

A Comparison of Teacher Attitudes Toward and Uses of Middle School Restructuring Actions

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In a recent article, Lounsbury and Vars (2003) revisit middle level education in the 20th century and look ahead to the future. They begin with a chronological view noting that 40 years ago, William Alexander first used and advocated the term middle school; the National Middle School Association began 30 years ago; and 18 years ago, the 6-8 middle school became the centerpiece of the 5-3-4 schooling process. At the beginning of this change almost 20 years ago, numerous volumes and reports in the literature made compelling cases for a total transformation of middle level schools (Alexander & McEwin, 1989; Alexander, Williams, Compton, Hines, & Prescott, 1968; Carnegie, 1989; Eichhorn, 1968; Gruhn & Douglas, 1956; and Lounsbury & Clark, 1990).

These reports supported integrating curriculum, using alternate scheduling procedures, teaching with multiage grouping, creating an interdisciplinary organization, implementing team advisory plans, using varied teaching strategies, fostering cooperativeness and collaboration among students and teachers, and participating in shared decision-making among teachers and administrators. The driving force for changing nonviable practices with new actions was the learner, an early adolescent experiencing significant and dramatic changes in physical and cognitive growth (Capelluti & Stokes, 1991; Eichhorn, 1968; and George, Stevenson, Thomason, & Beane, 1992). The Carnegie Report, *Turning Points: Preparing youth for the 21st century* (1989), became the most cited report during the latter part of the 20th century.

The report called for middle schools to (1) provide respectful relationships between

adults, students, and peers; (2) teach a core curriculum to all students; (3) ensure success for all students; (4) give teachers and administrators control over instructional programs; (5) have a staff of teachers who are experts in teaching young adolescents; (6) improve academic performance through fostering health and fitness; (7) reengage families in education; and (8) connect schools with the community. The influence of *Turning Points* continues. The National Middle School Association recently published, *This We Believe: Successful schools for young adolescents* (2003) that include beliefs endorsed by middle school educators. The document supports six beliefs that educators advocate for students. Successful schools for young adolescents help students learn, grow and develop into knowledgeable, reflective, caring, ethical and contributing citizens; provide students with access to the best programs and teaching practices; engage students in learning that is relevant, challenging, integrative, and exploratory; create democratic learning environments where students thrive academically, socially and emotionally and where trust and respect are paramount and family and community are actively involved; help students face significant life choices; and reinforce a learning environment where educators are prepared to work with the youth and lifelong learners committed to their own professional development (National Middle School Association, 2003).

Turning Points of 20 years ago and today's *This We Believe* advocate changing traditional educational systems to educate teachers to use a variety of teaching strategies centered on cognitive, social and emotional growth of young adolescents. However, the 1993

National Middle School Study (McEwin, Dickinson, & Jenkins, 1996) reported that 90% of the middle school teachers used traditional teaching strategies. When examining middle school teacher responses to change, in their recent study, Brighton and Hertberg (2003) support the 1993 middle school study findings. Traditional teaching practices are now reinforced by the 2001, No Child Left Behind legislation, the latest reform movement that forces increased accountability on standardized achievement measures. In a high stakes testing environment, teachers tend to believe that direct instruction with individual repetition and skill practice provides the best strategies for preparing students to score higher on standardized tests.

Today, educators can turn to high stakes testing and accountability as an excuse for using traditional strategies. To examine middle school teachers' attitudes toward changing their teaching practices, this study examined teacher attitudes about middle school restructuring actions and their perceived uses of alternative teaching strategies prior to the NCLB legislation. The data was collected after teachers received five years of intensive training supported by a corporate partnership in all but one middle school in a mid size State of Florida school district. The goal was to prepare teachers to enter the 21st century with new and innovative teaching techniques that aligned to the recommendations supported by *Turning Points*. A county level staff development department and an educational corporate partner provided district teachers with professional development to change teaching practices to align to recommendations for restructuring middle schools. This on-going training mainly included workshops and meetings. The goal was to provide teachers with knowledge and skills on middle school restructuring actions to facilitate middle school personnel transforming schools. Using a survey administered to all middle school teachers, the study addressed three questions: (1) What were teacher attitudes toward middle school restructuring actions as presented through county-wide professional development? (2) To what extent did teachers' believe they used these actions in their classrooms? and (3) How did their attitudes compare to

their perceived uses of these middle school restructuring actions?

