recorded, values via SPSS software were assigned for the section of the survey (questions 1-39) that required Likert scale type answers. Numerical values on the frequency scale were recorded so that in section I, which seeks to determine the amount of knowledge and degree of practice, a value of five was assigned to "Extreme Awareness" or "Great Extent." A value of one was assigned to the

response “Not Aware at All” or “Not Practiced.” When analyzing these responses, the higher the mean value, the more frequently the educational practice was known or practiced.

| Level of Awareness. | Level of Practice. |
|---|---|
| 5= Extreme Awareness | 5= Great Extent |
| 4= Above Average Awareness | 4= Most of the Time |
| 3= Average Awareness | 3= Average Extent |
| 2= Below Average Awareness | 2= Hardly Ever |
| 1= Not Aware at All | 1= Not Practiced |

**Research Related to Awareness and Practice**

The purpose of this study was to investigate middle level teachers’ awareness of, and practices in, the implementation of *Turning Points 2000* recommendations. This section gives data to help answer Research Questions One, Two, Five and Six, which all deal with investigating the levels of awareness and practice. The questions are: To what extent do middle level teachers report being aware of the principles of *Turning Points 2000* recommendations? To what extent do middle level teachers report practicing the implementation of *Turning Points 2000* recommendations? How do individual characteristics; including age, gender, and educational experience, influence teacher awareness and practice of the implementation of *Turning Points 2000* recommendations? How do the school characteristics, including enrollment and setting, influence teacher awareness and practice of the implementation of *Turning Points 2000* recommendations?

Teachers’ beliefs about education are built upon deep and protected structures. The lack of awareness may produce less support for educators to adopt culturally

responsive teaching. McEwin and Greene (2011) discovered in an extensive study that teachers were willing to make changes in pedagogy, but they were not open to making critical changes in their general teaching philosophies. Frustration results when teachers fail to comprehend the value of responsive instruction, ignore the information that is available, or are unaware of how to implement strategies to assist students. This first research question attempts to alert the reader to the awareness the teachers had on key middle level recommendations.

Overall Midwestern Pennsylvania middle school teachers had average awareness scores with an overall mean score of 3.52 as measured by the MLAPQ. Midwestern Pennsylvania middle level teachers reported a sum total score of 143 on the practice side of the MLAPQ, out of a possible score of 195. This would indicate that teachers' awareness of most *Turning Points 2000* recommendations was between an average to above average awareness level.

In Table 12 the mean scores indicate that teachers were aware of the importance of developing instruction that encourages students to develop higher level thinking skills through problem solving activities. In order to accomplish this challenge, teachers feel they need to be involved in helping determine what subject matter is taught. As teachers acknowledge the importance of high quality instruction, they also stress the importance of providing an environment conducive to their students feeling emotionally and physically safe. To do this, teachers feel they should develop close, trusting relationships with their students.

Table 12

*Of the Scores Recorded for the Awareness Section, the Statements that Received a Mean Score of Four or Higher Include*

| Statement | | Mean Score |
|---|---|---|
| 4. | Teachers in our school understand the need to emphasize thinking skills. | 4.48 |
| 5. | Middle level teachers emphasize problem-Solving activities in their classroom. | 4.37 |
| 10. | Middle level teachers in our school help Determine how subject matter is taught to Their students. | 4.14 |
| 30. | Teachers understand that close, trusting relationships with middle level students create a climate for personal growth and intellectual development. | 4.11 |
| 34. | Our school has developed and implemented programs to create a school environment that is emotionally and physically safe for middle level students and their teachers. | 4.27 |

The reporting of high scoring teacher awareness helps point out strengths the teachers have that can be built upon for future planning of lessons. More importantly, however, data sharing occurs when a survey points out the deficiencies which can then be acknowledged and corrected by school districts. The data then becomes the basis for discussion and for developing the school restructuring plan. The survey statements that were rated can be used to assess the progress the schools have made in implementing the *Turning Points 2000* recommendations, thus presenting statistical evidence to assess strength and weaknesses.

In Table 13 the mean scores seem to indicate that the teachers lacked awareness of some of the more non-traditional *Turning Points 2000* recommendations. The teachers indicated they were not aware of being allowed to participate in shared decision making and governance of the school. As such, they did not obtain the opportunity to assume many leadership roles in the school that would give them empowerment to determine the instructional direction. They were also not aware of the more contemporary practices of organizing the school into smaller units such as "houses" or the use of a flexible schedule such as block scheduling. Lastly, they were not aware of parents being allowed to get involved in the decision making of the organization of the school.

Table 13

*Of the Scores Recorded for the Awareness Section, the Statements that Received a Mean Score of Three or Below Include*

| Statement | | Mean Score |
|---|---|---|
| 21. | Middle level teachers and students in our school are organized into small units such as "houses" or "schools within a school." | 2.64 |
| 27. | The parents of our school's middle level students actively participate in the governance and the decision-making process of our school. | 2.76 |
| 29. | Our school has a school governance committee where middle level teachers and administrators participate in and practice shared decision making. | 3.00 |
| 31. | Our school provides training to our middle level teachers to have opportunities to assume leadership positions such as house or team leaders. | 2.91 |
| 33. | Our teachers are educated in developing lesson plans to use use in a flexible or block schedule for the middle level students. | 2.94 |

Most studies develop research that asks about simple knowledge or awareness of key concepts and then reports the findings. This study sought to go one step further and ask whether key concepts are actually practiced or implemented. It is a big assumption that if a recommendation is known, it is also being implemented properly to its completion. Unfortunately, there are numerous stages in the implementation process that limit a recommendation from possibly being put into practice. The second research question attempts to alert the reader to the level of practice the teachers acknowledge to performing, in relation to key middle level recommendations.

Overall, Midwestern Pennsylvania middle school teachers have average awareness scores with an overall mean score of 3.07 as measured by the MLAPQ. Midwestern Pennsylvania middle level teachers reported a sum total score of 119 on the practice side of the MLAPQ, out of a possible score of 195. This would indicate that most *Turning Points 2000* recommendations are being practiced at an average extent.

Table 14 shows that overall the mean scores with the highest rating seem to indicate teachers practice only the recommendations they learned in higher level educational settings or through professional development at their schools. Instead of instructional techniques, the highest ratings tend to deal with the school developing programs that create an environment that deals with the safety of teachers and students while in the building. Then, although the order differs, responders say teachers practice what they are aware of by determining the subject matter that promotes the students' ability to think at a higher level through acquiring problem solving skills. Middle level educators also say teachers practice promoting healthy behavior by modeling healthy practices.

Table 14

*Of the Scores Recorded for the Practice Section, the Statements that Received a Mean Score of 3.8 or Higher Include*

| Statement | | Mean Score |
|---|---|---|
| 4. | Teachers in our school understand the need to emphasize thinking skills. | 4.05 |
| 5. | Middle level teachers emphasize problem solving activities in their classrooms. | 3.97 |
| 10. | Middle level teachers in our school help determine how subject matter is taught to their students. | 4.11 |
| 20. | Middle level teachers in our school promote healthy behavior by modeling healthy practices (e.g., no smoking, healthy diets, etc.). | 3.87 |
| 34. | Our school has developed and implemented programs to create a school environment that is emotionally and physically safe for both middle level students and teachers. | 4.12 |

Once again the data shows that there are areas that should be addressed. These areas are best seen by displaying the lowest mean scores of the recommendations teachers feel are not practiced. It is not uncommon for recommendations to be considered ineffective or marginally effective when, in fact, the recommendation was improperly or only partially implemented. Thomas Guskey (2000) recommends that data be collected by the school or a researcher to determine if the intervention has been implemented widely and properly.

Table 15 shows that overall, the mean scores once again show teachers rated their practice of the recommendations similarly to the ones they said they were not aware of, as was illustrated in research question one. They did not practice the non-traditional recommendations of organizing into small units such as "teams" or "houses," or being involved in flexible scheduling such as block scheduling. They lacked in the practice of assuming leadership roles and opportunities to participate in the governance of the school. Finally, they acknowledged deficiencies in the use of portfolio assessment of students in their classroom.

Table 15

*Of the Scores Recorded for the Practice Section, the Statements that Received a Mean Score of Four or Higher Include*

| Statement | | Mean Score |
|---|---|---|
| 8. | Teachers in our school use portfolio assessment in evaluation of their students. | 2.40 |
| 21. | Middle level teachers and students in our school are organized into small units such as houses or schools-within-schools. | 1.86 |
| 27. | The parents of our schools' middle level students actively participate in the governance and decision-making process or our school. | 2.31 |
| 31. | Our school provides training to our middle level teachers to have opportunities to assume leadership positions such as house or team leaders. | 2.28 |
| 33. | Our teachers are educated in developing lesson plans to use in a flexible or block schedule for the middle level students. | 2.06 |

The data presented to answer the first two research questions has given a quick snapshot of the *Turning Points 2000* statements that rank high and low on simple mean scores. A brief summary shows that teachers said they are aware of the importance of providing good instruction in an environment that has a climate that promotes health and safety. On the other hand, they pointed out they are not aware of some of the non-traditional recommendations, and need to stress more of the current instructional strategies.

When responding to the statements concerning their actual implementation, teachers again echoed that they practice what they have reported as high in awareness. These include the areas of good instruction and health and safety. Although teachers ranked implementing these areas high, there are instructional techniques geared toward middle level they were not implemented fully. Teachers also need to implement more involvement of parents in joining with them and administration in shared decision making.

The information gained from the mean scores gives the reader quick data on teachers' perceptions of middle level awareness and practice, but to understand what factors influenced teachers to form these perceptions, the researcher mined deeper into the data by testing the results of the statements against some independent variables. The next section incorporates SPSS testing software in order to get more detailed results using Chi-square testing.

The testing involved using all 39 statements from the survey that asked about *Turning Points 2000* recommendations against 7 independent variables which included: age; gender; total years of teaching; middle level years of experience; and, hours of

middle level professional development, school enrollment, and school grade configuration. Since the survey asked the respondents to rate the 39 statements on both awareness and practice they each had two test results. Therefore the researcher ran and analyzed 546 tests.

To start the next section, the researcher gathered data to answer research question five. This data clarified how individual characteristics influenced teacher awareness and practice of the implementation of *Turning Points 2000* recommendations.

To produce more in-depth data on the personal characteristics of teachers and what relationship those characteristics had on the awareness and practice of *Turning Points 2000* recommendations, Pearson's Chi-square testing was used by the researcher. Of the two types of comparison available with Chi-square, a test of independence was used to compare personal characteristics with 39 variables involving *Turning Points 2000* recommendations. A test of independence assesses whether paired observations on two variables, expressed in a contingency table, are independent of each other.

The null hypothesis for this section of testing is that there is no significant difference among age or gender and the level of awareness and/or practice. There is no significant difference among educational experience and the level of awareness and/or practice. The variable that produced the most tests of significance was the age of the teachers who responded to the survey. Therefore, to illustrate to the reader what the data showed in a typical run, the following report of information involves the researcher's narrative followed by tables showing the Chi-square testing of age versus all 39 statements on both the awareness and practice scales.

Table 16 indicates that the test of awareness was at a significant level showing 10% of younger teachers being unaware of whether middle level certification was held by the teaching staff compared to 37% of older teachers. There is no significant difference between the two groups in the statement regarding the level of practice.

Table 16

*Middle Level Teachers in Our School Have Middle Level Certification (Test 1 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [6]7.4% | [3]3.7% | [29]35.8% | [17]21.0% | [26]32.1% |
| 41+ | [8]21.1% | [6]15.8% | [7]18.4% | [5]13.2% | [12]31.6% |

Value = 12.532
Degree of Freedom = 4
Significance = .014

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [6]7.4% | [13]16.0% | [15]18.5% | [12]14.8% | [35]43.2% |
| 41+ | [6]16.7% | [3]8.3% | [10]27.8% | [5]13.9% | [12]33.3% |

Value = 4.788
Degree of Freedom = 4
Significance = .310

Teachers assigned as advisors to students are shown in Table 17. About half of the younger teachers felt that teachers should be assigned to advice students. The difference in awareness level between both groups was not significant. In addition 35% of younger teachers and 26% of older teachers felt that teachers should be assigned as advisors when looking at level of practice therefore neither group differed significantly.

Table 17

*Middle Level Teachers in Our School are Assigned as Advisors (Test 2 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [14]17.9% | [6]7.7% | [25]32.1% | [11]14.1% | [22]28.2% |
| 41+ | [14]36.8% | [5]13.2% | [9]23.7% | [4]10.5% | [6]15.8% |

Value = 7.078
Degree of Freedom = 4
Significance = .132

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [22]27.8% | [12]15.2% | [17]21.5% | [9]11.4% | [19]24.1% |
| 41+ | [17]43.6% | [4]10.3% | [8]20.5% | [4]10.3% | [6]15.4% |

Value = 3.395
Degree of Freedom = 4
Significance = .494

Table 18 shows no significance and thus indicates that the age of the teachers was not a factor in teachers' awareness and practice of small group instruction in their classrooms.

Table 18

*Teachers Value the Use of Small Groups of Students in Their Classroom on a Regular Basis (Test 3 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [1]1.3% | [2]2.5% | [18]22.5% | [20]25.0% | [39]48.8% |
| 41+ | [2]5.1% | [1]2.6% | [12]30.8% | [11]28.2% | [13]33.3% |

Value = 3.805
Degree of Freedom = 4
Significance = .433

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [2]2.5% | [5]6.3% | [30]37.5% | [23]28.8% | [20]25.0% |
| 41+ | [3]7.7% | [0]0.0% | [15]38.5% | [15]38.5% | [6]15.4% |

Value = 6.010
Degree of Freedom = 4
Significance = .198

Table 19 shows that approximately 90% of younger and older teachers agreed that thinking skills need to be emphasized in the middle level. In Table 19 it appears that older teachers emphasized thinking skills significantly more than younger teachers.

Total 19

*Teachers in Our School Understand the Need to Emphasize Thinking Skills (Test 4 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [0]0.0% | [1]1.3% | [7]8.8% | [24]30.0% | [48]60.0% |
| 41+ | [0]0.0% | [0]0.0% | [4]10.3% | [13]33.3% | [22]54.4% |

Value = 0.703
Degree of Freedom = 3
Significance = .872

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [0]0.0% | [1]1.2% | [30]36.6% | [21]25.6% | [30]36.6% |
| 41+ | [0]0.0% | [0]0.0% | [6]15.4% | [19]48.7% | [14]35.9% |

Value = 8.741
Degree of Freedom = 3
Significance = .033

Both groups emphasized the importance of teaching problem solving skills, as seen in Table 20. When it comes to actual application, it appears that older teachers actually implemented the practice within their classroom to a greater degree than younger teachers.

Table 20

*Middle Level Teachers Emphasize Problem-Solving Activities in Their Classrooms (Test 5 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [0]0.0% | [0]0.0% | [14]17.3% | [28]34.6% | [39]48.1% |
| 41+ | [0]0.0% | [0]0.0% | [5]12.8% | [10]25.6% | [24]61.5% |

Value = 1.893
Degree of Freedom = 2
Significance = .388

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [0]0.0% | [4]4.9% | [27]33.3% | [24]29.6% | [26]32.1% |
| 41+ | [0]0.0% | [0]0.0% | [7]17.9% | [20]51.3% | [12]30.8% |

Value = 7.506
Degree of Freedom = 3
Significance = .057

In Table 21, analysis shows that 60% of older and younger teachers felt promoting a healthy lifestyle is important. When it comes to levels of practice almost half of the older and younger teachers worked to promote a healthy lifestyle.

Table 21

*Middle Level Teachers Throughout Our School Promote Healthy Lifestyles in Their Classrooms Because They Know the Importance It Has in Helping Students Achieve (Test 6 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [1]1.2% | [2]2.5% | [28]34.6% | [24]29.6% | [26]32.1% |
| 41+ | [2]5.1% | [1]2.6% | [12]30.8% | [8]20.5% | [16]41.0% |

Value = 3.131
Degree of Freedom = 4
Significance = .536

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [2]2.4% | [11]13.4% | [32]39.0% | [23]28.0% | [14]17.1% |
| 41+ | [6]16.7% | [3]8.3% | [10]27.8% | [5]13.9% | [12]33.3% |

Value = 2.169
Degree of Freedom = 4
Significance = .705

Table 22 showed 60% of older and younger teachers saw the importance of teachers integrating the subject matter across the various disciplines. However less then half of the older and younger teachers implemented such a procedure in their classrooms.

Table 22

*Teachers in Our School are Trained to Integrate the Subject Matter Across the Various Disciplines Such as Organizing Thematic Instructional Units for Their Students (Test 7 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [2]2.5% | [2]2.5% | [21]25.9% | [30]37.0% | [26]32.1% |
| 41+ | [1]2.6% | [2]5.1% | [13]33.3% | [12]30.8% | [11]28.2% |
| [16]41.0% | | | | | |

Value = 1.494
Degree of Freedom = 4
Significance = .828

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [7]8.5% | [18]22.0% | [22]26.8% | [19]23.2% | [16]19.5% |
| 41+ | [1]2.6% | [8]20.5%% | [15]38.5% | [11]28.2% | [4]10.3% |

Value = 4.261
Degree of Freedom = 4
Significance = .372

Although teachers saw the importance of using portfolio assessment as shown in Table 23, less than 20% of older and younger teachers required portfolios in their classes.

Table 23

*Teachers in Our School Use Portfolio Assessment in Evaluation of Their Students (Test 8 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [11]13.6% | [16]19.8% | [19]23.5% | [21]25.9% | [14]17.3% |
| 41+ | [5]12.8% | [9]23.1% | [11]28.2% | [8]20.5% | [6]15.4% |

Value = .765
Degree of Freedom = 4
Significance = .943

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [17]20.7% | [31]37.8% | [23]28.0% | [9]11.0% | [2]2.4% |
| 41+ | [10]25.6% | [11]28.2% | [10]25.6% | [6]15.4% | [2]5.1% |

Value = 2.036
Degree of Freedom = 4
Significance = .729

As illustrated in Table 24, over 60% of older and younger teachers agreed that it is important to have input in determining what subject matter is taught to students. Additionally, over half of the older and younger teachers saw this occurring in their schools.

Table 24

*Middle Level Teachers in Our School Help Determine What Subject Matter is Taught to Their Students (Test 9 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [1]1.4% | [7]9.5% | [14]18.9% | [29]39.2% | [23]31.1% |
| 41+ | [3]8.6% | [3]8.6% | [8]22.9% | [14]40.0% | [7]20.0% |

Value = 4.642
Degree of Freedom = 4
Significance = .326

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [4]5.3% | [12]16.0% | [17]22.7% | [25]33.3% | [17]22.7% |
| 41+ | [4]11.4% | [2]5.7% | [6]17.1% | [19]54.3% | [4]11.4% |

Value = 7.749
Degree of Freedom = 4
Significance = .101

Table 25 shows that teachers felt strongly that they should determine how subject matter is taught, and almost75% practiced this in their classroom.

