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A Tri-State Study: Is the Middle School Movement Thriving… or Barely Surviving?

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Abstract

This descriptive study sought to determine the attitudes of middle school teachers in Indiana, Kentucky, and Ohio toward the current implementation of key components of the middle school concept within their schools. Researchers were asked to assess the relationship of state accountability programs to the implementation levels of such components. Random cluster sampling was used to select participants from a population list of districts. One hundred four teachers of 201 (52%) completed the questionnaires. Results revealed that many essential components of effective middle school programs are currently present in the schools, but often less so than in prior years. Other tenets were perceived to be disappearing or absent completely. A lack of fit with state testing/accountability was the primary reason for the current lack of fully implemented middle school components, although a clear majority of teachers did not select this option. Some reported that high-stakes testing/state testing and accountability had some positive effects in the classroom. Teachers, however, believed they have less autonomy. Most perceived a decrease for enrichment, elective, or exploratory courses and activities. In sum, the results from this tri-state study suggested that teachers still consider the middle school concept to be quite relevant and applicable. The real issue would appear to be the intensity, integrity, and strength with which the components are implemented.

Introduction

Anecdotal literature pertaining to the state of the middle school movement over the past few years has been less than encouraging. The literature portends an accelerated shift to K–8 organizational structures and indicts the middle school model for its concessions to young adolescence at the perceived expense of rigorous academics. In the *Rand Report,* Juvonen, Le, Kaganoff, Augustine, and Constant, (2004) argued that the modern middle school is

characterized by learning lags and maturity delays unforeseen by middle school designers. Yecke (2003) charged that many contemporary middle schools overemphasize cooperative learning, peer tutoring, and heterogeneous grouping and, thus, drastically lower expectations and achievement for pupils, especially those who possess high academic ability. In *Mayhem in the Middle: How Middle Schools Have Failed America and How to Make Them Work*, Yecke (2005) summed up her dissatisfaction with the middle school concept, "This is the age of results-based accountability in education, and organizational structures that fail to emphasize achievement and discipline will wither" (p. 16). Manzo's (2000) examination of missed opportunities in the middle school movement provided insight from Joan Lipsitz, an early middle school advocate, "We have the structure right, and we have the climate right, and some schools have even diversified their instructional techniques so that the classes are very interesting. But they still haven't looked at why they're teaching what they're teaching" (p. 15).

Not all of the literature, however, has been pessimistic. Bunting (2005), for example, maintained, "There *are* middle schools that succeed. In these fortunate settings, academics live a life of increase rather than decline, and developmental change translates into maturity rather than devastation" (p. 132). Beane and Lipka (2006) insisted that, on the whole, the middle school concept's components are sound but have not been well implemented over time and rarely as a complete set of principles and practices. As a result, many detractors have indeed mistaken the practices found in too many middle schools for the middle school concept itself. With such a cacophony of conflicting information on both sides of the issue, what assumptions can we make about the current state and vitality of the middle school movement? Are we able to demonstrate a concerted effort to implement the core principles of middle school education as described in seminal documents such as *This We Believe: Successful Schools for Young Adolescents* (National Middle School Association, 2003) and *Turning Points: Preparing American Youth for the 21st Century* (Carnegie Corporation, 1989)?

Paul George (2007) conducted a survey of middle school principals and district directors of education throughout the state of Florida regarding the current implementation of key components of the middle school concept within their respective middle schools. George determined that essential elements of the middle school model are disappearing from the daily experiences of teachers and students. Interdisciplinary team organization, advisory programs, curriculum enrichment and exploratory programs, flexible scheduling, heterogeneous grouping, and intramurals were among the middle school tenets shown to be in decline. Participants suggested that testing and accountability measures were heavily responsible for this apparent degeneration.

George called for a replication of his study in other states to help determine if the trends he captured within Florida are, in fact, revealing or merely idiosyncratic of a single geographic location. The purpose of this study was to address George's recommendation for further investigation yet alter the focus and examine the perceptions of middle school *teachers*. By the very nature of their leadership position, administrators hold a macro view of their buildings and may lack the acuity to discern how a school's mission is perceived or carried out within dozens of individual classrooms. After all, few tenets of the middle school concept are self-actualizing. Conversely, teachers possess a compelling hybrid of formal research blended with "gut instincts" and the ability to work in real settings. According to the National Middle School Association Research Committee (2003), "High-performing middle schools have high-performing, learner-centered leaders—principals and *teachers*—working collaboratively to enhance student learning" (p. 61).