Sample

A middle school restructuring survey was developed and administered to middle school teachers teaching in all, but one middle school in a State of Florida school district. Teachers at a federally funded, interdisciplinary magnet middle school of choice were not included. From its inception, the teachers self-selected to teach in the magnet school that was characterized by flexible block scheduling, enrichment courses, and an interdisciplinary cross grade level curriculum. Teachers at this middle school received intensive training prior to opening the school and were availed additional resources, such as time, expertise, and technology to structure an effective middle school of choice (Pilcher, 1993). Because of their special situation regarding staffing, training, and resources, we decided that the data gathered from this school could be appreciably different from other district middle schools. All district middle school teachers who received the five-year, corporate sponsored professional development were included in the study.

Method

Descriptive data was collected using a survey administered to each teacher at their work site. We wanted to examine teachers' perceptions of specific middle school restructuring actions on the survey that aligned to middle school reforms. We compared teachers' attitudes and their perceived uses of 17 middle school reform actions. Therefore, overall differences were not as informative as the item-by-item descriptive and comparative information. The survey included middle school restructuring recommendations addressed in the literature and the professional development components provided to teachers through the corporate partners' workshops. The professional development primarily occurred through workshops delivered by corporate partner experts on middle school restructuring. Using the recommendations listed in *Turning Points*, the corporate partner

committed to a five-year restructuring effort with the district middle schools. The corporate partner provided a consultant team with extensive expertise working with a wide range of middle school concerns. Each middle school's team worked with the middle school consultant team. A contact person from each school's team was responsible for administering the survey at each school site. The contact person placed the surveys and an informational letter in school mailboxes. All middle school teachers at the nine schools received a survey. Teachers were requested to complete the survey and return it to the contact person within three days.

Measuring Instructions

When developing the survey we reviewed the literature to ascertain common endorsements for restructuring middle schools and expert opinions on common middle school restructuring practices. A measurement specialist reviewed the survey. Recommendations to simplify and condense items were completed. Further revisions were made after the survey was field tested with teachers enrolled in a graduate class. Once again a measurement expert reviewed the instrument. Final revisions and an expert review were made prior to the administration of the survey.

The survey used a Likert scaling procedure to (1) measure teacher attitudes toward middle school restructuring actions; (2) measure the extent that teachers believed they used the restructuring actions; (3) examine how teachers' attitudes compared to their perceived uses of the restructuring actions. The survey consisted of 17 items on common middle school restructuring practices referred to as actions on the survey. Teachers expressed their attitude toward the middle school restructuring actions and their level of classroom use for that same action. Five response options ranged from strongly agree to disagree with an alternative response, "no knowledge." Also, five response options for use ranged from routinely used

to never tried, with the same "no knowledge" option.

Procedures Used to Analyze Data

The survey scores were tabulated for the 17 items. Standardized means or z scores were calculated for each item on attitudes toward and use of the middle school restructuring actions. Therefore, each item could be analyzed based on the standardized mean score of 0 and one, two and three standard deviations from the mean. Then, the standardized mean differences between attitudes and uses were determined to compare teacher attitudes and perceived uses of the actions. The larger difference represented a higher disconnect between attitude and use. To assess the reliability of the survey, three Cronbach alpha coefficients were calculated. These three coefficients represent the reliability of the responses on the three research questions: attitude toward the restructuring action (.87); use of the restructuring action (.82); and the comparison between attitude and use (.88).

Findings

One hundred forty-five of the four hundred fifteen surveys distributed were returned, representing a 34% return rate. Six of the returned instruments were not included in the data analysis due to improper completion. The response, "no knowledge," was marked a total of 128 times, less than 3 percent of the responses.