Table 25

*Middle Level Teachers in Our School Help Determine How Subject Matter is Taught to Their Students (Test 10 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [1]1.4% | [1]1.4% | [10]13.5% | [28]37.8% | [34]45.9% |
| 41+ | [1]2.9% | [3]8.6% | [7]20.0% | [12]34.3% | [12]34.3% |

Value = 5.157
Degree of Freedom = 4
Significance = .272

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [1]1.3% | [4]5.3% | [10]13.3% | [28]37.3% | [32]42.7% |
| 41+ | [1]2.9% | [1]2.9% | [8]22.9% | [11]31.4% | [14]40.0% |

Value = 2.225
Degree of Freedom = 4
Significance = .695

Fifty percent of younger and 28% of older teachers recognized the importance of middle level guidance counselors being trained in career guidance. Table 26 goes on to show 43% of teachers felt this practice was taking place in their schools.

Table 26

*Middle Level Counselors in Our School are Trained in Career Guidance (Test 11 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [8]10.8% | [8]10.8% | [20]27.0% | [15]20.3% | [23]31.1% |
| 41+ | [11]32.4% | [3]8.8% | [10]29.4% | [4]11.8% | [6]17.6% |

Value = 8.807
Degree of Freedom = 4
Significance = .066

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [7]9.6% | [9]12.3% | [22]30.1% | [18]24.7% | [17]23.3% |
| 41+ | [7]20.6% | [5]14.7% | [9]26.5% | [8]23.5% | [5]14.7% |

Value = 3.196
Degree of Freedom = 4
Significance = .526

When looking at the perception of whether teachers are organized in interdisciplinary teams, 50% seemed to be aware while 30% seemed unaware. Table 27 shows less than 50% of teachers said they are not organized into interdisciplinary teams. So with 30% reporting having practiced this recommendation, it would seem middle level teaches are not organized into interdisciplinary teams.

Table 27

*Middle Level Teachers in Our School are Organized into Interdisciplinary Teams (i.e., the organization of two or more teachers from different disciplines who share the same group of students) (Test 12 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [9]12.2% | [12]16.2% | [9]12.2% | [13]17.6% | [31]41.9% |
| 41+ | [7]20.0% | [4]11.4% | [7]20.0% | [6]17.1% | [11]31.4% |

Value = 3.037
Degree of Freedom = 4
Significance = .552

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [30]40.0% | [8]10.7% | [16]21.3% | [10]13.3% | [11]14.7% |
| 41+ | [7]20.0% | [5]14.3% | [11]31.4% | [4]11.4% | [19]17.3% |

Value = 5.088
Degree of Freedom = 4
Significance = .278

Table 28 shows that almost 50% of younger and older teachers realized the benefit of sharing responsibility for the curriculum, but only 28% actually seemed to be doing it in their classrooms.

Table 28

*Teachers in Those Interdisciplinary Teams Realize the Benefit of Sharing Responsibility for the Curriculum of that Same Group of Students (Test 13 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [11]15.1% | [8]11.0 | [14]19.2% | [13]17.8% | [27]37.0% |
| 41+ | [9]25.7% | [3]8.6% | [8]22.9% | [8]22.9% | [7]20.0% |

Value = 4.216
Degree of Freedom = 4
Significance = .378

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [33]44.0% | [9]12.0% | [11]14.7% | [11]14.7% | [11]14.7% |
| 41+ | [9]25.7% | [6]17.1% | [10]28.6% | [6]17.1% | [4]11.4% |

Value = 5.248
Degree of Freedom = 4
Significance = .263

Much the same as the previous table dealing with curriculum, Table 29 shows approximately 50% of younger and older teachers realized the benefit of sharing responsibility for instruction. In contrast, less than 30% actually seemed to be implementing this recommendation in their classroom.

Table 29

*Teachers in Those Interdisciplinary Teams Realize the Benefit of Sharing Responsibility for the Instruction of that Same Group of Students (Test 14 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [11]15.1% | [7]9.6% | [14]19.2% | [16]21.9% | [25]34.2% |
| 41+ | [7]20.0% | [5]14.3% | [7]20.0% | [8]22.9% | [8]22.9% |

Value = 1.837
Degree of Freedom = 4
Significance = .766

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [32]43.2% | [6]8.1% | [15]20.3% | [9]12.2% | [12]16.2% |
| 41+ | [8]23.5% | [617.6% | [9]26.5% | [8]23.5% | [3]8.8% |

Value = 7.584
Degree of Freedom = 4
Significance = .108

Similar to the previous two tables dealing with curriculum, Table 30 shows that approximately 50% of younger and older teachers realized the benefit of sharing responsibility for assessment. In contrast again, less than 30% actually reported to be doing this recommendation in their classroom.

Table 30

*Teachers in Those Interdisciplinary Teams Realize the Benefit of Sharing Responsibility for the Assessment of that Same Group of Students (Test 15 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [9]12.5% | [11]15.3% | [13]18.1% | [17]23.6% | [22]30.6% |
| 41+ | [10]28.6% | [2]5.7% | [8]22.9% | [9]25.7% | [6]17.1% |

Value = 7.137
Degree of Freedom = 4
Significance = .129

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [31]41.3% | [11]14.7% | [14]18.7% | [10]13.3% | [9]12.0% |
| 41+ | [10]29.4% | [6]17.6% | [8]23.5% | [8]23.5% | [2]5.9% |

Value = 3.632
Degree of Freedom = 4
Significance = .458

Although teachers seemed to be aware of the importance of receiving staff development targeting the needs of adolescents as shown in Table 31, around 70% of older and younger teachers reportedly did not receive this type of staff development.

Table 31

*Middle Level Teachers in Our School Receive Staff Development Specifically Targeting the Needs of Young Adolescents (Test 16 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [5]6.8% | [5]6.8% | [20]27.0% | [25]33.8% | [19]25.7% |
| 41+ | [1]2.9% | [3]8.6% | [11]31.4% | [12]34.3% | [8]22.9% |

Value = 1.003
Degree of Freedom = 4
Significance = .909

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [12]16.0% | [18]24.0% | [27]36.0% | [10]13.3% | [8]10.7% |
| 41+ | [3]8.8% | [6]17.6% | [12]35.3% | [8]23.5% | [5]14.7% |

Value = 3.100
Degree of Freedom = 4
Significance = .541

Table 32 indicates that younger teachers were more aware of the importance to inform parents of the progress of their children through alternative assessment. There was no significant difference in attitudes toward actual practice between the younger and older teachers when using alternative assessments.

Table 32

*Middle Level Teachers in Our School Inform Middle Level Parents of the Progress of Their Children Through Alternative Assessment Means Other Than Report Cards and District Mandated Progress Reports (Test 17 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [2]2.7% | [6]8.1% | [17]23.0% | [26]35.1% | [23]31.1% |
| 41+ | [7]20.6% | [2]5.9% | [8]23.5% | [11]32.4% | [6]17.6% |

Value = 12.532
Degree of Freedom = 4
Significance = .014

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [8]10.7% | [13]17.3% | [18]24.0% | [22]29.3% | [14]18.7% |
| 41+ | [6]17.1% | [8]22.9% | [7]20.0% | [8]22.9% | [9]17.1% |

Value = 1.733
Degree of Freedom = 4
Significance = .785

Table 33 shows that 35% of younger and older teachers realized that they should receive staff development in decision making skills concerning the education of middle level students, but less than 20% actually seemed to receive the staff development.

Table 33

*Middle Level Teachers in Our School are Given Staff Development in Decision Making Skills Concerning the Education of the Middle Level Students (Test 18 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [7]9.5% | [11]14.9% | [28]37.8% | [17]23.0% | [11]14.9% |
| 41+ | [9]25.7% | [5]14.3% | [9]25.7% | [10]28.6% | [2]5.7% |

Value = 7.280
Degree of Freedom = 4
Significance = .122

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [13]17.3% | [28]37.3% | [22]29.3% | [6]8.0% | [6]8.0% |
| 41+ | [11]31.4% | [11]31.4% | [6]17.1% | [6]17.1% | [1]2.9% |

Value = 6.621
Degree of Freedom = 4
Significance = .157

Table 34 shows that 60% of younger and older teachers realized the importance of teachers being specially trained to teach adolescents but only 40% actually seemed to think teachers were specially trained.

Table 34

*Middle Level Teachers in Our School are Specially Trained to Teach Young Adolescents (Test 19 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [2]2.5% | [9]11.1% | [21]25.9% | [29]35.8% | [20]24.7% |
| 41+ | [3]7.7% | [4]10.3% | [9]23.1% | [11]28.2% | [12]30.8% |

Value = 2.647
Degree of Freedom = 4
Significance = .618

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [10]12.2% | [11]13.4% | [28]34.1% | [17]20.7% | [16]19.5% |
| 41+ | [5]12.8% | [4]10.3% | [12]30.8% | [9]23.1% | [9]23.1% |

Value = .542
Degree of Freedom = 4
Significance = .969

Table 35 shows that teachers felt strongly about the importance of modeling healthy practices and 70% did this in while in their classroom.

Table 35

*Middle Level Teachers in Our School Promote Healthy Behavior by Modeling Healthy Practices (e.g., no smoking, healthy diets, etc.) (Test 20 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [2]2.5% | [2]2.5% | [15]18.5% | [25]30.9% | [37]45.7% |
| 41+ | [3]7.9% | [2]5.3% | [8]21.1% | [10]26.3% | [15]39.5% |

Value = 2.909
Degree of Freedom = 4
Significance = .573

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [2]2.4% | [1]1.2% | [24]29.3% | [34]41.5% | [21]25.6% |
| 41+ | [1]2.6% | [1]1.6% | [12]31.6% | [11]28.9% | [13]34.2% |

Value = 2.123
Degree of Freedom = 4
Significance = .713

Table 36 shows that about half the teachers were unaware of teachers in their schools being organized into small units, and 75% said they did not practice this in their schools.

Table 36

*Middle Level Teachers and Students in Our School are Organized into Small Units Such as "Houses" or "Schools-Within-Schools" (Test 21 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [23]28.4% | [17]21.0% | [14]17.3% | [15]18.5% | [12]14.8% |
| 41+ | [14]35.9% | [7]17.9% | [7]17.9% | [6]15.4% | [5]12.8% |

Value = .830
Degree of Freedom = 4
Significance = .934

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [49]60.5% | [12]14.8% | [10]12.3% | [7]8.6% | [3]3.7% |
| 41+ | [18]47.4% | [11]28.9% | [4]10.5% | [2]5.3% | [3]7.9% |

Value = 4.829
Degree of Freedom = 4
Significance = .305

Table 37 indicates that the test of awareness was at a significant level showing 40% of younger teachers compared to 23% of older teachers who were aware of students learning life skills through community service. The statement regarding level of practice indicates that older teachers and younger teachers did not significantly differ in whether

students learned through community service. Both groups showed a low level of practice in this area.

Table 37

*Middle Level Students in Our School are Learning Life Skills Through Participation in School and Community Service (Test 22 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [11]8.6% | [14]17.3% | [27]33.3% | [22]27.2% | [11]13.6% |
| 41+ | [7]28.2% | [6]15.4% | [13]33.3% | [5]12.8% | [4]10.3% |

Value = 9.412
Degree of Freedom = 4
Significance = .052

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [11]13.6% | [30]37.0% | [25]30.9% | [10]12.3% | [5]6.2% |
| 41+ | [11]28.2% | [10]25.6% | [12]30.8% | [4]10.3% | [2]5.1% |

Value = 4.245
Degree of Freedom = 4
Significance = .374

Table 38 shows that over 60% of older and younger teachers felt that students in their schools are heterogeneously grouped. When it came to levels of practice almost half of the older and younger teachers heterogeneously grouped students.

Table 38

*Middle Level Students in Our School are Heterogeneously Grouped (i.e., missed by academic ability) for Instruction in Core Courses as a Result of Teachers' Beliefs (Test 23 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [6]7.4% | [7]8.6% | [20]24.7% | [22]27.2% | [26]32.1% |
| 41+ | [6]15.4% | [1]2.6% | [7]17.9% | [14]35.9% | [11]28.2% |

Value = 4.465
Degree of Freedom = 4
Significance = .347

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [20]24.4% | [13]15.9% | [20]24.4% | [11]13.4% | [18]22.0% |
| 41+ | [7]18.4% | [3]7.9% | [9]23.7% | [12]31.6% | [7]18.4% |

Value = 6.276
Degree of Freedom = 4
Significance = .179

Table 39 indicates that the test of awareness was at a significant level showing 46% of younger teachers compared to 24% of older teachers were aware of student participation in exploratory courses. The statement regarding level of practice indicates that older teachers and younger teachers did significantly differ in practice of whether

they used exploratory courses in their schools with younger teachers seeming to do it more than older teachers.

Table 39

*Teachers Believe Students in Our School Should Participate in Exploratory or "Mini" Courses Where They Can Experience Success in a Variety of Interest Areas (Test 24 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [10]12.3% | [9]11.1% | [24]29.6% | [25]30.9% | [13]16.0% |
| 41+ | [12]30.8% | [8]20.5% | [9]23.1% | [5]12.8% | [5]12.8% |

Value = 10.539
Degree of Freedom = 4
Significance = .032

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [14]17.1% | [25]30.5% | [23]28.0% | [9]11.0% | [11]13.4% |
| 41+ | [16]42.1% | [6]15.8% | [8]21.1% | [5]13.2% | [3]7.9% |

Value = 9.956
Degree of Freedom = 4
Significance = .041

Table 40 shows that younger and older teachers agreed that middle level students should have structured learning opportunities outside of the classroom. The younger teachers appeared to be aware and to have practiced this recommendation significantly more than older teachers.

Table 40

*In Addition to Regularly Scheduled Class Periods, Teachers Believe Middle Level Students in Our School Should have Structured Learning Opportunities at Times Such as Before School, During Lunch, and After School (Test 25 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [1]1.2% | [11]13.6% | [23]28.4% | [22]27.2% | [24]29.6% |
| 41+ | [9]23.1% | [6]15.4% | [9]23.1% | [7]17.9% | [8]20.5% |

Value = 17.156
Degree of Freedom = 4
Significance = .002

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [6]7.3% | [22]26.8% | [2]25.6% | [19]23.2% | [14]17.1% |
| 41+ | [11]28.9% | [6]15.8% | [11]28.9% | [6]15.8% | [3]10.5% |

Value = 11.462
Degree of Freedom = 4
Significance = .022

Table 41 shows 65% of younger and 48% of older teachers recognized the importance of middle level students being taught to think critically. Table 26 goes on to show about half of teachers felt this practice was taking place in their schools.

Table 41

*Middle Level Students in Our School are Taught to Think Critically to Prepare Them for the Responsibilities of Citizenship in a Pluralistic Society (Test 26 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [1]1.2% | [5]6.2% | [22]27.2% | [27]33.3% | [26]32.1% |
| 41+ | [2]5.1% | [4]10.3% | [14]35.9% | [11]28.2% | [8]20.5% |

Value = 4.317
Degree of Freedom = 4
Significance = .365

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [4]4.9% | [12]14.6% | [26]31.7% | [25]30.5% | [15]18.3% |
| 41+ | [2]5.1% | [3]7.7% | [19]48.7% | [10]25.6% | [5]12.8% |

Value = 3.781
Degree of Freedom = 4
Significance = .437

In Table 42 it appears that younger teachers were significantly more aware of the importance of parent participation in governance in the schools. Both younger and older teachers indicated that close to 60% were not practicing this recommendation thus they have no significant differences.

Table 42

*The Parents of Our School's Middle Level Students Actively Participate in the Governance and Decision Making Process of Our School (Test 27 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [14]17.5% | [13]16.3% | [24]30.0% | [17]21.3% | [12]15.0% |
| 41+ | [12]30.8% | [12]30.8% | [8]20.5% | [6]15.4% | [1]2.6% |

Value = 9.800
Degree of Freedom = 4
Significance = .044

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [18]22.5% | [29]36.3% | [21]26.3% | [7]8.8% | [5]6.3% |
| 41+ | [12]31.6% | [15]39.5% | [8]21.1% | [1]2.6% | [2]5.3% |

Value = 2.655
Degree of Freedom = 4
Significance = .617

Although teachers seemed to see the importance of receiving sustained and intensive professional development in middle level philosophy as shown in Table 43, less than 18% of older and younger teachers were receiving this professional development.

Table 43

*Middle Level Teachers in Our School Receive Sustained and Intensive Professional Development in Middle Level Philosophy (i.e., study groups, joint lesson planning, peer coaching, and collaboratively reviewing student work) (Test 28 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [6]7.4% | [16]19.8% | [20]24.7% | [25]30.9% | [14]17.3% |
| 41+ | [6]15.4% | [9]23.1% | [11]28.2% | [8]20.5% | [5]12.8% |

Value = 3.298
Degree of Freedom = 4
Significance = .509

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [18]22.0% | [30]36.6% | [19]23.2% | [11]13.4% | [4]4.9% |
| 41+ | [10]26.3% | [8]21.1% | [15]39.5% | [3]7.9% | [2]5.3% |

Value = 5.312
Degree of Freedom = 4
Significance = .257

Even though teachers seemed to see the importance of a school governance committee as shown in Table 44, less than 24% of older and younger teachers saw teachers and administrators participating in this practice.

Table 44

*Our School Has a School Governance Committee Where Middle Level Teachers and Administrators Participate in and Practice Shared Decision Making (Test 29 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [10]13.9% | [12]16.7% | [19]26.4% | [15]20.8% | [16]22.2% |
| 41+ | [11]31.4% | [6]17.1% | [8]22.9% | [7]20.0% | [3]8.6% |

Value = 6.291
Degree of Freedom = 4
Significance = .178

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [18]24.7% | [20]27.4% | [17]23.3% | [8]11.0% | [10]13.7% |
| 41+ | [12]34.3% | [7]20.0% | [10]28.6% | [4]11.4% | [2]5.7% |

Value = 2.934
Degree of Freedom = 4
Significance = .569

In Table 45 it appears that younger teachers were significantly more aware of the need for close, trusting relationships that create a climate for personal and intellectual

development. Both younger and older teachers indicated that close to 60% did not practice this recommendation, thus they have no significant differences.

Table 45

*Teachers Understand That Close, Trusting Relationships with Middle Level Students Creates a Climate for Personal Growth and Intellectual Development (Test 30 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [0]0.0% | [2]2.7% | [11]15.1% | [21]28.8% | [39]53.4% |
| 41+ | [3]8.8% | [1]2.9% | [9]26.5% | [3]38.2% | [8]23.5% |

Value = 13.432
Degree of Freedom = 4
Significance = .009

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [0]0.0% | [4]5.4% | [23]31.1% | [24]32.4% | [23]31.1% |
| 41+ | [2]5.9% | [2]5.9% | [8]23.5% | [15]44.1% | [7]20.6% |

Value = 6.630
Degree of Freedom = 4
Significance = .157

Table 46 indicates that about half of the younger teachers felt that teachers should be trained to have the opportunities to assume leadership positions. The difference in awareness level between both groups was not significant. In addition, 21% of younger

teachers and 19% of older teachers felt that teachers actually were given the training necessary to assume the leadership positions in the middle level schools, therefore neither group differed significantly.