Teachers have the most direct contact with the students and are in the best strategic position to comment on the current feasibility of the middle school concept. Of all the stakeholders who impact a school setting, the classroom teacher, by virtue of his or her role as leader, speaker, diplomat, and disciplinarian, bears the single greatest responsibility for structuring optimal learning environments for students who have wide ranges of abilities, interests, and needs. The teacher is present in the everyday setting, immersed and connected with the students and various interactions that take place around him or her.

According to McEwin and Dickinson (1995), middle school teachers have two related missions. Their primary mission, of course, is to teach young adolescents. A deeper, often unarticulated, mission is the continuance of the middle school movement itself. Sustaining the growth of the middle school movement becomes a daunting task if the very

environments in which teachers practice their craft do not identify or align themselves with the middle school philosophy or fail to understand the tenets underlying the philosophy. The purpose of this study, then, was to determine the extent to which middle school teachers believe the essential elements of the middle school model are implemented within their buildings. This study also sought to highlight (a) factors that allow the middle school concept to flourish and (b) factors that inhibit its growth.

Literature Review

While literature that discusses the middle school concept is plentiful, much of the current literature on the state of the middle school movement as it pertains specifically to *implementation levels* within middle schools is largely anecdotal. Empirical studies producing hard data have been intermittent, at best. Roney, Brown, and Anfara (2004) used rating features such as structure, attitude, skill, climate, and instructional practice to identify 11 middle school constructs outlined in *Turning Points* (1989) and *This We Believe* (2003). They proceeded to interview 24 teachers from both low-performing and high-performing middle schools. Using an assessment of the degree of implementation, the researchers categorized each component as "highly evident" (teachers' responses clearly indicated that the component existed by responding positively to the five criteria), "somewhat evident" (teachers' responses did not completely fit the criteria), or "not evident" (no evidence of implementation or knowledge of the component). They found evidence of eight components in both the low- and high-performing schools. However, findings also illustrated differences between the degrees to which middle level reform is implemented at the various schools. Roney and associates concluded that factors other than the reforms themselves contribute to these discrepancies.

Gregoire and Wolfe (1999) designed and piloted a questionnaire that measured the level of implementation of exemplary middle school practices using Rasch measurement theory. Assistant principals (n = 26) participated in telephone interviews by responding to a 27-item questionnaire that contained items reflecting school scheduling practices, team teaching, teacher planning, school philosophy, tracking, and other exemplary middle school practices. Findings showed that schools with block scheduling exhibit more exemplary middle school practices than do those with traditional class scheduling. In addition, 58% of the sample exhibited exemplary middle school practices based on the most distinguishing questionnaire items.

Cook, Faulkner, and Kinne (2009) examined the perceived level of implementation of key tenets of the middle school concept (as outlined by *This We Believe*) in Kentucky schools designated as "Schools to Watch," as compared to non-designated schools. They determined a slightly higher perceived level of implementation of key tenets of the middle school concept in Kentucky's "Schools to Watch" and revealed overall higher levels of academic achievement as measured by the Kentucky Core Content Test.

Consistent with George's (2007) assertion that the pressure of high-stakes assessment has prompted many educators to abandon the components of the middle school model, Faulkner and Cook (2006) examined middle school teachers' perceptions. Using the responses of 216 educators from 17 middle schools in Northern Kentucky, Faulkner and Cook explored middle grades teachers' perceptions of how high-stakes testing and state accountability standards influence instructional strategies used in the classroom. Results indicated that while teachers acknowledge the importance of including active and student-centered strategies on a consistent basis, the state tests seem to drive the curriculum, resulting in more teacher-directed approaches to instructional delivery.

Brundett (2005) researched the relationship between the level of implementation of the middle school concept and student achievement. The level of implementation of the middle school concept was determined by the Texas Assessment of Middle Level Schools (TAMLS), which was completed by a random sample of middle school principals across Texas. Significant relationships were found between: (a) TAMLS criteria of developmental responsiveness and teacher preparation and professional development and student achievement; (b) school size, the TAMLS criteria, and student achievement; and (c) student ethnicity, the TAMLS criteria, and student achievement. However, the relationship between the level of implementation of the middle school concept and student achievement was not significant.