This study compared teacher attitudes toward middle school restructuring actions and teacher perceptions on their use of these actions. The standardized mean toward middle school restructuring actions ranged from 1.80 to -2.96. The standardized mean for perceived use ranged from 2.25 to -1.27. Higher attitudes and uses were defined by standardized means that were .70 standard deviations above the mean of 0. Lower attitudes and uses were defined by standardized means that were .70

Table 1

Standardized Means: High to Low Rating			
Action	Std. Mean Attitude	Action	Std. Mean Utilization
Use various instructional and teaching techniques	1.80	Use various instructional and teaching techniques	2.25
Coordinate classroom discipline with a team of teachers	1.11	Coordinate classroom discipline with a team of teachers	1.41
Teach with a team of teachers	.72	Teach with a team of teachers	1.25
Actively involve parents in the student's learning process	.63	Use cooperative learning groups in the classroom	.86
Sit on committees that make collaborative school decisions	.43	Actively involve students in classroom decision making	.35
Create a common teaching plan with a team of teachers	.42	Use alternative methods for assessing student progress	.34
Use cooperative learning groups in the classroom	.34	Sit on committees that make collaborative school decisions	.15
Create interdisciplinary curricula with a team of teacher	.21	Create a common teaching plan with a team of teachers	.14
Use alternative methods for assessing student progress	-.08	Implement a written advisory plan	-.11
Coordinate curriculum delivery with a team of teachers	-.04	Actively involve parents in the student's learning process	-.26
Teach in an environment with flexible scheduling	-.30	Use alternative reporting procedures	-.64
Teach cooperative learning groups with a team of teachers	-.42	Create interdisciplinary curricula with a team of teachers	-.66
Actively involve students in classroom decision making	-.42	Teach in an environment with flexible scheduling	-.75
Use alternative reporting procedures	-.44	Coordinate curriculum delivery with a team of teachers	-.80
Teach interdisciplinary curricula with a team of teachers	-.40	Teach cooperative learning groups with a team of teachers	-1.01
Implement a written advisory plan	-.70	Teach interdisciplinary curricula with a team of teachers	-1.26
Teach in a classroom in which students are NOT grouped by grade level	-2.96	Teach in a classroom in which students are NOT grouped by grade level	-1.27

standard deviations below the mean of 0. In addition, standardized mean differences were used to analyze the difference between attitude and use of the action.

Table 1 displays the standardized means showing the highest to lowest ratings for the attitude and use. Teachers had the highest attitudes (above .70 standard deviations) for three of the 17 actions: using instructional and teaching techniques, coordinating classroom discipline with a team of teachers, and teaching with a team of teachers. Teachers had the lowest attitude toward teaching multi age groupings. Again, using .70 as the indicator, teachers perceived that they had higher uses for implementing various instructional and teaching techniques, coordinating classroom discipline with a team of teachers, teaching with a team of teachers, and using cooperative learning groups in the classroom. They had lower uses for teaching multiage groupings, teaching interdisciplinary curricula with a team of teachers, teaching cooperative learning groups with a team of teachers, coordinating curriculum delivery with a team of teachers, and teaching in an environment with flexible scheduling. Thus, teachers did not use actions that required them to implement the teaching practice with other teachers. They, however, liked coordinating instructional practices that used innovative approaches with teachers. The teachers also did not routinely use an action that required changing the way courses were scheduled.

Teachers had a very unfavorable attitude toward teaching in multiage classrooms (almost 3 standard deviations below the mean). Although not as low as the use rating, they also had the most unfavorable attitude toward this action. Teachers perceived that they routinely used various instructional and teaching techniques in their classrooms (2.25 standard deviations below the mean). They had the highest attitude toward this action as well. They also had the second highest attitude and use ratings

for coordinating classroom discipline with a team of teachers.