Table 46

*Our School Provides Training to Middle Level Teachers to Have Opportunities to Assume Leadership Positions Such a House or Team Leaders (Test 31 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [15]20.5% | [8]11.0% | [20]27.4% | [13]17.8% | [17]23.3% |
| 41+ | [13]37.1% | [6]17.1% | [7]20.0% | [5]14.3% | [4]11.4% |

Value = 5.616
Degree of Freedom = 4
Significance = .230

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [28]38.4% | [16]21.9% | [13]17.8% | [10]13.7% | [6]8.2% |
| 41+ | [14]41.2% | [9]26.5% | [4]11.8% | [4]11.8% | [3]8.8% |

Value = .862
Degree of Freedom = 4
Significance = .930

Table 47 shows that when it came to awareness the younger teachers significantly emphasized the importance of providing assistance in securing health services. When it came to actual application, it appears that younger teachers actually implemented the practice more than older teachers too.

Table 47

*Our School Provides Assistance to Middle Level Students in Securing Health Services When Needed (Test 32 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [5]6.9% | [0]0.0% | [20]27.8% | [19]26.4% | [28]38.9% |
| 41+ | [6]17.1% | [4]11.4% | [13]37.1% | [11]31.4% | [1]2.9% |

Value = 22.776
Degree of Freedom = 4
Significance = .000

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [2]2.8% | [5]6.9% | [19]26.4% | [25]34.7% | 21]29.2% |
| 41+ | [3]8.8% | [5]14.7% | [14]41.2% | [10]29.4% | [2]5.9% |

Value = 10.854
Degree of Freedom = 4
Significance = .028

Table 48 indicates that about 40% of the younger teachers felt that teachers should be developing lesson plans for flexible schedules. The difference in awareness level between both groups is not significant. In addition, only 19% of younger teachers and 6% of older teachers felt that teachers actually were educated in developing this type of lesson plan.

Table 48

*Our Teachers are Educated in Developing Lesson Plans to Use in a Flexible or Block Schedule for the Middle Level Students (Test 33 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [13]17.8% | [11]15.1% | [21]28.8% | [10]13.7% | [18]24.7% |
| 41+ | [12]34.3% | [5]14.3% | [8]22.9% | [6]17.1% | [4]11.4% |

Value = 5.314
Degree of Freedom = 4
Significance = .257

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [40]54.1% | [11]14.9% | [9]12.2% | [5]6.8% | [9]12.2% |
| 41+ | [15]44.1% | [7]20.6% | [10]29.4% | [1]2.9% | [1]2.9% |

Value = 7.599
Degree of Freedom = 4
Significance = .107

About 80% of the younger teachers and older teachers felt that their school developed programs to create a school environment that is emotionally and physically safe. The difference in the awareness level between both groups is not significant. In addition, 80% of younger teachers and older teachers felt their schools implemented programs to create a school environment that is emotionally and physically safe therefore neither group differed significantly.

Table 49

*Our School has Developed and Implemented Programs to Create a School Environment that is Emotionally and Physically Safe for Both Middle Level Students and Teachers (Test 34 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [2]2.8% | [0]0.0% | [12]16.7% | [17]23.6% | [41]56.9% |
| 41+ | [0]0.0% | [1]2.9% | [7]20.0% | [12]34.3% | [15]42.9% |

Value = 5.060
Degree of Freedom = 4
Significance =.281

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [3]4.1% | [2]2.7% | [13]17.8% | [19]26.0% | [36]49.3% |
| 41+ | [0]0.0% | [1]2.9% | [7]20.0% | [15]42.9% | [12]34.3% |

Value = 4.832
Degree of Freedom = 4
Significance = .305

Less than half of the teachers felt that their school sees the value in giving parents the opportunity to work in the schools in various capacities. In addition 20% of younger teachers and older teachers felt that schools were actually giving the opportunity to parents when looking at level of practice, therefore neither group differed significantly.

Table 50

*Our School Sees the Value in Giving Middle Level Parents the Opportunity to Work in the School in Various Capacities (Test 35 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [7]9.6% | [7]9.6% | [27]37.0% | [17]23.3% | [15]20.5% |
| 41+ | [3]8.6% | [8]22.9% | [13]37.1% | [7]20.0% | [4]11.4% |

Value = 4.259
Degree of Freedom = 4
Significance = .372

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [13]18.1% | [17]23.6% | [25]34.7% | [9]12.5% | [8]11.1% |
| 41+ | [6]17.1% | [13]37.1% | [9]25.7% | [7]20.0% | [0]0.0% |

Value = 6.925
Degree of Freedom = 4
Significance = .140

Although teachers seemed to see the importance of receiving training to create a climate that promotes healthy lifestyles as shown in Table 51, less than 35% of older and younger teachers were receiving this training from their schools.

Table 51

*Our School Provides Training to Bring About a Climate that Promotes Healthy Lifestyles for Middle Level Teachers and Students (Test 36 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [3]4.1% | [11]15.1% | [17]23.3% | [25]34.2% | [17]23.3% |
| 41+ | [5]14.3% | [3]8.6% | [12]34.3% | [11]31.4% | [4]11.4% |

Value = 6.911
Degree of Freedom = 4
Significance = .141

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [4]5.5% | [19]26.0% | [26]35.6% | [12]16.4% | [12]16.4% |
| 41+ | [6]17.1% | [8]22.9% | [9]25.7% | [10]28.6% | [2]5.7% |

Value = 8.095
Degree of Freedom = 4
Significance = .088

Table 52 shows that around half of younger and older teachers seemed to feel they are knowledgeable on how to give parents assistance in helping their children, but less than a quarter of the teachers actually seemed to provide this to parents.

Table 52

*Our Teachers are Knowledgeable on How to Give Middle Level Parents Assistance in Helping Their Children to Learn at Home (Test 37 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [2]2.7% | [11]15.1% | [19]26.0% | [23]31.5% | [18]24.7% |
| 41+ | [3]8.8% | [6]17.6% | [11]32.4% | [12]35.3% | [2]5.9% |

Value = 6.742
Degree of Freedom = 4
Significance = .150

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [4]5.4% | [16]21.6% | [25]33.8% | [18]24.3% | [11]14.9% |
| 41+ | [4]11.8% | [8]23.5% | [14]41.2% | [8]23.5% | [0]0.0% |

Value = 6.723
Degree of Freedom = 4
Significance = .151

Table 53 shows that older and younger teachers were aware of the importance of hiring teachers who have a strong commitment to work with middle level students. It appears however that the younger teachers were slightly more aware then older teachers. Close to 60% of younger and older teachers felt that their school practiced this recommendation.

Table 53

*One Criterion for Hiring Middle Level Teachers in Our School is they Possess a Strong Commitment to Work with Middle Level Students (Test 38 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [6]8.2% | [7]9.6% | [11]15.1% | [28]38.4% | [21]28.8% |
| 41+ | [6]17.6% | [0]0.0% | [11]32.4% | [10]29.4% | [7]20.6% |

Value = 9.585
Degree of Freedom = 4
Significance = .048

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [4]5.5% | [6]8.2% | [15]20.5% | [29]39.7% | [19]26.0% |
| 41+ | [2]6.1% | [1]3.0% | [16]48.5% | [9]27.3% | [5]15.2% |

Value = 9.176
Degree of Freedom = 4
Significance = .057

In Table 54 it appears that younger teachers were more aware that their school works cooperatively with the community. Although younger and older teachers seemed to value the opportunity to work with the community, less than 28% actually practiced it in their schools.

Table 54

*Our School Works Cooperatively with Community Businesses, Service Clubs, and Foundations to Provide Resources for Middle Level Students and Teachers (Test 39 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [5]6.8% | [9]12.3% | [24]32.9% | [18]24.7% | [17]23.3% |
| 41+ | [13]31.4% | [5]14.3% | [10]28.6% | [8]22.9% | [1]2.9% |

Value = 15.813
Degree of Freedom = 4
Significance = .003

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Age | 1 | 2 | 3 | 4 | 5 |
| 21-40 | [5]6.8% | [21]28.8% | [26]35.6% | [12]16.4% | [9]12.3% |
| 41+ | [8]23.5% | [9]26.5% | [10]29.4% | [4]11.8% | [3]8.8% |

Value = 6/214
Degree of Freedom = 4
Significance = .184

In looking at the rest of the data that showed significance, the researcher found information that helped provide answers to research questions five and six which deal with individual and school characteristics. They are: How do the individual characteristics, including age, gender, and educational experience, influence teacher awareness and practice of the implementation of *Turning Points 2000* recommendations? How do the school characteristics, including enrollment and setting, influence teacher awareness and practice of the implementation of *Turning Points 2000* recommendations?

*Turning Points 2000* placed a strong emphasis on curriculum, student assessment, and instruction. It stressed how changes in school organizational structures are necessary but not sufficient for major improvement in academic achievement. These structural changes must be accompanied by substantial improvement in teaching and learning.

The researcher found that 16 recommendations showed high levels of significance; 9 statements dealt with individual characteristics and 7 statements dealt with school characteristics. The results and tables following are provided for review.

Table 55 shows that teachers in schools with low enrollment differed significantly in the level of practice regarding the benefits of sharing responsibility for curriculum from schools with higher enrollment. The statement regarding level of awareness indicated the schools with lower enrollment and schools with higher enrollment seem to agree that teachers realize the benefit of sharing the responsibility for curriculum. Therefore, the level of awareness does not differ significantly between the two enrollment categories.

Table 55

*Teachers in Those Interdisciplinary Teams Realize the Benefit of Sharing Responsibility for the Curriculum of the Same Group of Students (Test 13 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Enrollment | 1 | 2 | 3 | 4 | 5 |
| 1-699 | [8]14.5% | [3]5.5% | [10]18.2% | [15]27.3% | [19]34.5% |
| 700-1500+ | [12]23.5% | [8]15.7% | [12]23.5% | [5]9.8% | [14]27.5% |

Value = 8.874
Degree of Freedom = 4
Significance = .064

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Enrollment | 1 | 2 | 3 | 4 | 5 |
| 1-699 | [10]18.2% | [7]12.7% | [13]23.6% | [13]23.6% | [12]21.8% |
| 700-1500+ | [32]60.4% | [8]15.1% | [7]13.2% | [4]7.5% | [2]3.8% |

Value = 25.270
Degree of Freedom = 4
Significance = .000

In Table 56 it appears that teachers in schools with lower enrollment differed significantly than schools with higher enrollment in awareness and practice relative to their organization as interdisciplinary teams. It is important to note that teachers in schools with lower enrollment expressed a major difference in practice than schools with higher enrollment, with 52% compared to 8%.

Table 56

*Middle Level Teachers in Our School are Organized into Interdisciplinary Teams (i.e., the organization of two or more teachers from different disciplines who share the same group of students) (Test 12 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Enrollment | 1 | 2 | 3 | 4 | 5 |
| 1-699 | [4]7.3% | [4]7.3% | [9]16.4% | [11]20.0% | [27]49.1% |
| 700-1500+ | [12]23.1% | [12]23.1% | [7]13.5% | [7]13.5% | [14]26.9% |

Value = 13.187
Degree of Freedom = 4
Significance = .010

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Enrollment | 1 | 2 | 3 | 4 | 5 |
| 1-699 | [6]10.9% | [4]7.3% | [16]29.1% | [12]21.8% | [17]30.9% |
| 700-1500+ | [31]58.5% | [8]15.1% | [10]18.9% | [2]3.8% | [2]3.8% |

Value = 38.571
Degree of Freedom = 4
Significance = .000

Much the same as in Table 56, it appears Table 57 shows that teachers in schools with lower enrollment differed significantly from schools with higher enrollment in awareness and practice of teachers realizing the benefits of sharing responsibility for instruction. It is important to note that teachers in schools with lower enrollment expressed a major difference in awareness and practice than schools with higher

enrollment with 65% compared to 27% in awareness, and 44% compared to 11% in practice.

Table 57

*Teachers in Those Interdisciplinary Teams Realize the Benefit of Sharing Responsibility for Instruction of the Same Group of Students (Test 14 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Enrollment | 1 | 2 | 3 | 4 | 5 |
| 1-699 | [6]10.9% | [3]5.5% | [10]18.2% | [15]27.3% | [21]38.2% |
| 700-1500+ | [12]23.5% | [9]17.6% | [11]21.6% | [8]15.7% | [11]21.6% |

Value = 10.167
Degree of Freedom = 4
Significance = .038

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Enrollment | 1 | 2 | 3 | 4 | 5 |
| 1-699 | [8]14.5% | [5]9.1% | [17]30.9% | [13]23.6% | [12]21.8% |
| 700-1500+ | [32]62.7% | [7]13.7% | [6]11.8% | [4]7.8% | [2]3.9% |

Value = 31.796
Degree of Freedom = 4
Significance = .000

Table 58 shows that of the four different configurations, three of the school configurations reported similarly relating to the practice of sharing responsibility for instruction. It appears that teachers realized the benefit approximately 50% in the five-six-seven, six-seven-eight, and seven-eight-nine grade configurations compared to 16% of those in the seven-eight grade configuration.

Table 58

*Teachers in Those Interdisciplinary Teams Realize the Benefit of Sharing Responsibility for Instruction of that Same Group of Students (Test 14 Practice)*

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Configuration | 1 | 2 | 3 | 4 | 5 |
| 6-7-8 | [2]14.3% | [1]7.1% | [6]42.9% | [2]14.3% | [3]21.4% |
| 5-6-7-8 | [0]0.0% | [2]6.9% | [12]41.4% | [8]27.6% | [7]24.1% |
| 7-8 | [37]59.7% | [9]14.5% | [6]9.7% | [6]9.7% | [4]6.5% |
| 7-8-9 | [1]33.3% | [0]0.0% | [0]0.0% | [1]33.3% | [1]33.3% |

Value = 46.155
Degree of Freedom = 12
Significance = .000

Table 59 displays results which show that when teachers were placed into two groups by total teaching years they differed significantly. It appears that 56% of teachers with 20 or less years of experience were not aware of the benefits of sharing responsibility for instruction of the same group of students, whereas teachers with 21 or more years of experience had 31% who were not aware of this recommendation.

Table 59

*Teachers in Those Interdisciplinary Teams Realize the Benefits of Sharing Responsibility for Instruction of the Same Group of Students (Test 14 Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Total Teaching Years | 1 | 2 | 3 | 4 | 5 |
| 1-20 | [33]45.8% | [8]11.1% | [11]15.3% | [11]15.3% | [9]12.5% |
| 21+ | [7]19.4% | [4]11.1% | [13]36.1% | [6]16.7% | [6]16.7% |

Value = 9.524
Degree of Freedom = 4
Significance = .049

Table 60 shows that teachers in schools with lower enrollment differed significantly from schools with higher enrollment in awareness and practice of the benefit of sharing responsibility for assessment of students. It is important to note that teachers in schools with lower enrollment expressed a major difference in awareness and practice than schools with higher enrollment with 60% compared to 37% in awareness, and 35% compared to 16% in practice.

Table 60

*Teachers in Those Interdisciplinary Teams Realize the Benefits of Sharing Responsibility for the Assessment of that Same Group of Students (Test 15 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Enrollment | 1 | 2 | 3 | 4 | 5 |
| 1-699 | [8]14.5% | [2]3.6% | [12]21.8% | [17]30.9% | [16]29.1% |
| 700-1500+ | [11]22.0% | [11]22.0% | [9]18.0% | [8]16.0% | [11]22.0% |

Value = 11.086
Degree of Freedom = 4
Significance = .026

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Enrollment | 1 | 2 | 3 | 4 | 5 |
| 1-699 | [9]16.4% | [11]20.0% | [16]29.1% | [11]20.0% | [8]14.5% |
| 700-1500+ | [32]61.5% | [6]11.5% | [5]9.6% | [7]13.5% | [2]3.8% |

Value = 24.559
Degree of Freedom = 4
Significance = .000

Table 61 shows that of the four different configurations, three of the school configurations differed significantly in regards to sharing responsibility for assessment. It appears that approximately half of the teachers realized the benefit in the five-six-seven-eight, six-seven-eight, and seven-eight-nine grade configurations compared to 15% of those in seven-eight grade configuration.

Table 61

*Teachers in Those Interdisciplinary Teams Realize the Benefits of Sharing Responsibility for the Assessment of that Same Group of Students (Test 15 Practice)*

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Configuration | 1 | 2 | 3 | 4 | 5 |
| 6-7-8 | [2]14.3% | [1]7.1% | [8]57.1% | [2]14.3% | [1]7.1% |
| 5-6-7-8 | [0]0.0% | [9]31.9% | [6]20.7% | [8]27.6% | [6]20.7% |
| 7-8 | [38]60.3% | [7]11.1% | [8]12.7% | [7]11.1% | [3]4.8% |
| 7-8-9 | [1]33.3% | [0]0.0% | [0]0.0% | [1]33.3% | [1]33.3% |

Value = 50.318
Degree of Freedom = 12
Significance = .000

When looking at Table 62 it shows that teachers with more hours of professional development differed significantly from teachers who had fewer hours of professional development. It appears that 83% of teachers with over 11 hours of professional development practiced the recommendation to specifically target the needs of young adolescents, compared to 52% of teachers with 10 or less hours. Thus the more hours of professional development teachers received, the more likely they were to practice middle level recommendations which target the needs of adolescents.

Table 62

*Middle Level Teachers in Our School Receive Staff Development Specifically Targeting the Needs of Young Adolescents (Test 16 Practice)*

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Hours of PD | 1 | 2 | 3 | 4 | 5 |
| 0-10 | [14]20.6% | [18]26.5% | [18]26.5% | [11]16.2% | [7]10.3% |
| 11+ | [1]2.5% | [6]15.0% | [20]50.0% | [7]17.5% | [6]15.0% |

Value = 11.877
Degree of Freedom = 4
Significance = .018

Table 63 shows although 60% of all teachers who listed their middle level teaching experience had similar awareness of receiving staff development specifically targeting the needs of adolescents they still differed significantly in some way. It appears that 11% of faculty who had 10 or less years of middle level experience were not aware of this recommendation, compared to 0% of faculty with over 11 years of middle level experience.

Table 63

*Middle Level Teachers in Our School Receive Staff Development Specifically Targeting the Needs of Young Adolescents (Test 16 Awareness)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Middle Level Years | 1 | 2 | 3 | 4 | 5 |
| 0-10 | [6]10.9% | [0]0.0% | [16]29.1% | [21]38.2% | [12]21.8% |
| 11+ | [0]0.0% | [8]14.8% | [15]27.8% | [16]29.6% | [15]27.8% |

Value = 15.033
Degree of Freedom = 4
Significance = .005

Table 64 shows that teachers in schools with lower enrollment differed significantly from schools with higher enrollment in awareness and practice of the need to be specially trained to teach adolescents. Teachers in schools with lower enrollment expressed a major difference in awareness and practice than schools with higher enrollment with 71% compared to 46% in awareness, and 51% compared to 31% in practice.

Tables 63 and 64 indicate that schools with enrollments less than 699 were more aware and practiced the recommendation of specialized training to teach adolescents. This again reinforces the finding that enrollment plays a major part in the implementation of middle level recommendations in schools.

Table 64

*Middle Level Teachers in Our School are Specially Trained to Teach Young Adolescents (Test 19 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Enrollment | 1 | 2 | 3 | 4 | 5 |
| 1-699 | [1]1.7% | [3]5.0% | [13]21.7% | [24]40.0% | [19]31.7% |
| 700-1500+ | [4]6.9% | [10]17.2% | [17]29.3% | [14]24.1% | [13]22.4% |

Value = 9.828
Degree of Freedom = 4
Significance = .043

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Enrollment | 1 | 2 | 3 | 4 | 5 |
| 1-699 | [3]5.0% | [5]8.3% | [21]35.0% | [16]26.7% | [15]25.0% |
| 700-1500+ | [12]20.3% | [10]16.9% | [18]30.5% | [9]15.3% | [10]16.9% |

Value = 10.250
Degree of Freedom = 4
Significance = .036

When looking at Table 65 it shows that teachers with more hours of professional development differed significantly from teachers who had fewer hours of professional development. It appears that 72% of teachers with over 11 hours of professional development were aware of the recommendation to target the needs of young adolescents compared to 52% of teachers with 10 or less hours. Furthermore 62% of teachers with

over 11 hours of professional development practiced the recommendation compared to 29% of teachers with 10 or less hours. Once again this data shows that the more hours of professional development teachers received, the more likely they were to be aware of and practice middle level recommendations which target the needs of adolescents.

Table 65

*Middle Level Teachers in Our School are Specially Trained to Teach Young Adolescents (Test 19 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Hours of PD | 1 | 2 | 3 | 4 | 5 |
| 0-10 | [4]5.3% | [11]14.7% | [21]28.0% | [26]34.7% | [13]17.3% |
| 11+ | [1]2.3% | [2]4.5% | [9]20.5% | [14]31.8% | [18]40.9% |

Value = 9.829
Degree of Freedom = 4
Significance = .043

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Hours of PD | 1 | 2 | 3 | 4 | 5 |
| 0-10 | [11]14.7% | [12]16.0% | [30]40.0% | [12]16.0% | [10]13.3% |
| 11+ | [4]8.9% | [3]6.7% | [10]22.2% | [14]31.1% | [14]31.1% |

Value = 12.786
Degree of Freedom = 4
Significance = .012

When looking at Table 66 it shows that 64% of teachers with over 11 hours of professional development were aware of the recommendation that they should receive sustained and intensive professional development in middle level philosophy compared to 31% of teachers with 10 or less hours. Furthermore 27% of teachers with over 11 hours of professional development practiced the recommendation compared to 10% of teachers with 10 or less hours. This provides more evidence that the more hours of professional development teachers receive, the more likely they are to be aware of and practice middle level recommendations.

Table 66

*Middle Level Teachers in Our School Receive Sustained and Intensive Professional Development in Middle Level Philosophy (i.e., study groups, joint lesson planning, peer coaching, and collaboratively reviewing student work) (Test 28 Awareness & Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Hours of PD | 1 | 2 | 3 | 4 | 5 |
| 0-10 | [11]14.7% | [17]22.7% | [23]30.7% | [17]22.7% | [7]9.3% |
| 11+ | [1]2.3% | [7]15.9% | [8]18.2% | [16]36.4% | [12]27.3% |

Value = 13.977
Degree of Freedom = 4
Significance = .007

| | Level of Practice | | | | |
|---|---|---|---|---|---|
| Hours of PD | 1 | 2 | 3 | 4 | 5 |
| 0-10 | [23]31.1% | [22]29.7% | [21]28.4% | [7]9.5% | [1]1.4% |
| 11+ | [5]11.1% | [16]35.6% | [12]26.7% | [7]15.6% | [5]11.1% |

Value = 11.240
Degree of Freedom = 4
Significance = .024

Table 67 displays data that shows the two genders differed significantly in their awareness of sustained and intensive professional development in middle level philosophy. It appears that males were more aware of the need for intensive professional development with 11% compared to 3% of females.

Table 67

*Middle Level Teachers in Our School Receive Sustained and Intensive Professional Development in Middle Level Philosophy (i.e., study groups, joint lesson planning, peer coaching, and collaboratively reviewing student work) (Test 28 Practice)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Gender | 1 | 2 | 3 | 4 | 5 |
| Male | [6]16.2% | [17]45.9% | [8]21.6% | [2]5.4% | [4]10.8% |
| Female | [22]26.5% | [21]25.3% | [26]31.3% | [12]14.5% | [2]2.4% |

Value = 10.866
Degree of Freedom = 4
Significance = .028

Table 68 shows teachers with less middle level years of teaching differed significantly in the awareness of hiring teachers who have a strong commitment to work with middle level students. It appears that 78% of faculty who have 10 or less years of middle level experience were more aware compared with 44% of faculty with over 11 years of middle level experience.

Table 68

*One Criterion for Hiring Middle Level Teachers in Our School is They Possess a Strong Commitment to Work with Middle Level Students (Test 38 Awareness)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Middle Level Years | 1 | 2 | 3 | 4 | 5 |
| 0-10 | [3]5.6% | [3]5.6% | [6]11.1% | [25]46.3% | [17]31.5% |
| 11+ | [9]17.0% | [4]7.5% | [16]30.2% | [13]24.5% | [11]20.8% |

Value = 12.755
Degree of Freedom = 4
Significance = .013

Table 69 displays results showing that teachers' awareness of hiring teachers who have a strong commitment to work with middle level students differed significantly. It appears that 73% of teachers with 20 or less years of experience were more aware of the hiring criteria of knowing teachers possess a strong commitment to work with students compared to 38% of teachers with 21 or more years of experience.

Table 69

*One Criterion for Hiring Middle Level Teachers in Our School is They Possess a Strong Commitment to Work with Middle Level Students (Test 38 Awareness)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Total Teaching Years | 1 | 2 | 3 | 4 | 5 |
| 1-20 | [8]11.3% | [4]5.6% | [7]9.9% | [31]43.7% | [21]29.6% |
| 21+ | [4]11.1% | [3]8.3% | [15]41.7% | [7]19.4% | [7]19.4% |

Value = 16.903
Degree of Freedom = 4
Significance = .002

Table 70 displays results showing teachers awareness of the importance of understanding that close, trusting relationships create a climate of personal growth differed significantly. It shows that 80% of teachers with 20 or less years of experience were more aware of the recommendation compared to 66% of teachers with 21 or more years of experience.

Total 70

*Teachers Understand that Close, Trusting Relationships with Middle Level Students Creates a Climate for Personal Growth and Intellectual Development (Test 30 Awareness)*

| | Level of Awareness | | | | |
|---|---|---|---|---|---|
| Total Teaching Years | 1 | 2 | 3 | 4 | 5 |
| 1-20 | [1]1.4% | [3]4.2% | [10]14.1% | [19]26.8% | [38]53.5% |
| 21+ | [2]5.6% | [0]0.0% | [10]27.8% | [15]41.7% | [9]25.0% |

Value = 11.477
Degree of Freedom = 4
Significance = .022

**Research Relating to On-Going Training**

This section gives data to help answer Research Question Three of this study which sought to find teachers' perceptions of the on-going training they received to help them be aware of the *Turning Points 2000* recommendations. The bottom line is that you simply cannot get to high academic achievement for every student, or even reasonably expect such high achievement, without high quality pre- and in-service professional education that is integrated into the daily work of middle grades teachers.

To show data related to staff development, the researcher selected all the survey questions that dealt with training or staff development, and then examined the mean scores for the responses of the teachers who participated. The overall mean score for the awareness teachers had on their staff development opportunities was 3.40. This score places the teachers' awareness right in the middle of "Above Average Awareness" and

"Average Awareness" levels as a sample group. The highest rated statements show teachers felt they were trained or had received staff development to teach young adolescents how to integrate the subject matter and promote healthy lifestyles.

The lower rated data indicates staff development relating to more current middle level recommendations as more of a concern for the teachers who took the survey. Teacher responses rate being educated in flexible scheduling and professional development in middle level philosophy lower than the other statements. Levels of awareness in the area of staff development and training are listed in Table 71.

Table 71

*Teachers' Level of Awareness in the Areas of Staff Development*

| Question | Area | Mean Score |
|---|---|---|
| 1 | Middle level certification | 3.51 |
| 7 | Trained to integrate the subject matter | 3.88 |
| 11 | Counselors trained in career guidance | 3.26 |
| 16 | Staff development in adolescent needs | 3.65 |
| 18 | Staff development in decision making skills | 3.05 |
| 19 | Trained to teach young adolescents | 3.68 |
| 28 | Professional development in middle level philosophy | 3.18 |
| 33 | Educated in developing flexible/block schedule | 2.94 |
| 36 | Training to promote healthy life styles | 3.44 |
| Total | | 3.40 |

Although teachers may read or gain awareness of middle level recommendations in many ways, the need to embed professional development in the daily lives of teachers raises an issue that educators consistently identify as one of the most critical factors determining the quality of professional development activities: time.

When asked to respond to the same nine statements but look at the actual practice of them in their schools, teachers rated them lower than the awareness ratings. Now the perspective of what do you actually do on the job at your school threw a different light on the ratings. The data shows schools are not placing emphasis on continuous on-going staff development with the sample group.

In relation to practice, the overall mean score for staff development opportunities was 2.90. This score places the teachers' practice just below the "Average Awareness" level as a sample group. The highest rated statements show teachers felt they were in some way certified to teach young adolescents and their needs, have trained guidance counselors, and know how to integrate the subject matter. Again the data seems to indicate that professional development for the teachers who took the survey was rated lower in the areas of being educated in flexible scheduling, and practicing middle level philosophy. Levels of practice in the area of staff development are listed in Table 72.

Table 72

*Teachers' Level of Practice in the Areas of Staff Development*

| Question | Area | Mean Score |
|---|---|---|
| 1 | Middle level certification | 3.61 |
| 7 | Trained to integrate the subject matter | 3.23 |
| 11 | Counselors trained in career guidance | 3.26 |
| 16 | Staff development in adolescent needs | 2.91 |
| 18 | Staff development in decision making skills | 2.45 |
| 19 | Trained to teach young adolescents | 3.16 |
| 28 | Professional development in middle level philosophy | 2.43 |
| 33 | Educated in developing flexible/block schedule | 2.06 |
| 36 | Training to promote healthy life styles | 3.03 |
| Total | | 2.90 |

This section gives data to help answer Research Question Four of this study dealing with teachers' perceptions of how this on-going training is related to the practice and implementation of *Turning Points 2000* recommendations.

Analyzing past in-service training and its impact on implementation of the *Turning Points 2000* recommendations was done by using a Likert scale to rank in-service training from the past two years. Respondents were asked to identify which of the 12 listed middle level concepts they had received in-service training in their school district over the past 2 years. They were instructed to circle N/A if the topic was not applicable or if they had received no training. If they had training, they were asked to rate the quality of that training on a Likert scale of 1-5, 1 being "Very Poor" and 5 being "Very Good." One hundred ten teachers participated in answering this section; however, 11 respondents did not answer this section at all.

In reviewing the mean scores of the 12 concepts the data showed that all scores were below the less than average rating. Five concepts that dealt with proven instructional strategies had mean scores that were between the "Less than Average" and "Very Poor" ratings. Teachers' responses indicated that they have received training in the areas of best practices such as integrating the curriculum, use of teaming during common planning time, and exploratory curriculum in lesson plans. Of the concepts, teachers also highly rated the need to receive health and safety training.

The seven other listed concepts had mean scores below the "Very Poor" rating on the Likert scale. These concepts tend to be viewed as non-traditional in the normal school setting. The schools sampled seem to have limited training in the areas that get teachers involved in out of school endeavors such as community partnerships and service

learning. In addition, lower scores were received in more current classroom practices like peer tutoring and the teacher as an advisor. The concept rated the lowest was middle level certification which is to be expected since Pennsylvania does not have middle level certification.

Overall, the combination of all middle level concepts yielded a mean score of .96, which indicates the training of Midwestern middle level teachers is "very poor" in the *Turning Points 2000* recommendations and other middle level concepts promoted by advocates. The comparison of mean scores for each topic is shown in Table 73.

Table 73

*Teachers' Level of In-Service Training in Middle Level Practices Within the Past Two Years (With No Training Option)*

| Question | Area | Mean Score |
|---|---|---|
| 51 | Advisor-advisee | 0.65 |
| 52 | Teaming-common planning time | 1.31 |
| 53 | Middle level certification | 0.46 |
| 54 | Integration (curriculum) | 1.93 |
| 55 | School-health services | 1.42 |
| 56 | Heterogeneous grouping | 1.17 |
| 57 | Home/school/community partnership | 0.84 |
| 58 | Flexible scheduling | 0.49 |
| 59 | Building governance committee | 0.59 |
| 60 | Youth service | 0.71 |
| 61 | Exploratory curriculum | 1.07 |
| 62 | Peer tutoring | 0.88 |
| Total | | 0.96 |

Allowing the score of "N/A or no training" affected the final mean score, and did not statistically allow a true indication of the ranking of the teachers who did receive training. Therefore, the following information represents the true rating of training received by taking out the "N/A or no training" responses and allowing only scores of one to five on the Likert scale.

In reviewing the mean scores now, of the 12 concepts the data showed that all scores were between the "Average" and "Very Poor" range. Nine concepts had mean scores that were between the "Average" and "Less than Average" rating. Again, teachers' responses indicated that they had received training in the areas of best practices such as integrating the curriculum, use of teaming during common planning time, and health service. The difference from the previous listing of mean scores is that Advisor-Advisee training and flexible scheduling came toward the top of the list and exploratory curriculum and peer tutoring moved down. This would indicate that teachers, who are receiving training, work at schools that emphasize middle level concepts already and are just adding more in-depth training to teachers' skills.

The three other listed concepts had mean scores below the "Less than Average" rating on the Likert scale. Two of these concepts seemed to require less training since they could be concepts teachers have had from pre-service training. The schools sampled seem to have had training in the areas that involve teachers in out of school endeavors such as community partnerships and service learning since they moved up in the ratings. The concept rated the lowest was service learning which could indicate a true need for training is being acknowledged by the score.

Overall, the combination of all middle level concepts yielded a mean score of 2.86, which indicates the teachers who acknowledged receiving training rated their in-service training between "Average" and "Less than Average" in the *Turning Points 2000* recommendations and other middle level concepts promoted by advocates.

The comparison of mean scores for each topic is shown in Table 74.

Table 74

*Teachers' Level of In-Service Training in Middle Level Practices Within the Past Two Years (Without Any Training Option)*

| Question | Area | Mean Score |
|---|---|---|
| 51 | Advisor-advisee | 3.00 |
| 52 | Teaming-common planning time | 2.88 |
| 53 | Middle level certification | 2.55 |
| 54 | Integration (curriculum) | 3.07 |
| 55 | School-health services | 3.06 |
| 56 | Heterogeneous grouping | 2.82 |
| 57 | Home/school/community partnership | 2.71 |
| 58 | Flexible scheduling | 2.70 |
| 59 | Building governance committee | 2.71 |
| 60 | Youth service | 1.37 |
| 61 | Exploratory curriculum | 1.40 |
| 62 | Peer tutoring | 1.37 |
| Total | | 2.86 |

## Summary

In this chapter the researcher investigated middle school teacher perceptions toward their awareness, and practices in the implementation of a comprehensive school reform called the *Turning Points 2000* recommendations using the MLAPQ. Secondly, data was presented that examined possible factors that influence middle school teachers' attitudes and practices toward implementation of the *Turning Points 2000*

recommendations. The last covered was measuring if school teachers are using effective instructional methods that are directly related to the *Turning Points 2000* recommendations through current staff development opportunities.

The Chi-square testing in the SPSS software was used to produce a test of independence to compare personal and school characteristics with 39 variables involving *Turning Points 2000* recommendations. The testing involved using all 39 statements from the survey that ask about *Turning Points 2000* recommendations against 7 independent variables which included: age; gender; total years of teaching; middle level years of experience; hours of middle level professional development; school enrollment; and, school grade configuration. The test results produced significance in the *Turning Points 2000* recommendation areas of curriculum, instruction, assessment, teachers as experts, and school climate.

# CHAPTER V

## STATEMENT OF THE PROBLEM

This study investigated middle school teacher perceptions toward, and practices in the implementation of, a comprehensive school reform called the *Turning Points 2000* recommendations. The second purpose of this study was to examine possible factors that influence middle school teachers' perceptions and practices toward implementation of the *Turning Points 2000* recommendations. The last intent was to measure if middle school teachers in the Midwestern I. U. 4 are using effective instructional methods that are directly related to the *Turning Points 2000* recommendations.

*Turning Points 2000* was developed to bridge the gap between academic research and classroom practice. There are few channels, however, for this information to reach middle grades educators. This research sought to find what barriers exist that limits the implementation of recommendations from the teachers' perspective.

Some major problems that exist in implementing the necessary practices to service the physical, emotional, intellectual, and social needs of middle level students are first that teachers are not adequately prepared to instruct students using best practices. Teacher quality has become a national concern with the enforcement of the *No Child Left Behind Act of 2001* (NCLB). Staffing all classrooms with highly qualified teachers, therefore, is a critical national concern. Secondly, teachers are often placed at the middle level without preparation to instruct this student population. Thirdly, as a result it becomes easy to see why a school's implementation of a Comprehensive School Reform (CSR) model may fall short of the design anticipated by model developers. Fourthly, schools are not structurally or procedurally set up to implement the recommendations

necessary to address student needs. Lastly, key leadership to help teachers implement the recommendations is lacking in some cases. With this in mind this study produced research data to answer these research questions.

## Research Questions

1. To what extent do middle level teachers report being aware of the principles of *Turning Points 2000* recommendations?
2. To what extent do middle level teachers report practicing the implementation of *Turning Points 2000* recommendations?
3. What are teachers' perceptions of the on-going training they receive to help them be aware of the *Turning Points 2000* recommendations?
4. What are teachers' perceptions of how this on-going training is related to the practice and implementation of the *Turning Points 2000 recommendations?*
5. How do individual characteristics, including age, gender, and educational experience, influence teacher awareness and practice of the implementation of *Turning Points 2000* recommendations?
6. How do the school characteristics, including enrollment and setting, influence teacher awareness and practice of the implementation of *Turning Points 2000* recommendations?

## Significance of the Study

This study becomes important because it incorporated components of recommendations from past studies to produce newer and more relevant data. Viewing implementation through a different lens could help to inform the discussion and provide a more accurate assessment of the status of the *Turning Points 2000* implementation.

Faulkner (2003) pulled from dissertations before his study that recommended researchers examine more than six-eight grade configurations and not just knowledge but practice of recommendations. Additional recommendations from previous studies stressed examining the effects of teaching experience and the professional experience of teachers rather than principals. After Faulkner completed his research he recommended that other studies be conducted to determine the degree of implementation of *Turning Points* (1989) recommendations and whether a relationship exists between enrollment and implementation of *Turning Points* (1989) recommendations in schools outside Ohio. He also suggested a study be done in junior high schools not just middle level schools to give a different perspective to the study. Lastly he recommended looking at whether professional development was being provided to enhance the implementation.