Comparison of Teacher Attitudes and Perceived Uses

Table 2 displays the ranking of the differences between the standardized mean attitudes and the uses of the 17 actions. As shown in Table 2, the attitude toward and use of most actions are in close proximity to each other on the bell curve, showing no extreme difference between attitude and use. Items with larger differences (.70 or higher) or those with less alignment between attitude and use may have fallen in one of four categories: positive attitude/positive use, positive attitude/negative use, negative attitude, positive use, and negative attitude/negative use. The differences fell into three of the four categories above. No differences fell into positive attitude/high use. Therefore, very little differences occurred between attitude and perceived use when teachers had a positive attitude toward an action. The two exceptions were: involving parents in the learning process (positive attitude/low use) and creating interdisciplinary curriculum with a team of teachers (positive attitude/low use). Teachers liked these two actions, but most likely had little time within the normal school day to implement the actions. One item, involving students in the decision-making, fell into the negative attitude/high use category. Most items that showed a difference in attitude and use fell into the negative attitude/low use category: teaching in a multiage classroom (negative attitude/low use); teaching interdisciplinary curriculum with a team of teachers (negative attitude/low use); and coordinating curriculum delivery with a team of teachers (negative attitude/low use).

In summary, Table 2 displays the mean rankings within the four categories. The actions, the differences between the standardized means for attitude and use from highest to

Table 2

Comparison of Attitude/Utilization Ratings and Ranked Standardized Means

Action	Difference ^a	Category ^{aa}
Teach in a classroom in which students are NOT grouped by grade level	1.69	NA/LU
Actively involve parents in the student's learning process	.89	PA/LU
Create interdisciplinary curriculum with a team of teachers	.87	PA/LU
Teach interdisciplinary curriculum in the classroom with a team of teachers	.80	NA/LU
Actively involve students in classroom decision-making	.77	NA/HU
Coordinate curriculum delivery with a team of teachers	.76	NA/LU
Teach cooperative learning groups with a team of teachers	.59	NA/LU
Implement a written advisory plan	.59	NA/LU
Teach with a team of teachers	.53	PA/HU
Use cooperative learning groups in the classroom	.52	PA/HU
Teach in an environment that has flexible scheduling of classes	.45	NA/LU
Use various instructional and teaching techniques	.45	PA/HU
Sit on committees that make collaborative decisions about school policies and procedures	.30	PA/HU
Coordinate classroom discipline with a team of teachers	.30	PA/HU
Create a common teaching plan with a team of teachers	.28	PA/HU
Use alternative methods for assessing student progress	.26	PA/HU
Use Alternative reporting procedures to communicate student progress	.20	NA/LU

^aStandardized mean difference above 1.00.

^{aa}PA/HU (Positive attitude/High use); PA/LU (Positive attitude/Low use); NA/LU (Negative attitude/Low use); NA/HU (Negative attitude/High use).

lowest difference, and one of the following designations are provided: PA/HU (Positive attitude/High Use); PA/LU (Positive attitude/Low use); NA/LU (negative attitude/low use); NA/HU (negative attitude/high use).

Conclusion

The purpose of this study was to examine teachers' attitudes and their perceived use of middle school restructuring actions that were included in a five-year professional development series sponsored by a corporate partner. In most instances, when teachers had a more positive attitude toward the action, they perceived that they more routinely used that action. Teachers were most negative about using multiage grouping in their classrooms. They were most positive about using various instructional techniques when teaching their students. Six highlighted discrepancies between attitude and use occurred.

Teachers had both a negative attitude and a perceived low use of multiage grouping. However, they did not rate the use as low as their attitude. Therefore, they seemed to be using this type of grouping based on school or district decisions to combine grade levels in certain activities during the school day. Teachers had a positive attitude toward creating interdisciplinary curriculum with a team of teachers, but a more negative attitude toward actually teaching this same curriculum with a team. They also perceived they did not often use these two actions. Thus, teachers favored working with other teachers to create instruction, but did not necessarily want to teach with other teachers. This conclusion is also supported by the more negative attitude toward coordinating the delivery of the instruction. Teachers enjoyed working with others to create and plan, but not to coordinate the delivery and actually teach in a classroom together. In addition, teachers had a positive attitude toward involving parents in their child's learning, but had a negative attitude toward involving their students. Ironically, they did not perceive they routinely included parents. The structure of the school day most likely did not encourage

or allow teachers the necessary time to involve parents. In contrast, although they did not necessarily like involving students in the decision making process about their learning, they did so anyway. In this case, time did not hinder the implementation of the action.