This researcher chose to further explore the recommendations of previous researchers relating to the *Turning Points* and *Turning Points 2000* recommendations with a different population of participants. Very few studies have been done in Pennsylvania concerning the implementation of *Turning Points 2000*. Of the studies done, they have concentrated on the original *Turning Points* of 1989 and teacher perceptions toward those recommendations (Steward, 2000) and not *Turning Points 2000* recommendations. As Pennsylvania proposes changes to teacher education and licensure at the middle level, the need for implementation data is essential, as policymakers and universities make decisions concerning middle level teacher preparation. This study provided implementation data that can be used by decision makers and future researchers as they assess middle level reform efforts and propose future direction for middle schools in Pennsylvania and across the nation.

This study produced data that showed whether the teachers surveyed are aware and practicing recommendations from *Turning Points 2000* in relation to curriculum, instruction, and student assessment. It showed that changes in school organizational structures are necessary but not sufficient for major improvement in academic achievement and must be accompanied by proven strategies in teaching and learning.

The most significant challenge to middle schools as they work to put NCLB mandates into practice is the implementation of teacher quality standards. In *Turning Points 2000*, Jackson and Davis (2000) corroborate that tenet, stating that "increasing middle grades teachers' knowledge and skills before and during their tenure is critical to the success of middle grades education" (p. 94).

This study could be cited and used by school boards, administrators, teachers, and parents in Midwestern Pennsylvania to show the need for staff development that will help with the implementation of middle level strategies that will benefit students.

## Major Findings

The data in Chapter IV were analyzed using descriptive statistics and Chi-square test. Based on these data, five major findings were discovered in this study. First, when taking a quick look at all of the awareness statements together, it would seem that teachers perceive themselves as having an above average awareness of the *Turning Point 2000* recommendations. Second, when assessing the scores of all of the practice statements together, it would seem that teachers perceive themselves as having an average level of practice of the *Turning Point 2000* recommendations. There are also significant differences when looking at teacher perceptions of the level of awareness and practice relating to some of *Turning Points 2000* recommendations in regard to the

individual and institutional variables of the descriptive statistics. Teachers reported that they have received some staff development relating to some of the *Turning Points 2000* recommendations. Specifically, they report more awareness and practice of those recommendations that relate to effective instruction and student teacher relationships, which are areas of which they have more control. There was less staff development that addressed the specific recommendations relating to middle level philosophies of school-wide organization and decision-making. Research (McEwin & Greene, 2011) indicates that all *Turning Points 2000* recommendations need to be addressed within the school for the most effective implementation to occur and this study shows that in the sample population it was not occurring.

**Research Findings from the Descriptive Statistics**

There were key findings that emerged from the data in the descriptive section of the survey. The data in the descriptive statistics revealed the teachers participating in this study were mostly female, over 50 years old, with 1-10 years of middle level experience, and possesses a master's degree with secondary certification. An equal number of respondents reported having K-12 certification. This would indicate that these teachers instruct special subjects such as art, music, physical education, technology, library, or special education. The school setting data showed the enrollment category with the highest percentage was 1,000-1,499 and the grade configuration was that of seventh and eighth grade students. When asked about middle level training within the past two years, most teachers responded that the training consisted of one-five hours, and that they had not completed college coursework specializing in middle level teaching. It is also

significant to note that close to 90% of the teachers do not belong to middle level professional organizations.

The first key finding relates to the experience of the teacher. Thirty-five percent of teachers report having over 20 years of teaching experience, but only 21% report having over 20 years of experience at the middle level. Additionally, 38% of the teachers report having less than 10 years of total experience while 52% of teachers report having less than 10 years of experience at the middle level. This comparison would indicate that 14% of teachers have moved to the middle level within the last 10 years. As noted in Chapter II, (Fixen, 2011; Fullan, 2006; Hall & Hord, 2010) research shows that the stages within the change process can greatly influence the level of implementation of CSR. This researcher suggests, based on the descriptive data, those teachers with more overall experience but only recent years in the middle level may take longer to move through those stages of change. "Experienced teachers have attained expertise through real-life experiences, classroom practice, and time" (Stronge, 2002). Even though a teacher may have numerous years teaching, that alone does not make him/her effective at the middle level. The majority of middle level teachers currently teaching young adolescents have not received the specialized professional middle level preparation needed to be effective (McEwin, Dickinson, & Jenkins, 2003).

Secondly, most teachers have obtained their master's degree but report not ever having had a college course specializing in middle level teaching. As such they have certification in the secondary level or K-12 without a middle level emphasis. This researcher concludes that there is limited pre-service and in-service teacher training that targets middle level philosophy.

It must be acknowledged that 58% of the teachers responded that their school consisted of grades seven-eight. This finding had a major effect on data because it is important to note that of the schools surveyed, one school had the largest number of respondents and is comprised of just grades seven-eight with a junior high school title. With 41% of the data coming from this school, the teachers' perceptions have a major influence on the final statistics. This may be considered a limitation of this research.

The data also indicated that 40% of the respondents belong to schools with an enrollment of 1,000-1,499. In the book *Turning Points 2000,* the authors advocate for smaller schools with less than 600 students. The larger school enrollment may affect the implementation of the recommendations within *Turning Points 2000.*

Middle grades educators can now choose from among several promising "whole school change" models that simultaneously push the academic rigor and personal nurture called for in *Turning Points 2000* (Jackson & Davis, 2000). Through the 10 years that research was done to write the book *Turning Points 2000,* numerous studies were sighted that supported that membership in middle level associations greatly enhances the best practices associated with middle level instruction. Yet another key finding that arose from this study was that 89% of the respondents do not belong to any middle level organizations.

## Research Findings Relating to Awareness and Practice

The purpose of this study was to investigate middle level teachers' awareness of, and practices in the implementation of, *Turning Points 2000* recommendations. This section serves to provide a discussion of research findings relevant to research questions

one, two, five, and six which all deal with investigating the levels of awareness and practice of Turning Points 2000 recommendations.

**Research Question One**

1. To what extent do middle level teachers report being aware of the principles of *Turning Points 2000* recommendations?

**Awareness**. When taking a quick look at all of the statements relative to teacher awareness, it would seem that teachers perceive themselves as possessing above average awareness of the *Turning Point 2000* recommendations. The total mean score for all awareness scores was reported at 3.52 indicating an above average awareness range. The data shows of all the middle level concepts presented, teachers in this study have a higher awareness of the need to emphasize thinking skills, problem solving activities, and helping to determine how subject matter is taught. Teachers also report a high level of awareness in regards to the importance of a close, trusting relationship with students that will create an environment that is emotionally and physically safe. Lastly, teachers have a high level of awareness that a trusting relationship will bring about a climate for personal growth and intellectual development. These recommendations are consistent with best practices across all levels of instruction and not necessarily specific to middle level instruction.

The data also indicates teachers in this study are not as familiar with ways to organize students into houses, "school within a school" or the development of flexible schedules. Respondents also report having limited awareness of the recommendations relating to school governance and parent/teacher involvement in decision-making for the school. Overall, the teachers seem to be more aware of recommendations that they can

control in their classrooms with their students rather than those that affect the entire school structure (Hall & Hord, 2010).

**Research Question Two**

2. To what extent do middle level teachers report practicing the implementation of *Turning Points 2000* recommendations?

**Practice**. When reviewing the data presented in Chapter IV, the total mean score for the practice section of the survey was reported at 3.07, indicating an average level of practice by the teachers in the study. The teachers indicate that they have a higher level of practice of the *Turning Points 2000* recommendations focused on the caring of their students and providing the highest quality of instructional strategies.

The results of the practice findings are very similar to the awareness findings in that teachers seem to practice most often that which they know best. The practice of creating an environment that is emotionally and physically safe moves to the forefront based on the mean scores. Whereas, the promotion of thinking skills had the highest mean score in awareness. It appears that the first priority in implementation focuses on creating an environment where learning can take place. The data then shows a higher level of practice with the middle school concepts of understanding the need to emphasize thinking skills, problem solving activities, and determining how subject matter is taught. Another category that surfaces into one of highest levels of teacher practice is that of promoting healthy behavior by modeling healthy practices. This was not highly rated in the awareness category. These findings align with that of McEwin and Greene (2011) who found schools nationally were practicing the recommendations to a high level.

The teachers report implementation of qualities relating to the care, health, and safety of students as well as their need to develop lessons and pace instruction based on what they know about their students. These qualities would be commonly found across all levels of education and would not necessarily indicate practice of recommendations specific to middle level students.

When reviewing the data of the lowest scoring statements relating to practice, it indicates that teachers have a low level of implementation of the recommendations involving the organization of smaller units such as houses or schools-within-schools. The survey also indicated a low level of implementation with the use of portfolio assessments or lessons developed for a flexible schedule. The teachers report that teachers or parents in their school have little involvement in the decision-making and governance of the school. These findings are in agreement with findings by RAND (2004) where the overall findings reported alarmingly low levels of implementation of recommendations.

**Research Questions Five and Six**

5. How do individual characteristics, including age, gender, and educational experience, influence teacher awareness and practice of the implementation of *Turning Points 2000* recommendations?

6. How do the school characteristics, including enrollment and setting, middle level experience, influence teacher awareness and practice of the implementation of *Turning Points 2000* recommendations?

**Teacher and School Characteristics**

Of the two types of comparison available with Chi-square, a test of independence was used to compare individual and school characteristics which included: age; gender; total years of teaching; middle level years of experience; hours of middle level professional development; school enrollment; and, school grade configuration with 39 variables involving *Turning Points 2000* recommendations. A test of independence assesses whether paired observations on two variables, expressed in a contingency table, are independent of each other.

Since the survey asked the respondents to rate the 39 statements on both awareness and practice, teachers each had two responses for each statement. Therefore, the researcher ran the Chi-squared test with SPSS software and analyzed 546 statements to which 61 statements produced levels of significance. The variable that produced the most tests of significance was the age of the teachers who responded to the survey.

**Age as a Variable**

The age variable when tested against the 39 statements revealed 12 tests of significance in either the awareness or practice. For the purpose of analyzing data using Chi-squared, the variable of age was divided into two independent categories of 21-40 and 41+ years of age. Thirty-nine tables were produced to illustrate the percentages for the responses to awareness and practice for each statement on the MLAPQ.

Each of the 39 statements included in the MLAPQ were derived from the 7 recommendations developed by the authors of the book *Turning Points 2000*. Of the 39 statements 12 were found to have a level of significance. Tables for the 12 areas of significance were developed and reviewed in Chapter IV. Two tests showed that older

teachers implement thinking and problem solving skills in their classroom instruction more so than the younger teachers.

Of the statements with significance, 10 showed data that the younger teachers were more aware and/or implemented more of the recommendations than the older aged teachers. Younger teachers seem more aware of the recommendations that have been advocated more in the last ten years by middle level organizations. These relate to community involvement in student learning and non-traditional learning opportunities which encourage demonstration of student understanding.

As the researcher examined this data, a major finding appeared that relates back to the review of literature. It would seem that the older teachers are in the beginning stages of concern within the change process as pointed out by Hall and Hord (2010). Since younger teachers have been trained more recently with middle level concepts and theory they have not had to progress through the stages of change as much as the older teachers. One must consider that the data could indicate that teachers are at the beginning levels of concern in the Hall and Hord (2010) change process. Teachers are at the awareness and informational levels where they are knowledgeable of a recommendation but have not yet reached the task level due to lack of training. In the Fullan change process, the teachers' age factors into whether they are still personalizing the change or moving into the precision stage. Teachers have changed to develop a good climate for the school through core recommendations but are not at the level for a cultural change. This finding is in agreement with studies by Walters (2007) and Lyle (2010) who pointed out that there is a lack of high level of reform knowledge and implementation due to change barriers.

## Significant Data for Other Variables

The variables that emerged as significant factors in responses to the statements in the MLAPQ are: enrollment; grade configuration of the school; total years of experience; years of middle level experience; and, hours of middle level professional development in the past two years. Smaller school size with enrollment of less than 700 students surfaced as significant in four statements relating to shared instruction or teaming. It was also a factor when looking at specialized training in middle level concepts. Schools with smaller enrollment reported a higher level of practice than larger school. This relates back to literature reviewed in Chapter II (Merenbloom, 2007) that stated the importance of teachers teaming to share the development of curriculum, instruction, and assessment specific to the needs of their middle level students.

Teachers with more than 20 total years of teaching experience were more aware of two middle level recommendations than those teachers with less experience. This is evident with their awareness of developing close and trusting relationships with their students and sharing instructional responsibilities with their colleagues.

Another significant variable was the number of middle level hours of professional development within the last two years. It would stand to reason that if teachers received recent professional development relating to middle level practices that they would rate awareness and practice higher in related statements.

Schools with only grades seven and eight were least aware of sharing instruction and assessment than other schools with middle level configurations ranging from grades five-eight. Therefore this indicates that the grade configuration significantly affects the level of awareness of some middle level recommendations (NFTAMGR, 2008).

The number of years spent teaching at the middle level were significant variables for two of the MLAPQ statements. Teachers with less than 10 years of middle level experience were more aware of the need to hire teachers with a strong commitment to middle level philosophy. On the other hand, teachers with more than 10 years of middle level experience were more aware of the importance of receiving middle level staff development. The researcher developed a matrix to visually display where these significant tests occurred in relation to the 39 statements and the 7 independent variables.

Although the data indicates in a previous section that teachers have an above average awareness of the *Turning Points 2000* recommendations this section seems to show data that teachers are not fully implementing these practices. The finding that emerges suggests that it is not the lack of knowledge but the failure to fully implement the suggested recommendations that can benefit adolescents. As Lounsbury (2009) noted, "The true middle school concept has not been practiced and found wanting; rather, it has been found difficult to implement fully, and is practiced, then, only partially" (p. 31).

As noted in Chapter II in the Literature Review, Mertens, Flowers, and Mulhall (2005) and Slavin, Daniels, and Madden (2005), show the middle school reform recommendations are effective in addressing the needs of adolescents. The data in this survey indicates that teachers understand the importance of developmentally responsive programs and practices. The concern arises as to whether teachers are ready to join with other stakeholders to fully implement and maintain these middle level practices. In Fixen's stages of implementation, the teachers surveyed seem to be in the exploration and adoption phase bordering on the program installation phase (Fixsen, et. al, 2010).

Through the data gained from Tables 16- 55 in Chapter IV it is noted that individual and school characteristics do influence the implementation of the *Turning Points 2000* recommendations. A finding that should be noted is that of the significant statements relating to research questions five and six, half of them were related to variables of staff development or years of experience. These variables are further explored in the next section which deals with on-going training.

## Research Findings Relating to On-Going Training

### Research Questions Three and Four

3. What are teachers' perceptions of the on-going training they receive to help them be aware of the *Turning Points 2000* recommendations?

4. What are teachers' perceptions of how this on-going training is related to the practice and implementation of the *Turning Points 2000* recommendations?

The data provided in this section helped to answer Research Question Three which sought to find the teachers' perceptions of on-going training they receive relating *Turning Points 2000* recommendations. To obtain data related to staff development, the researcher selected the nine survey statements that dealt with training or staff development, and then examined the mean scores from each. Tables 71 and 72 show the awareness and practice mean scores relating to staff development. The average of the mean scores for awareness of staff development was 3.40. In relation to practice, the average mean score for staff development opportunities was 2.90. This shows that teachers are slightly more aware of middle level recommendations than what they practice.

The mean scores reveal that the teachers feel prepared through on-going training to teach at this level and understand the needs of their students. This is reflected in the higher mean scores for awareness of training to teach adolescents and understand their needs. The highest mean score in practice relates to certification which shows that teachers feel qualified to teach middle level students. This is odd due to the fact that Pennsylvania did not have certification in the middle level at the time that this survey was conducted.

Teachers are less aware of training related to middle level concepts of flexible/block scheduling and decision making skills. Likewise, they rate their practice lowest with below average mean scores for the same statement relating to flexible/block schedules. In regards to middle level philosophy and on-going training, teachers have an above average level of awareness and below average level of practice. Whereas, training related to career guidance is consistently rated at an average level for both awareness and practice with the exact same mean score of 3.26.

Based on the above mentioned mean scores, on-going training appears to target broader audiences within a school district rather than focusing specifically on the needs of the middle level. Being able to practice the recommendations becomes the key to lasting implementation of the strategy. Teachers need "at-the-elbow" assistance in implementing many new instructional strategies (Jackson & Davis, 2000).

This researcher's findings are in direct relationship to findings by Mertens, Flowers, and Mulhall (2005) who found that there was a lack of staff development specifically designed for middle level educators. The findings are in contradiction of

Faulkner (2003) who had findings that supported a high level of staff development was being provided with the people who responded to his survey.

Although high-quality pre-service preparation is important, ongoing professional development is equally essential to help teachers already on the job build a sound foundation of instructional skills (Jackson & Davis, 2000). Professional development programs must be designed to directly support student and teacher learning. Effective, sustained professional development is an important factor in improving teacher skills and student achievement, and should be a priority.

Tables 74 and 75 show the teachers' level of in-service training in middle level practices within the past two years. Factoring in that there may be substantial training provided, this section of the survey goes on to establish the quality of the training. In order to assess areas of staff development for all current middle level recommendations, 12 middle level concepts were used to survey teachers. Since it would not be fair to ask teachers to rank the quality of a concept of which they have not been trained or may not use, a response of N/A was provided as a choice. If they had participated in training, they were given the opportunity to rate that training on a Likert scale of 1-5.

Although staff development is a key component to implementing recommendations, 11 of the 121 survey participants did not answer this section at all. On the other hand, 110 participants did answer this section, and provided data on their perceptions of middle level training in Midwestern I. U. 4. The results provided strong support to the researcher's hypothesis that implementation of *Turning Points 2000* recommendations was not taking place due to the lack of adequate teacher staff development.

When reviewing all of the 111 responses in regard to the quality of the staff development, the total mean score is .96 which is rated very poor based on the survey response options. With the option of N/A representing no training at all and having a value of zero, this researcher suspected that the mean score was skewed to the negative by those respondents that had no training. Given that one cannot rate the quality of training that was not received, the mean scores were recalculated without the N/A responses. This produced a mean score of 2.86 which shows the quality of the training to be perceived as average by the teachers who participated. With this type of discrepancy between mean scores, it is evident that many respondents have not received training in middle level practices within the last two years.

Of those who received recent training, the highest quality was found in the areas of curriculum integration, school health services, and advisor-advisee programs respectively. All of which were rated average by the participants. The trainings receiving a very poor quality rating were youth services, peer tutoring, and exploratory curriculum. Overall it appears that high quality staff development targeting middle level practices is lacking for schools in Midwestern I.U.4 middle level schools. If schools are not providing this type of professional development it is unlikely that they will implement key middle level concepts. As stated by Jackson and Davis (2000), it is blatantly hypocritical to expect teachers to know effective instruction, given the weakness of most teacher preparatory programs and the lack of ongoing professional development opportunities.

This is in direct contradiction to the study by Johns (2001) who reported a high level of middle level staff development occurring in the sample audience he surveyed

thus the *Turning Point* recommendations were being fully implemented. He reported 97% of the audience surveyed involved in middle level staff development and 50% had 31 or more hours of middle level coursework. The difference can be attributed to the fact that Johns surveyed only principals who then used their leadership skills to help teachers implement the recommendations.

## Limitations of Study

Every school improvement plan or reform effort has barriers to its implementation that need to be identified, addressed, and overcome (e.g., lack of training, lack of time to plan, lack of resources, and lack of school or district support). Sometimes being able to identify the barriers before the change process begins can be beneficial for saving time and lowering staff frustration levels. So we will now review the limitations to this study as stated in Chapter I and reiterated in more detail.

The data for this study were collected entirely from eight school districts in Midwestern I. U. 4 of Pennsylvania; therefore, the data represents the perspective of Midwestern I. U. 4 middle school teachers only. Data were not collected from others who have a vested interest in the success of middle school reform efforts in Pennsylvania (e.g., administrators, parents, students, community members). The teachers' perspectives may not reflect the opinion of other members of the middle school communities across Pennsylvania or America. Non-public, community, non-chartered, and special population schools were excluded from consideration due to the nature and special needs of their populations and specialized focus of their academic programs.

The MLAPQ was developed by the author of this study and thus there are no other studies that used this instrument. The questionnaire only sought the awareness and

practice of recommendations not the quality or benefits to the learning community. There were very few survey questions that asked about how teachers respond to change and how the change process occurs in their schools.

A lower than expected response to the MLAPQ from the pre-determined sample posed a potential limitation. It was hoped that all 14 districts would participate but only 8 accepted the invitation. With just over half of the districts responding to the MLAPQ, it was difficult to determine if the views expressed by the sample were representative of the population. Results of the survey may be skewed because 41% of the responses came from teachers in a large junior high school setting. Therefore due to the inherent natural of a junior high philosophy one may presume that there would be a lower level of awareness and practice of middle level recommendations.

Teachers may feel that the results will reflect their abilities as a teacher or the practices of their school. Therefore, they may have inflated their responses to awareness and practices of the recommendations.

## Recommendations

The results of this study will provide middle grades practitioners, scholars, advocates, and policy makers with information that links the middle school concepts recommended in *Turning Points 2000* to improved student academic development. This researcher hopes that future researchers will do follow-up studies to help identify if student achievement has improved. As a result of the data collected in this study, the researcher has identified some recommendations as key stakeholders and for future studies.

First, school districts need to take a systematic approach to implementing comprehensive school reform. It seems that the teachers are supplied with few opportunities to be engaged in ongoing, focused discussion about topics specific to middle level practices. Teachers have to be willing to assess and improve their own practice. Schools should be structured so that teachers can work collaboratively with colleagues and other stakeholders to promote a variety of learning opportunities including non-traditional initiatives.

A school district needs to develop criteria for hiring that addresses key middle level concepts so prospective teachers can demonstrate mastery of middle level practices. Hiring of new teachers at the middle level should also require evidence of middle level coursework from each candidate's college or university or have middle level certification. States that have middle level certification have had studies that show the middle level concepts are implemented at a higher level which benefits adolescents. These requirements will help the district to show they are hiring highly qualified teachers and meeting NCLB mandates.

It is important to note that these mandates may also place a limitation on the ability of school districts to place a major stress on true middle level practices due to the pressure to raise test scores. The influences of societal priorities places more time and focus on math and science and competition with other countries to have the highest test scores. This may also be a good area for future studies to explore on how much of an influence the NCLB mandates effect or limit the full implementation of Comprehensive School Reforms.

A serious effort must be made by school boards and administration to provide the necessary training and experience needed to develop curriculum, assessments, and instructional activities that are sufficiently rigorous to promote effective student learning. An emphasis needs to be put on staff development that fosters implementation of best practices relating to middle level education of adolescent students. School districts must hire highly trained and qualified administrators who possess the leadership skills to successfully implement middle level philosophy in a school. The need to embed professional development in the daily lives of teachers is a key requirement. Finding ways of availing time for teachers to do this is a must. To learn what they need to know and to change their roles and practices, teachers need time and opportunities to collaborate and concentrate on instruction.

Future studies should include examination of all middle level schools not just public schools. These studies should included junior highs, non-public schools, private schools, and other special needs schools. Examining implementation in a variety of contexts would provide a more comprehensive assessment of the status of middle school reform in Pennsylvania. Opening up the study to more than public schools would make the results more meaningful and conclusive. Future studies should strive to address the sampling limitations from this study to insure the sample is representative of the entire population. These studies should target the overall quality of the implementation in middle level schools to see why they are successful.

This study began to address the need for additional data sources by surveying teachers for both their awareness and practice of middle level recommendations. Future studies should include data from other stakeholders in the reform process (students,

parents, community members, business leaders) and qualitative data such as observations and interviews. This additional information would enhance the ability of future studies to measure awareness and practice of recommendations as well as implementation levels.

Lastly, after addressing the stated limitations, future studies should duplicate this study in other regions of Pennsylvania and other states to perfect the means by which overall implementation is assessed. In addition, duplication would permit comparative analysis to determine which states or regions are implementing model practices to a greater degree, and if so, how and why.

## Summary and Conclusion

This study investigated middle school teacher perceptions and practices in the implementation of *Turning Points 2000* recommendations. The findings helped to shed light on possible factors that influence middle school teachers' practices that hinder the implementation of these recommendations. Lastly are teachers using effective instructional methods that are directly related to the *Turning Points 2000* recommendations? Findings from this quantitative study suggest there are five overarching categories when considering the research on and implementation of these recommendations.

First, the data shows that based on years of experience at the middle level and the teachers' being more comfortable with traditional teaching strategies that staffing of schools is a concern. Teachers not trained in more current reform methods became a barrier to the awareness and practice of key middle level recommendations. The practice of employing teachers or transferring them from another level, who seem from the data to lack specific professional preparation to teach adolescents, creates another barrier to

effective implementation. All too often middle level classrooms are staffed with teachers who were prepared to teach students at other developmental stages and levels of schooling.

Second, the data points out the lack of middle level course work being taken by a majority of the teachers surveyed. Middle level teachers do not have the certification or pre-service training at higher educational institutions to teach the students who have unique developmental needs at the middle level. On-going professional development for teachers entering the middle level needs to occur to improve the subject area expertise and the pedagogical skills.

Third, through the review of mean scores it became evident that teachers were aware and practiced *Turning Points* recommendations to an average level. The study did point out several promising practices that did address both academic achievement and the developmental needs of young adolescents but all recommendations together were not fully implemented. If fully implemented, these recommendations have been proven to propel schools toward higher levels of achievement that are the goals of several national initiatives like NCLB, *This We Believe, Schools to Watch*.

Fourth, through the testing involving individual and institutional characteristics the findings indicate that teachers seem to be more aware and practice those recommendations that they feel deal more with the basic needs of students. An area concerning the practice of creating an environment that is emotional and physically safe seems to be a skill possessed by most all teachers young and old. The teachers seem to be more aware of recommendations that they can control in their classrooms with their students rather than those that affect the entire school structure. Teachers have changed

to develop a good climate for the school through core recommendations but are not at the level for a cultural change to institute non-traditional reform strategies.

Based on this research, schools should continue to strive to establish the cultures to fully implement the components of the middle level philosophy as proposed in *Turning Points 2000*. In order for this to occur, special attention should be given to several components in particular: the organization of smaller units such as houses or schools-within-schools, the use of portfolio assessments or lessons developed for a flexible schedule; and, the level of involvement by teachers and parents in the decision-making and governance of the school.

Lastly, the data from this study points out the lack of on-going training in middle school philosophy and strategies which impedes the implementation of the *Turning Points 2000* recommendations. Most teachers indicated they did not receive on-going training in middle school concepts in the two years prior to taking the survey and if they did the training was just at an average level. The authors of *Turning Points 2000* advocate that teachers trying to implement the recommendations should have a high level of support from administration and colleagues to ensure the implementation is successful. Such support should included internal and external coaching to fully understand the middle level concepts and how to implement them properly.

In conclusion data shows the *Turning Points 2000* middle level recommendations were not being implemented fully in the Midwestern I. U. 4. In addition, adequate on-going staff development centered on these recommendations was not occurring to a high quality level in the sample area either. Teachers were left to rely on their previous

teaching strategies because on-going, embedded staff development is inadequate and infrequently available to enhance learning.

This study provides the necessary data to get parents, community members, policymakers, educators, and students to see the gaps and weaknesses that need to be addressed. By doing so, a vision can be developed to engage our schools in the mission of providing quality instruction so every young adult can become a high achiever.

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# Appendices

# Appendix A

## Letter to Superintendents

January 2009

Inside Address

Dear (Superintendent):
Having the best middle level school in the IU is probably your main objective. What this study is trying to determine is teachers' perceptions of what should be going on in the middle level with what is going on in the middle level. I know you would be interested in these results across the IU 4 middle level schools.

As a doctoral student, my combined roles as a teacher, administrator and researcher have taken shape in a study that I feel is relevant to all public schools. In the middle level reform movement there are two predominate publications that are the guiding forces, *This We Believe* from the National Middle School Association and *Turning Points 2000* from the Carnegie Corporation. Many critics are speaking out against these reforms claiming they do not work and haven't helped student achievement. They are advocating the return to the K-8 school structure to aid achievement in schools without ample data to see if the middle level recommendations are being implemented.

In order to determine teachers' perceptions toward middle school reform I would like your permission to survey the teachers in your district. The survey consists of items which seek to assess perceptions of teaching practices in the middle level school. (Enclosed for your preview is a copy of the questionnaire along with a cover letter I will send to the teachers.) Those teachers who choose to participate in the study will mail their completed questionnaire directly to me. As I explain in the cover letter, neither teachers nor school districts will be identified in the study. At the conclusion of the study I will send you an executive summary of the findings.

I believe this information can be valuable to teachers and administrators seeking to improve student achievement and servicing student needs by identifying the level of awareness of recommendations in middle level schools. I am even willing to report the findings to your teachers in an In-service or faculty meeting. If you decide to grant permission for me to conduct my research in your district please sign below and return the bottom portion of the letter to me in the attached envelope. Thank you for your time and willingness to participate in this research.

Sincerely,

Michael Pendred
Doctoral Researcher
116 Carol Drive
Saxonburg, Pa 16056
(724) 352-4495
Email: mpendred@zoominternet.net

Dr. Joseph F. Marcoline
Faculty Sponsor
311 Davis Hall
Indiana University of Pennsylvania
(724) 357-2419
Email: j.f.marcoline@iup.edu

Enclosures

The project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the protection of Human Subjects (724) 357-7730

**Research Acknowledgment Form**

_____I grant permission for the teachers in my district to participate in the study- "Implementation of *Turning Points 2000 Recommendations*: A Survey of Mid-Western Pennsylvania Middle Level Teachers' Beliefs and Practice"District

Date_____

Superintendent's Signature _____

## Appendix B

## Survey Cover Letter

April 6, 2009

Dear ( Name) Middle School teachers:

You are invited to participate in a research study dealing with your awareness and practice regarding nationally known recommendations common to middle level schools. The following information is provided in order to help you make an informed decision whether or not to participate in the study. You are eligible to participate because you are a middle level teacher responsible for instruction of students in $5^{th}$- $8^{th}$ grades.

The purpose of the study is to gain information about beliefs and practice teachers have regarding middle level schools in Mid-Western IU 4. Participation in this study will require approximately 15 minutes of your time. You will be asked to complete a questionnaire approved by Indiana University of Pennsylvania's Internal Review Board consisting of 63 questions using a scale of 1-5. You will place your completed survey in the enclosed self-addressed stamped envelope and mail it directly to me within one week after you receive the survey.

An executive summary of the results will be mailed to your superintendent and building principal upon completion of the research.

Your participation in the study is completely voluntary. Any decision you make regarding participation in the survey will not affect your position in your school or any benefit to which you are entitled. If you choose to participate, all the information will be held in strict confidence and will have no bearing on your current teaching position. Your response will be considered only in combination with other teachers. You will notice a coded square in the top right hand corner that will only be used to calculate the number of surveys returned to me. The information obtained in the study may be published in scholarly journals or presented at educational seminars, but your identity will remain strictly confidential.

Please read the directions at the top of the survey and respond to each item on the survey. Return the completed questionnaire in the enclosed envelope. Do not add a return address to the envelope so the highest level of confidentiality can be obtained in this study.

Sincerely,

Michael J. Pendred II
Doctoral Researcher
116 Carol Drive
Saxonburg, Pa 16056
Pennsylvania
(724) 352-4495
Email: mpendred@zoominternet.net
j.f.marcoline@iup.edu

Dr. Joseph F. Marcoline
Faculty Sponsor
311 Davis Hall
Indiana University of

(724) 357-2419
Email:

Enclosures

The project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the protection of Human Subjects (724) 357-7730

## Appendix C

### First Follow-Up Letter

**February 2009**

**Dear (name of Middle School) teacher,**

**In January 2009, you should have received a survey about particular educational practices in middle schools. This study is designed to measure the awareness levels of recommended middle school practices by teachers in Mid-Western IU 4. This study is the first in the Western Pennsylvania on this topic and the results could be of particular importance to many citizens and educators who are currently considering what educational practices will best meet the needs of middle level students in Pennsylvania. In order for the study to have validity, it is very important that I receive as many completed surveys as possible.**

**I am pleased to report that a large number of completed surveys have been returned. If you have recently returned the survey, please disregard this request. I thank you for your cooperation. If you have not yet had the opportunity to complete the survey, I would greatly appreciate if you could take the enclosed survey, fill it out, and return it to me by February 13, 2009. The survey should only take approximately 15 minutes of your time. Additional pre-addressed, stamped envelopes are available at the principal's office. Do not add a return address to the envelope so the highest level of confidentiality can be obtained in this study. Please know that your participation is very important. The success of this study and the ability to accurately describe teachers' perceptions of current educational practices is dependent upon the percentage of responses received.**

**Your contribution to the success of this study will be appreciated greatly. It is my hope that the results will help our state have a better understanding of how theory is meeting practice in our middle level schools. I wish you an enjoyable and rewarding rest of the 2008-2009 school year.**

**Sincerely,**

**Michael J. Pendred II**

**Enclosures**

The project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the protection of Human Subjects (724) 357-7730

## Appendix D

### Permission to Use the Middle Level Practice Questionnaire

Dr. Myles M. Seghers
Our Lady of Holy Cross College
4123 Woodland Drive
New Orleans, LA 70131-7399

February 17, 2008
116 Carol Dr.
Saxonburg, Pa 16056

Dear Dr. Seghers,

I am a doctoral candidate enrolled at Indiana University of Pennsylvania conducting dissertation research as the final requirement for the doctor of education degree in educational leadership, under the direction of Dr. Wenfan Yan (724) 357-7931).

From the beginning of my doctoral studies I have been interested in the implementation of the Turning Points Recommendations at the middle level of education. I followed the research in dissertations by Thomas Becker (1999), David Johns (2001), and Shawn Faulkner (2003) who used your MLQP survey to research implementation of the recommendations. I would like to pursue similar research, but take it a bit further by looking at *Turning Points 2000 Recommendations.* I do not have a survey developed so I would like to use your survey but add a few updates to reflect the more current recommendations. A completed version will be sent to you for your approval when I finish the additions to it.

After meeting with members of my committee recently, I have the go ahead to pursue research in the above area in Western Pennsylvania middle level schools. My thoughts are that this reform movement is not failing because of the unsuccessful instructional strategies, but due to the lack of being fully implemented properly.

Therefore, I am now officially asking your permission to use the Middle Level Practices Questionnaire as the survey instrument for my dissertation. I will secure permission from the "Human Subject" committee at Indiana University of Pennsylvania before conducting the research. Please respond in writing to my request, as I will need documented proof of your permission for the committee. If you have any questions, please feel free to call me at (724) 352-4495 (home) or (724) 290- 4430 (cell). You can also Email me at mpendred@zoominternet.net if you have questions or suggestions that will help me further the studies you and others began. I will look forward to hearing from you soon. Thank you so much for your help in this endeavor.

Sincerely,
Michael J. Pendred II

## Mike Pendred

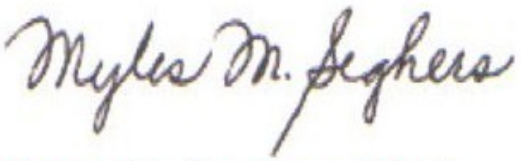
**From:** "Seghers, Myles" <MSeghers@olhcc.edu>
**To:** "Mike Pendred" <mpendred@zoominternet.net>
**Sent:** Tuesday, February 19, 2008 4:00 PM
**Subject:** RE: Request to use survey

Mike,

You certainly have my permission to use the MLPQ Survey. I wish you every success i
this e-mail will suffice as proper documentation. If not, let me know. I would be interest
findings when you get close to completion.

Sincerely,

Myles



Myles M. Seghers, Ph.D.
PROFESSOR OF EDUCATION
Our Lady of Holy Cross College
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New Orleans, LA 70131
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mseghers@olhcc.edu

---

**From:** Mike Pendred [mailto:mpendred@zoominternet.net]
**Sent:** Monday, February 18, 2008 10:10 PM
**To:** Seghers, Myles
**Subject:** Request to use survey

----- Original Message -----
**From:** Seghers, Myles
**To:** Mike Pendred
**Sent:** Tuesday, January 13, 2009 11:47 AM
**Subject:** RE: Request to use survey

Mike,

Happy New Year! You have my permission to change or alter the MLPQ Survey to meet the needs of your study. Best wishes on successfully completing your program.

Myles M. Seghers, Ph.D.
PROFESSOR OF EDUCATION
Our Lady of Holy Cross College
4123 Woodland Dr.
New Orleans, LA 70131
phone (504) 398-2214 fax (504) 391-2421
mseghers@olhcc.edu

---

**From:** Mike Pendred [mailto:mpendred@zoominternet.net]
**Sent:** Friday, December 19, 2008 8:18 PM
**To:** Seghers, Myles
**Subject:** Re: Request to use survey

Dr. Seghers,
It has been quite awhile since I last contacted you in February about the use of your survey in my study.
I have progressed along with my studies with a couple of delays which leave me just now asking my University for permission to distribute my survey. Your survey was right in the target area I needed to explore *Turning Points Recommendations.* The big change was I was looking more at the Turning Points 2000 Recommendations and the decade since your study. Therefore I have modified the survey to come more in line with my research questions. I wanted not to change the integrity of your survey, but to enhance it for more current results.

In my original letter I stated that I did not have a survey developed so I would like to use your survey but add a few updates to reflect the more current recommendations. I also added that the completed version will be sent to you for approval when I finished the additions to it.

You responded by saying the following "You certainly have my permission to use the MLPQ Survey. I wish you every success in your research. I hope this E-Mail will suffice as proper documentation. If not, let me know. I would be interested in reviewing your findings when you get close to completion".