When comparing actions rated positively for attitude and use, a pattern seems to emerge. Actions falling into a positive attitude/higher use category are normally implemented as teachers follow traditional norms of middle schools. For example, actions such as using various instructional and teaching techniques, using alternative methods for assessing students, using cooperative learning groups, teaching with a team of teachers, coordinating classroom discipline with a team of teachers, creating a common teaching plan with a team of teachers, and sitting on committees that make collaborative decisions about school policies have been part of the middle school instructional process in schools over the last several decades. It seems that the middle school teachers expected to use these actions in their classrooms. Also, these actions are relatively easy to implement in traditional school settings and class schedules. For example, the teachers had a relatively positive attitude and perceived that they used alternative methods for assessing student progress. For the most part, teachers have used both formal and informal assessment strategies and various assessment methods in their classrooms. In contrast, they did not feel favorably about using alternative reporting procedures to communicate student progress. Teachers were most likely comfortable with reporting student progress by using grades, which has been one of the most traditional aspects of the educational system.

Higher differences that fell into the negative attitude and low use category also suggest old norms or common middle school norms are still in place. These actions include: using cooperative learning groups with a team of teachers, coordinating curriculum delivery with a team of teachers, teaching interdisciplinary curriculum with a team of teachers, teaching in an environment with flexible scheduling of classes, teaching in a classroom in which

students are not grouped by grade level, using alternative reporting procedures to communicate student progress, and implementing a written advisory plans. These middle school actions call for shifts in existing educational systems and processes. Even following five years of professional development, teachers were not very favorable toward these types of actions. Negative attitude/low use items were ones that required teachers to change their teaching practices in the classroom rather than change the way they plan or create instruction. The middle school teachers had a more positive attitude and believed they routinely used actions that described planning and creating instruction with teams of teachers.

This study supports others' findings that teachers cling to traditional classroom practices making change difficult and complex (Brighton & Hertberg, 2004; Fullan, 1995; Lounsbury & Vars, 2003; Tyack & Cuban, 1995; Oakes, Quartz, Gong, Guiton, & Lipton, 1993). Brighton and Hertberg (2003) site a number of middle school experts stating that a "prominent theme in the literature on educational change illuminates the importance of considering individual teachers' beliefs about the nature of teaching and learning when considering a reform effort, rather than the school faculty as a whole." (p. 3). This study examined teachers' beliefs after experiencing district-wide professional development over five years. The goal was to change their beliefs, not to necessarily change school structures and processes. The findings support Lounsbury and Vars (2003) argument that the middle school movement has centered on programmatic change rather than organization change. Indeed, the middle school teachers' responses support their claim that, "Always present is the human inclination to resist change" (p. 2).

The teachers in this study received five years of professional development, but mostly in a traditional format through workshops. Schmitt states "research has found that successful implementation of concepts learned during these types of workshops is rare." (2). The teachers were exposed to new middle school restructuring actions. They, however, only adopted those that fit into their existing understanding

of the way schools work or those actions that did not require change that would affect their daily work schedules or processes. They made these decisions based on traditional norms of classroom instruction. Furthermore, even if teachers wanted to change their daily practices to include the more difficult and complex actions, systemic schooling structures of district middle schools would not allow for those changes to occur. Teacher practices and beliefs might evolve when organizational changes occur to support school reform. Further research is needed to explore practices and beliefs of teachers in middle schools that actually restructure their organizations (Mergendollar, 1993). Also, teacher practices and beliefs could more easily occur when using collaborative and reflective professional development models. Professional development needs to focus on changing teaching practices to improve student learning. Thus, further research could explore changes in middle school teaching practices of teachers who receive this type of professional development.

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