My Chair and I felt this was all that was needed to include as proof of permission. But now that it is front of the Department for review they question it because it says I can use your survey but not that I can change it or revise it. As a result I am afraid I need you to reply to this E-Mail stating that I can use the survey and change or revise it based on my current needs.

Once again I thank you for your time and permission to revise the survey. I have attached a copy of my original letter and my completed survey for your review. When I get my results I will surely send you the results of my studies.

Thanks, Mike Pendred
IUP Doctoral Student

## Appendix E

## Middle Level Awareness & Practice Questionnaire

## and Teacher Descriptive Questions

### MIDDLE LEVEL AWARENESS & PRACTICE QUESTIONNAIRE

This survey is divided into two parts. The first 39 statements ask you to determine two factors for each question. On the left hand side you are asked to rate on a Likert scale your awareness of a middle level recommendation. The right hand side asks you to rate on a Likert scale your perception of the actual practice of the recommendation in your whole school. The second 24 statements of the survey requests information about you and your school make up.

This survey focuses ONLY on the MIDDLE LEVEL in your school. For purposes of this survey, the middle level is defined as students in grades 5-8. (National Middle School Association)

---

**PART 1**

**DIRECTIONS: Please record your awareness of a middle level recommendation on the left hand side and the actual practice of the recommendation in your school on the right hand side. The recommendations have been underlined for your convenience. Using the following keys below, respond by circling the number that you feel is appropriate. Only circle one response on each side of the statement.**

| Level of Awareness. | Level of Practice. |
|---|---|
| **5= Extreme Awareness** | **5= Great Extent** |
| **4= Above Average Awareness** | **4= Most of the Time** |
| **3= Average Awareness** | **3= Average Extent** |
| **2= Below Average Awareness** | **2= Hardly Ever** |
| **1= Not Aware at All** | **1= Not Practiced** |

| | | |
|---|---|---|
| **5 4 3 2 1** | 1. Middle level teachers in our school have middle level certification to teach students. | **5 4 3 2 1** |
| **5 4 3 2 1** | 2. Middle level teachers in our school are assigned as advisors. | **5 4 3 2 1** |
| **5 4 3 2 1** | 3. Teachers value facilitating small groups of students on a regular basis in their classroom. | **5 4 3 2 1** |
| **5 4 3 2 1** | 4. Teachers in our school understand the need to emphasize thinking skills. | **5 4 3 2 1** |
| **5 4 3 2 1** | 5. Middle level teachers emphasize problem-solving activities in their classrooms. | **5 4 3 2 1** |

| Level of Awareness. | | | | | | Level of Practice. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **5= Extreme Awareness** | | | | | | **5= Great Extent** | | | | |
| **4= Above Average Awareness** | | | | | | **4= Most of the Time** | | | | |
| **3= Average Awareness** | | | | | | **3= Average Extent** | | | | |
| **2= Below Average Awareness** | | | | | | **2= Hardly Ever** | | | | |
| **1= Not Aware at All** | | | | | | **1= Not Practiced** | | | | |
| **5** | **4** | **3** | **2** | **1** | 6. Middle level teachers throughout our school promote healthful lifestyles in their classrooms because they know the importance it has in helping students achieve. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 7. Teachers in our school are trained to integrate the subject matter across the various disciplines such as organizing thematic instructional units for their students**.** | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 8. Teachers in our school use portfolio assessment in evaluation of their students. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 9. Middle level teachers in our school help determine what subject matter is taught to their students. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 10. Middle level teachers in our school help determine how subject matter is taught to their students. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 11. Middle level counselors in our school are trained in career guidance. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 12. Middle level teachers in our school are organized into interdisciplinary teams (i.e., the organization of two or more teachers from different disciplines who share the same group of students. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 13. Teachers in those interdisciplinary teams realize the benefit of sharing responsibility or the curriculum of that same group of students. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 14. Teachers in those interdisciplinary teams realize the benefit of sharing responsibility for the instruction of that same group of students. | **5** | **4** | **3** | **2** | **1** |

| Level of Awareness. | | Level of Practice. |
|---|---|---|
| **5= Extreme Awareness** | | **5= Great Extent** |
| **4= Above Average Awareness** | | **4= Most of the Time** |
| **3= Average Awareness** | | **3= Average Extent** |
| **2= Below Average Awareness** | | **2= Hardly Ever** |
| **1= Not Aware at All** | | **1= Not Practiced** |
| **5 4 3 2 1** | 15. Teachers in those interdisciplinary teams realize the benefits of sharing responsibility for the assessment of that same group of students. | **5 4 3 2 1** |
| **5 4 3 2 1** | 16. Middle level teachers in our school receive staff development specifically targeting the needs of young adolescents. | **5 4 3 2 1** |
| **5 4 3 2 1** | 17. Middle level teachers in our school inform middle level parents of the progress of their children through alternative assessment means other than report cards and district mandated progress reports. | **5 4 3 2 1** |
| **5 4 3 2 1** | 18. Middle level teachers in our school are given staff development in decision-making skills concerning the education of the middle level students. | **5 4 3 2 1** |
| **5 4 3 2 1** | 19. Middle level teachers in our school are specially trained to teach young adolescents. | **5 4 3 2 1** |
| **5 4 3 2 1** | **2**0. Middle level teachers in our school promote healthy behavior by modeling healthy practices (e. g., no smoking, healthy diets, etc.). | **5 4 3 2 1** |
| **5 4 3 2 1** | 21. Middle level teachers and students in our school are organized into small units such as " houses" or "schools-within-schools". | **5 4 3 2 1** |
| **5 4 3 2 1** | 22. Middle level students in our school are learning life skills through participation in school and community service. | **5 4 3 2 1** |
| **5 4 3 2 1** | 23. Middle level students in our school are heterogeneously grouped (i.e., mixed by academic ability) for instruction in core courses as a result of teachers' beliefs. | **5 4 3 2 1** |

| Level of Awareness. | | | | | | Level of Practice. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **5= Extreme Awareness** | | | | | | **5= Great Extent** | | | | | |
| **4= Above Average Awareness** | | | | | | **4= Most of the Time** | | | | | |
| **3= Average Awareness** | | | | | | **3= Average Extent** | | | | | |
| **2= Below Average Awareness** | | | | | | **2= Hardly Ever** | | | | | |
| **1= Not Aware at All** | | | | | | **1= Not Practiced** | | | | | |
| **5** | **4** | **3** | **2** | **1** | 24. Teachers believe students in our school should participate in exploratory or "mini" courses where they can experience success in a variety of interest areas. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 25. In addition to regularly scheduled class periods, teachers believe middle level students in our school should have structured learning opportunities at times such as before school, during lunch, and after school. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 26. Middle level students in our school are taught to think critically to prepare them for the responsibilities of citizenship in a pluralistic society. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 27. The parents of our school's middle level students actively participate in the governance and decision-making process of our school. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 28. Middle level teachers in our school receive sustained and intensive professional development in middle level philosophy (i.e., study groups, joint lesson planning, peer coaching, collaboratively reviewing student work). | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 29. Our school has a school governance committee where middle level teachers and administrators participate in and practice shared decision-making. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 30. Teachers understand that close, trusting relationships with middle level students creates a climate for personal growth and intellectual development. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 31. Our school provides training to our middle level teachers to have opportunities to assume leadership positions such as house or team leaders. | **5** | **4** | **3** | **2** | **1** |

| Level of Awareness. | | | | | | Level of Practice. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **5= Extreme Awareness** | | | | | | **5= Great Extent** | | | | | |
| **4= Above Average Awareness** | | | | | | **4= Most of the Time** | | | | | |
| **3= Average Awareness** | | | | | | **3= Average Extent** | | | | | |
| **2= Below Average Awareness** | | | | | | **2= Hardly Ever** | | | | | |
| **1= Not Aware at All** | | | | | | **1= Not Practiced** | | | | | |
| **5** | **4** | **3** | **2** | **1** | 32. Our school provides assistance to middle level students in <u>securing health services</u> when needed. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 33. Our teachers are educated in developing lesson plans to use in a <u>flexible or block</u> <u>schedule</u> for the middle level students. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 34. Our school has developed and implemented programs to create a school environment that is <u>emotionally and physically safe</u> for both middle level students and teachers. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 35. Our school sees the value in giving middle level <u>parents the opportunity to work</u> in the school in various capacities. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 36. Our school provides training to bring about a <u>climate that promotes healthy lifestyles</u> for middle level teachers and students. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 37. Our teachers are knowledgeable on how to give middle level <u>parents assistance</u> in helping their children to learn at home. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 38. One criterion for hiring middle level teachers in our school is they possess a <u>strong commitment to work</u> with middle level students. | **5** | **4** | **3** | **2** | **1** |
| **5** | **4** | **3** | **2** | **1** | 39. Our school <u>works cooperatively with community</u> businesses, service clubs, and foundations to provide resources for middle level students and teachers. | **5** | **4** | **3** | **2** | **1** |

## PART 2

**DIRECTIONS: Please read each statement and/ or question about yourself or your WHOLE school and respond appropriately. Circle or check off answers.**

CHARACTERISTICS

40. What is your gender?
    a. Male b) Female

41. What is your age?
    a) 21-30 b) 31-40 c) 41-50 d) 51-60
    e) 61 or older

42. With what ethic group would you identify?
    a) Caucasian b) African American c) Other

43. How many years have you been a teacher in this school, including this current year?
    a) 1-3 b) 4-10 c) 11-20 d) 21-30
    e) 31 or more

44. What is the highest level of education you have earned?
    a) Bachelor's degree b) Master's degree c) Doctor of Ed.

45. How many years have you been in education total, including this year?
    a) 1-10 b) 11-20 c) 21-30 d) 31 or more

46. Approximately how many students are currently enrolled in your school?
    a. 1- 499 b) 500-699 c) 700-999 d) 1000-1499
    e) 1500 or more

47. What grades are included in the middle level school of which you teach?
    a) 6-7-8 b) 5-6-7 c) 5-6-7-8 d) 5-6
    e) 6-7 f) 7-8 g) 7-9

MIDDLE LEVEL TRAINING AND COURSEWORK

48. What type of Pennsylvania Teaching certificate do you hold?
    a) Elementary K-6 b) High School 7-12 c) K-12

49. How many college courses have you taken that were devoted mainly to middle level education?
    a) one b) two c) three d) four e) five f) six or more g) none

50. How many hours of middle level professional development have you participated in over the past two years?
    a) 0-5 b) 6-10 c) 11-20 d) 21 or more

Which of the following topics have you had in-service training on in your school district within the past two years? And how would you rate the quality of that training on a scale of 1-5, 1 being VERY POOR and 5 being VERY GOOD.

**N/A- NOT APPLICABLE, NO TRAINING**
**1- VERY POOR**
**2- LESS THAN AVERAGE**
**3- AVERAGE**
**4- ABOVE AVERAGE**
**5- VERY GOOD**

| | | | | | | |
|---|---|---|---|---|---|---|
| 51. Advisor-Advisee | N/A | 1 | 2 | 3 | 4 | 5 |
| 52. Teaming –Common Plan Time | N/A | 1 | 2 | 3 | 4 | 5 |
| 53. Middle Certification | N/A | 1 | 2 | 3 | 4 | 5 |
| 54. Integration (curriculum) | N/A | 1 | 2 | 3 | 4 | 5 |
| 55. School-Health services | N/A | 1 | 2 | 3 | 4 | 5 |
| 56. Heterogeneous grouping | N/A | 1 | 2 | 3 | 4 | 5 |
| 57. Home/School/Comm. Partnership | N/A | 1 | 2 | 3 | 4 | 5 |
| 58. Flexible Scheduling | N/A | 1 | 2 | 3 | 4 | 5 |
| 59. Building Governance Committee | N/A | 1 | 2 | 3 | 4 | 5 |
| 60. Youth Service | N/A | 1 | 2 | 3 | 4 | 5 |
| 61. Exploratory Curriculum | N/A | 1 | 2 | 3 | 4 | 5 |
| 62. Peer Tutoring | N/A | 1 | 2 | 3 | 4 | 5 |

63. Are you a member of any of the following organizations? If so, please place a check in front of the ones that apply in the space provided.

____National Middle School Association

____ PA Middle School Association

____Turning Points Design Model

____National Staff Development

____National Forum to Accelerate Middle-Grades Reform

**Thank you for participating in this survey!**

**Please return the survey in the envelope provided.**

Some of parts 1 and 2 of the Middle Level Knowledge and Practice Questionnaire are from The Level of Implementation and Effects of the Carnegie (1989) Recommendations in Louisiana Sixth and Seventh Grade Public Schools, by M. M. Seghers, (Doctoral Dissertation, University of New Orleans, (1996). UMI NO. 9626629. Copyright 1996 by Seghers, Myles Michael. Reprinted with permission of the Author

## Appendix F

### Research Questions and Survey Matrix

| Research Questions | Survey Items |
|---|---|
| **1. To what extent do middle level teachers report being aware of the principles of *Turning Points 2000* recommendations?** | **1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36. 37, 38, 39.** |

Based on the research question #1 all questions seek to find teachers' awareness of Turning Points 2000.

| | |
|---|---|
| **2. To what extent do middle level teachers report practicing the implementation of *Turning Points 2000* recommendations?** | **1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36. 37, 38, 39.** |

These 39 questions were not changed much because they already were designed to assess whether teachers practice Turning Points 2000.

**3. What are teachers' perceptions of on-going training they receive to help them be aware of the *Turning Points 2000* recommendations?**

**48, 49, 50, 63.**

These 4 questions were changed to survey whether middle level teachers have received training of the Turning Points 2000 recommendations

**4. What are teachers' perceptions of how this on-going training is related to the practice and implementation of *Turning Points 2000* recommendations** **57, 58, 59, 60, 61, 62.**

These 6 questions were changed to survey whether middle level teachers have received training and has it helped to implement the Turning Points 2000 recommendations

**5. How do the individual characteristics including age, gender, educational experience, influence teacher awareness and practice of the implementation of Turning Points 2000 recommendations?** **40, 41,** 42, 43, 44, 45.

These 6 questions were included to give personal characteristics of the target audience being surveyed for this study.

*6. How do the school characteristics,* **including enrollment and setting influence teacher awareness and practice of the implementation of Turning Points 2000 Recommendations?** **46, 47.**

These 2 questions were included to look at school characteristics that may influence the implementation of a middle school reform effort.

## Appendix G

## Pilot Test Evaluation

## PILOT TEST EVALUATION

1. Approximately how many minutes did it take you to complete this survey?

   _____minutes.

2. Did you have any difficulty understanding any of the statements? If so, please specify (use back if necessary).

3. Is the rating scale for part I appropriate for the statements in this section? If not, please specify the number(s) of the statements you feel were inappropriate for the rating scale used.

4. Are the directions clear? If not, please specify which directions need clarification.

5. Do you have any recommendations to improve this instrument?

## Appendix H

## Pilot Test Instructions

## PILOT SURVEY

I am seeking the help of Pine-Richland Middle Level teachers to assist in a pilot study for my dissertation at Indiana University of Pennsylvania. In order to make sure the survey I will distribute is the best possible, I need to do a pre-testing or "trying out' of my research instrument. In this case it is a survey I designed called the MLAPQ (Middle Level Awareness and Practice Questionnaire), which is provided in this packet. Also included in the packet is my Research Topic Approval Form, which explains the background and purpose of the study, research methods I will use and the research questions I am trying to answer.

If you choice to participate, you will become the most important part of my research study. Your knowledge and background will be used to establish the face validity and reliability of the survey. The major key to your participating in the survey is that it might give advance warning about where research protocols could fail, where research protocols may not be followed, or whether proposed methods or instruments are inappropriate or too complicated. By collecting your feedback I can assess what needs changed so that I can convince the University that the survey is valid and worth supporting and distributing to a large sampling audience. This is not a test of your abilities or knowledge and will have no basis for any district evaluation of you. The feedback however may give the district some knowledge of Turning *Points 2000* recommendations as the new configuration of schools begins this year.

PROCEDURES TO FOLLOW:

1. There will be refreshments in the form of beverages and snacks available for all volunteers of the pilot survey.
2. It will take approximately an hour of your time. (10 minutes to set up, 20 minutes to take survey, 20 minutes to talk to me and give an evaluation and verbal feedback, and 10 minutes to close up and collect surveys).
3. Administer survey in exactly the way it will be administered in the main study.
4. Ask the subjects for feedback to identify ambiguities and difficult questions.
5. I will record the time taken to complete to decide if it is reasonable.
6. Discard all unnecessary, difficult or ambiguous questions.
7. Assess whether each question gives an adequate range of responses.
8. Establish that replies can be interpreted in terms of the information that is required.
9. Check that all questions are answered.
10. Re-word or rescale any questions that are not answered as expected.
11. Shorten, revise and put in a professional layout for main study.
12. Pilot group can receive a hard copy or E-Mail of final results when dissertation is complete done for district feedback.

TESTING SITES PROPOSAL:

1. Pilot testing could take place at the Middle School grades 7-8 after school. (15 teachers)
2. Pilot testing could take place at the Eden Upper Elementary School grades 5-6 after school. (15 teachers)
3. Teachers of both building could meet at one site to test. (15-30 teachers)
4. Teachers at both sites could be tested at two different sites on two different days. (15-30 teachers)

Determination of testing site will be decided by administration and I will work with building principal(s) on dates and times.

**Please consider your participation in this study. You will be helping to grow the data available to Western Pennsylvania Middle Level Schools!**

**Mike Pendred –Doctoral Student Indiana University of Pennsylvania**

**Appendix I**

**Pilot Test Summary & Corrections**

# PILOT TEST EVALUATION

1. Approximately how many minutes did it take you to complete the survey?
   16,10,11,15,15,19,7,20,14,13,18,17,23,12 = 210  210 divided by 14 = 15 minute average.

2. Did you have any difficulty understanding any of the statements? If so, please specify.
   a. No, the statements were clear and concise.
   b. No
   c. I wasn't sure if I answered questions on page 6 appropriately, #20 not worded properly.
   d. 13, 14, 15 were all the same question. 20 is hard to understand and needs re-worded.
   e. None.
   f. I understand what the questions were asking me, however lacking experience I was unable to judge or make a decision on a lot of questions.
   g. Good job underlining important parts, spaces before rating scale Part II was confusing.
   h. #7 of Part I.
   i. Specify if governance means the same as working together.
   j. No
   k. None
   l. No
   m. I thought #23 was confusing with the bracket, I am sure it was my fault.
   n. None

3. Is the rating scale for Part I appropriate for the statements in this section? If not, please specify the number(s) of the statements you feel were inappropriate for the rating scale used.
   a. Yes the rating scale was appropriate.
   b. Yes
   c. Yes
   d. Yes, but I do not like how you can vote "not aware at all" on the awareness side but there is no "not aware" option on the practice side. I feel something like "could/are practiced in the school" or "I just do not know about them" should be offered.
   e. Yes
   f. Unable to judge 3,8,11,15,16,18,21,23,28. I could not complete the In-Service training page because it was unclear.
   g. Good
   h. Yes
   i. Yes
   j. Yes
   k. Yes
   l. Yes
   m. Yes

n. Yes

4. Are the directions clear? If not, please specify which directions need clarification.
    a. Yes, the directions were easy to follow.
    b. Yes
    c. Not sure exactly what "level of awareness" means.
    d. The directions seem easy to understand.
    e. Yes very. The underlined part of the question is very helpful.
    f. Directions are clear and understandable.
    g. Good
    h. Yes
    i. Directions are clear/concise
    j. Yes
    k. Yes
    l. The directions of Part II say to answer the questions about the whole school, but most of the questions are about the teacher taking the survey.
    m. Took me a minute to understand what you meant by awareness & practice.
    n. Yes

5. Do you have any recommendations to improve this instrument?
    a. No, well done! This is put together very nicely. I'm a new teacher; therefore, I have little knowledge in some areas regarding this district. #20 there is a typo.
    b. Not really.
    c. No
    d. Add some type of "0" which equals "uninformed" option to level of practice.
    e. No
    f. I believe this test is very formative and put together appropriately, however, this test should be administered to just faculty with at least 3 years of experience. It will not be appropriate for a student teacher or a new teacher.
    g. The color-coding is a good idea. It is interesting and I did not know many of the key terms were actual recommendations.
    h. No
    i. #8- space between portfolio and assessment is underlined, #20- word "go" out of place, #35-break in underlining, #36-break in underlining.
    j. Providing an example maybe helpful. Like our students teachers learn by seeing examples for the first couple of questions. I was slightly unclear at first so an example may be helpful. Eating nutritious foods leads to a healthy lifestyle question confusing. I know eating healthy foods is important but I don't always do it.
    k. No
    l. No
    m. Put answers to #50 on same page.
    n. No, thanks for including us.

## When I reviewed the surveys from the teachers I noted suggestions they wrote on the survey itself.

a. I think #23 is confusing. It would have been clearer to me without the bracket.
b. #23 “results of teachers’ beliefs”. What does this mean “”structured learning opportunities” (not clubs right)?
c. None
d. Directions Part II, characteristic statements (these questions are all about the teacher not the whole school).
e. Clarify #63 directions.
f. #20 “go”? #35, #36 line interrupted.
g. #20 go? #51-62 format needs revised.
h. #13 extra line.
i. None
j. None
k. #13, 14, and 15 same question? Re-word #20.
l. #20 go?
m. Directions Part I: maybe recommendation should be philosophy. Where is the source of the recommendations? Directions for #51-62 should state district provided. Directions #63 should state please check.
n. #20 go?

## At the end of the teachers taking the survey I ask for verbal responses to the following questions for better clarification.

1. Was the cover letter confusing, too long, and what should come out?
   - Every thing looks good.
   - Nothing needs to come out.
   - It covers everything.
   - What you expressed in the cover letter was accomplished in the survey.

2. What wasn’t clear on the survey?
   - Perception does it mean for school or just the room on the practice side of survey?
   - What nationally known recommendations?
   - It should be level of perception not practice.
   - #51- 62 directions should state “training in your school district within the last two years. Take out lines in front of area of development. Clarify what N/A means.

3. Did you have problems with having to answer questions first on the right then the left? (Awareness & Practice)
   - The use of two colors helped a lot.
   - Underlining main topics was a great help to us.
   - We understood it when we first looked at it.

- At first I was not to sure what middle level recommendations you were speaking of. (State or Federal standards)
- Try to put survey on back of paper to conserve space so it looks shorter.

4. If you received this survey in your mailbox what would be the chances I would get it back?
    - Very good!
    - Just make sure to send a reminder.
    - It is interesting and easy to take.
    - It did not take a lot of time so people will return it.

6. How could I increase my chances of a high return rate?
    - Personal contact with a principal, building representative or key player in the building.
    - Do it at a faculty meeting so teachers have time to do it and give it back immediately.
    - On line.
    - Assign a time during the day with a period and place to meet.
    - Have staff meeting with food and beverages like today.

7. Do I need to fold the survey so one side is taken at a time? Do I need to write questions separately so one side is answered at a time? (all awareness questions first then all practice questions second)
    - No, it is easy to read.
    - No one had trouble answering questions with rating scale on each side of the question.
    - One teacher did do one side first and went back and did the other side and still finished the survey in 22 minutes.

8. Are there any other suggestions we may not have covered you would like to make?
    - Under the membership section directions it should state if you are a member of any of these organization you should check in front of it.
    - In-service section should state district provided in-service in your current school.
    - Use philosophy rather than recommendations.

All suggestions will be taken into account to revise survey and a summary of the revisions will be noted in Chapter 3 of my dissertation.

## Appendix J

## MLAPQ *Turning Points 2000*

## Awareness & Practice Mean Scores

Average awareness and practice of the recommendations (for each question and overall)

| | N | Mean | Std. Deviation | Variance |
|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Statistic |
| Average Awareness of Recommendations | 120 | 3.5166 | .68899 | .475 |
| Average Practice of Recommendations | 121 | 3.0701 | .63717 | .406 |
| Teachers have middle level certification- Awareness | 119 | 3.51 | 1.327 | 1.760 |
| Teachers have middle level certification- Practice | 117 | 3.61 | 1.396 | 1.948 |
| Teachers are assigned as advisors- Awareness | 116 | 3.03 | 1.474 | 2.173 |
| Teachers are assigned as advisors- Practice | 118 | 2.74 | 1.538 | 2.366 |
| Teachers value the use of small groups- Awareness | 119 | 4.06 | 1.011 | 1.022 |
| Teachers value the use of small groups- Practice | 119 | 3.63 | 1.007 | 1.015 |
| Teachers emphasize thinking skills- Awareness | 119 | 4.48 | .699 | .489 |
| Teachers emphasize thinking skills- Practice | 121 | 4.05 | .835 | .698 |
| Teachers emphasize problem solving- Awareness | 120 | 4.37 | .744 | .554 |
| Teachers emphasize problem solving- Practice | 120 | 3.97 | .859 | .738 |
| Teachers promote healthy lifestyles- Awareness | 120 | 3.89 | 1.002 | 1.005 |
| Teachers promote healthy lifestyles- Practice | 121 | 3.50 | 1.009 | 1.019 |
| Teachers are trained to integrate the subject matter- Awareness | 120 | 3.88 | .972 | .944 |
| Teachers are trained to integrate the subject matter- Practice | 121 | 3.23 | 1.160 | 1.346 |
| Teachers use portfolio assessment- Awareness | 120 | 3.10 | 1.286 | 1.654 |
| Teachers use portfolio assessment- Practice | 121 | 2.40 | 1.068 | 1.141 |
| Teachers determine what subject matter is taught- Awareness | 109 | 3.78 | 1.066 | 1.136 |
| Teachers determine what subject matter is taught- Practice | 110 | 3.51 | 1.155 | 1.335 |
| Teachers determine how subject matter is taught- Awareness | 109 | 4.14 | .938 | .879 |
| Teachers determine how subject matter is taught- Practice | 110 | 4.11 | .961 | .924 |
| Counselors are trained in career guidance- Awareness | 108 | 3.26 | 1.417 | 2.007 |
| Counselors are trained in career guidance- Practice | 107 | 3.26 | 1.291 | 1.667 |
| Teachers are organized into interdisciplinary teams- Awareness | 109 | 3.50 | 1.488 | 2.215 |

| | | | | |
|---|---|---|---|---|
| Teachers are organized into interdisciplinary teams- Practice | 110 | 2.68 | 1.483 | 2.201 |
| Teachers in teams realize the benifits of sharing responisibilty for curriculum- Awareness | 108 | 3.35 | 1.481 | 2.193 |
| Teachers in teams realize the benifits of sharing responisibilty for curriculum- Practice | 110 | 2.53 | 1.470 | 2.160 |
| Teachers in teams realize the benifits of sharing responisibilty for instruction- Awareness | 108 | 3.39 | 1.446 | 2.090 |
| Teachers in teams realize the benifits of sharing responisibilty for instruction- Practice | 108 | 2.58 | 1.467 | 2.152 |
| Teachers in teams realize the benifits of sharing responsibility for assessment- Awareness | 107 | 3.29 | 1.434 | 2.057 |
| Teachers in teams realize the benefits of sharing responsibility for assessment- Practice | 109 | 2.46 | 1.398 | 1.954 |
| Teachers receive training to target students needs- Awareness | 109 | 3.65 | 1.100 | 1.211 |
| Teachers receive training to target students needs- Practice | 109 | 2.91 | 1.191 | 1.417 |
| Teachers inform parents of progress through alternative assessment means- Awareness | 108 | 3.64 | 1.195 | 1.429 |
| Teachers inform parents of progress through alternative assessment means- Practice | 110 | 3.19 | 1.296 | 1.679 |
| Teachers are given staff development in decision making- Awareness | 109 | 3.05 | 1.212 | 1.470 |
| Teachers are given staff development in decision making- Practice | 110 | 2.45 | 1.138 | 1.295 |
| Teachers are specially trained to teach adolescents- Awareness | 120 | 3.68 | 1.109 | 1.230 |
| Teachers are specially trained to teach adolescents- Practice | 121 | 3.26 | 1.268 | 1.609 |
| Teachers model healthy practices- Awareness | 119 | 4.05 | 1.072 | 1.150 |
| Teachers model healthy practices- Practice | 120 | 3.87 | .931 | .867 |
| The school is organized into houses- Awareness | 120 | 2.64 | 1.437 | 2.064 |
| The school is organized into houses- Practice | 119 | 1.86 | 1.195 | 1.429 |
| Students learn life skills through community service- Awareness | 120 | 3.01 | 1.226 | 1.504 |
| Students learn life skills through community service- Practice | 120 | 2.53 | 1.100 | 1.209 |
| Students are heterogeneously grouped- Awareness | 120 | 3.65 | 1.261 | 1.591 |
| Students are heterogeneously grouped- Practice | 120 | 3.02 | 1.440 | 2.075 |
| Teachers believe students should participate in exploratory courses- Awareness | 120 | 3.04 | 1.318 | 1.738 |

| | | | | |
|---|---|---|---|---|
| Teachers believe students should participate in exploratory courses- Practice | 120 | 2.59 | 1.300 | 1.689 |
| Teachers believe students should have structured learning opportunities out side of class time- Awareness | 120 | 3.47 | 1.256 | 1.579 |
| Teachers believe students should have structured learning opportunities out side of class time- Practice | 120 | 2.99 | 1.273 | 1.622 |
| Students are taught to think critically- Awareness | 120 | 3.76 | 1.029 | 1.059 |
| Students are taught to think critically- Practice | 121 | 3.40 | 1.060 | 1.125 |
| Parents actively participate in the governance and decision making process- Awareness | 119 | 2.76 | 1.293 | 1.673 |
| Parents actively participate in the governance and decision making process- Practice | 118 | 2.31 | 1.106 | 1.222 |
| Teachers receive intensive professional development in middle level philosophy- Awareness | 120 | 3.18 | 1.223 | 1.496 |
| Teachers receive intensive professional development in middle level philosophy- Practice | 120 | 2.43 | 1.121 | 1.256 |
| Our school has a school governance committee with shared decision making- Awareness | 107 | 3.00 | 1.374 | 1.887 |
| Our school has a school governance committee with shared decision making- Practice | 108 | 2.53 | 1.307 | 1.710 |
| Teachers understand that close, trusting relationships creates a climate for personal growth- Awareness | 107 | 4.11 | .994 | .987 |
| Teachers understand that close, trusting relationships creates a climate for personal growth- Practice | 108 | 3.82 | .965 | .931 |
| Our school provides teachers training to become team leaders- Awareness | 108 | 2.91 | 1.457 | 2.122 |
| Our school provides teachers training to become team leaders- Practice | 107 | 2.28 | 1.330 | 1.770 |
| Our school provides students assistance in securing health services- Awareness | 107 | 3.58 | 1.221 | 1.491 |
| Our school provides students assistance in securing health services- Practice | 106 | 3.58 | 1.077 | 1.161 |
| Teachers are educated in developing lesson plans to use in a flexible schedule- Awareness | 108 | 2.94 | 1.433 | 2.053 |
| Teachers are educated in developing lesson plans to use in a flexible schedule- Practice | 108 | 2.06 | 1.324 | 1.754 |

| | | | | |
|---|---|---|---|---|
| Our school has developed and implemented programs to create a safe environment- Awareness | 107 | 4.27 | .917 | .841 |
| Our school has developed and implemented programs to create a safe environment- Practice | 108 | 4.12 | .993 | .985 |
| Our school sees the value in letting parents work in the school- Awareness | 108 | 3.25 | 1.177 | 1.386 |
| Our school sees the value in letting parents work in the school- Practice | 107 | 2.66 | 1.157 | 1.339 |
| Our school provides training to bring about a climate that promotes healthy lifestyles- Awareness | 108 | 3.44 | 1.163 | 1.352 |
| Our school provides training to bring about a climate that promotes healthy lifestyles- Practice | 108 | 3.03 | 1.164 | 1.354 |
| Teachers are knowledgeable on how to give parents assistance in helping their children at home- Awareness | 107 | 3.45 | 1.109 | 1.231 |
| Teachers are knowledgeable on how to give parents assistance in helping their children at home- Practice | 108 | 3.07 | 1.083 | 1.172 |
| Teachers are hired knowing they possess a strong commitment to work with students- Awareness | 107 | 3.59 | 1.259 | 1.584 |
| Teachers are hired knowing they possess a strong commitment to work with students- Practice | 106 | 3.63 | 1.081 | 1.168 |
| Our school works cooperatively with the community to provide resources for teachers and students- Awareness | 108 | 3.15 | 1.274 | 1.623 |
| Our school works cooperatively with the community to provide resources for teachers and students- Practice | 107 | 2.85 | 1.164 | 1.355 |
| Valid N (listwise) | 90 | | | |

# Appendix K

## Questions Grouped Under

## Specific Recommendations

## Means Scores

**Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Curriculum grounded in academic standards (Awareness) Q 7,13,24,25,26 | 108 | 1.20 | 5.00 | 3.4815 | .78540 |
| Curriculum grounded in academic standards (Practice) Q 7,13,24,25,26 | 109 | 1.20 | 4.80 | 2.9193 | .77418 |
| Instruction Designed for All Students (Awareness) Q 4,5,8,12,14,15,23,33 | 106 | 1.62 | 5.00 | 3.5814 | .81978 |
| Instruction Designed for All Students (Practice) Q 4,5,8,12,14,15,23,33 | 107 | 1.38 | 5.00 | 2.8750 | .75548 |
| Staff schools with expert teachers (Awareness) Q 1,11,16,18,19,28,38 | 105 | 1.57 | 5.00 | 3.3878 | .82345 |
| Staff schools with expert teachers (Practice) Q 1,11,16,18,19,28,38 | 101 | 1.29 | 5.00 | 3.0283 | .80813 |
| Climate of Intellectual Development and Caring Community (Awareness) Q 2,3,21,30 | 103 | 1.00 | 5.00 | 3.4515 | .71919 |
| Climate of Intellectual Development and Caring Community (Practice) Q 2,3,21,30 | 101 | 1.00 | 4.50 | 2.9802 | .74639 |

| | | | | | |
|---|---|---|---|---|---|
| Governed by school staff members (Awareness) Q 9,10,29,31 | 107 | 1.25 | 5.00 | 3.4556 | .86726 |
| Governed by school staff members (Practice) Q 9,10,29,31 | 106 | 1.25 | 4.75 | 3.1038 | .78366 |
| Provide safe and healthy schools (Awareness) Q 6,20,32,34,36 | 106 | 1.80 | 5.00 | 3.8358 | .78013 |
| Provide safe and healthy schools (Practice) Q 6,20,32,34,36 | 104 | 1.80 | 5.00 | 3.6096 | .69694 |
| Involve parents and community (Awareness) Q 17,22,27,35,37,39 | 105 | 1.00 | 5.00 | 3.1952 | .87415 |
| Involve parents and community (Practice) Q 17,22,27,35,37,39 | 104 | 1.00 | 5.00 | 2.7372 | .80441 |
| Valid N (listwise) | 90 | | | | |

## Appendix L

## Matrix of Chi Squared Tests

## versus Seven Independent Variables

Areas of Significance for MLAPQ Survey

| | Research Question | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AGE | | GENDER | | MIDDLE | | TOTAL | | HOURS | | ENROLL | | GRADES | |
| | | A | P | A | P | A | P | A | P | A | P | A | P | A | P |
| 1 | Certification | X | | X | | | | | | X | X | | | | |
| 2 | Advisors | | | | | | | | | | | | | | |
| 3 | Small Groups | | | | | | | | | | | | | | |
| 4 | Thinking Skills | | X | | | | | | | | | | | | |
| 5 | Problem Solving | | | | | | | | | | | | | | |
| 6 | Healthy Lifestyles | | | | | | | | | | | | | | |
| 7 | Thematic | | | X | | | X | | | | | | | | |
| 8 | Portfolio Assess | | | | | | | | | | | | | | |
| 9 | What Subject | | | | | | | | X | | | | X | | |
| 10 | How Subject | | | | | | | | | | | | | | |
| 11 | Career Guidance | | | | | | | | | | | | | | |
| 12 | Interdisciplinary | | | | | | | | X | | | X | X | | X |
| 13 | Curriculum | | | | | | | | | | | | X | | |
| 14 | Instruction | | | | | | | | X | | | X | X | | X |
| 15 | Assessment | | | | X | | | | | | | X | X | | X |
| 16 | Staff Development | | | | | X | | | | | X | | | | |
| 17 | Alt. Assessment | X | | | X | | | | | | | X | | | |
| 18 | Decision Making | | | | | | | | | | | | | | |
| 19 | Specially Trained | | | | | | | | | X | X | X | X | | |
| 20 | Model health | | | | | | | | | | | | | | |
| 21 | Houses | | | | | | X | | X | | | | X | X | X |
| 22 | Community Services | X | | | | | | | | | | | | | |
| 23 | Heterogeneous | | | | | | | | | | | | | | |
| 24 | Exploratory | X | X | | | | | | | | | | | | |
| 25 | Structured Learning | X | X | | | | | | X | | | | | | |
| 26 | Think Critically | | | | | | | | | X | | | | | |
| 27 | Governance | X | | | | | | | | | | | | | |
| 28 | Professional Dev. | | | | X | | | | | X | X | | | | |
| 29 | School Goverance | | | | | | | | | | | | | | |
| 30 | Trusting Relationships | X | | | | | | X | | | | | | | |
| 31 | Team Leader | | | | | | | | | | | | | | |
| 32 | Health Services | X | X | | | | X | X | | | | | | | |
| 33 | Block Schedule | | | | | X | X | | X | | | | | | |
| 34 | Personal Safety | | | | | | | | | | | | | | |
| 35 | Parent Working | | | | | | | | | X | | | | | |
| 36 | Climate | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 | Parent Assistance | | | | | | | | | | | | | | |
| 38 | Commitment to Work | **X** | | | | **X** | | **X** | | | | | | | |
| 39 | Work with Community | **X** | | | | | | **X** | | | | | | | |
| | Tables | | **11** | | **3** | | **2** | | **4** | | **3** | | **8** | | **4** |
| | TOTAL | | | | | | | | | | | | | | **35** |