Meeks and Stepka (2004) investigated the progress toward implementing the middle school concept within Arkansas schools by comparing results from a 2004 survey of principals with results from a similar

survey distributed in 1990. Several noteworthy findings were uncovered. In 1990, for example, a mere 26% of principals indicated their schools had membership in National Middle School Association. By 2004, the total had jumped to nearly 60%. Statistically significant gains were found in the use of interdisciplinary teaming, advisory programs, and flexible scheduling. Meeks and Stepka noted, however, that few principals took the time to provide evidence of how these components were actually used in the schools, so the survey results may be higher than everyday practice.

What is lacking in the literature is a more comprehensive study that incorporates several states into a single data set. With many in the middle school movement perceiving the dynamism of the middle school concept to be precarious, at best, additional data are needed in a more accelerated and deliberate fashion to (a) ensure that classroom teachers embrace program components that align with key recommendations from middle school literature, and (b) shed residual practices inconsistent with the spirit of the middle school philosophy.

Method

This study used a survey instrument created by Paul George that was distributed in his 2007 study of Florida middle schools. The fixed response survey was adapted to address the perceptions of teachers as opposed to administrators, although few changes in wording occurred to retain fidelity to George's original study. (References to specific aspects of Florida state testing were modified slightly). Hence, Part One of the survey invited respondents to estimate the current level of implementation of key components of the middle school concept within a teacher's building. Part Two invited estimates of the relationship of state accountability programs to the level of implementation of components of the middle school concept. Part Three invited additional reflections about aspects of middle school programs in the district. Teachers were asked to estimate the current status of 13 core components of a comprehensive middle school model (National Middle School Association, 2003). Respondents estimated whether the component was "currently implemented fully," "implemented now but less fully than in prior years," "implemented in the past but not currently," or "never implemented." Data for the various sections of the instrument were nominal, in that the responses represented categories with no intrinsic ranking and no use of corresponding numerical codes.

Participant selection began with cluster sampling. The researchers wanted to compile a sample of approximately 200 schools, a figure thought to be illustrative, yet manageable. Using three lists generated by their respective departments of education, the names of all school districts throughout Indiana, Kentucky, and Ohio were obtained. Two hundred one districts (67 from each of the three states) were then selected randomly from the three state master lists. If the district contained a middle school or schools, further random selection took place to choose one teacher from each middle school in the designated districts. If a district did not include a school expressly identified as a middle school, the district was withdrawn, and the selection process repeated to attain an alternate district. It was believed that teachers in so-named middle schools would be more likely than K–8 or junior high school teachers to be familiar with and, thus, able to identify specific tenets from National Middle School Association's vision for a successful school for 10- to 15-year-olds. The three states selected for this study have specialized middle level certification and licensure that focus on understanding the unique nature of the young adolescent learner (Kentucky certifies grades 5–9; Indiana, grades 5–8; Ohio, grades 4–9). Upon completion of the sampling process, 201 middle school teachers were given the questionnaire.

Reliability and Validity

Both face validity and item validity were assessed through data gathered in a pilot study with local middle school teachers who were not included in the final sample. Ten pilot study participants completed the entire survey and then answered the following questions about whether the survey allowed them to accurately and fully report their attitudes and perceptions of online teacher preparation programs. (1) Which, if any, items on the survey were unclear to you? Explain. (2) Which, if any, items did you find difficult to answer? Explain. (3) This survey uses fixed attitudinal responses. While completing the survey, did you feel that this scale adequately allowed you to express your opinion? If not, explain. (4) In your opinion, which, if any, items on the survey display a bias on the part of the research? Explain. (5) Provide any additional comments that you would like to make. Analysis of respondents' comments to the survey questions revealed no pattern of misinterpretation for any item or any reported impediments to their understanding of, or ability to respond to, survey items.

Because this descriptive "snapshot" study used self-reporting and subsequently analyzed each item separately, a scale was not invoked and, therefore, internal consistency and inter-rater reliability ratings were not viable. Threats to internal validity, such as history, maturation, and mortality were not factors. Credibility, or the capacity of a piece of research to provide a faithful description and interpretation of a human experience (Lincoln & Guba, 1985), was enhanced through independent corroboration from multiple informants. The use of quantitatively measured attributes demonstrated Wolcott's (1973) typicality of a phenomenon, or the extent to which attributes may be compared and contrasted along relevant dimensions with other phenomena.

Results

Of the 201 mailed questionnaires, 104 middle school teachers from three states (33 from Indiana, 35 from Kentucky, 36 from Ohio) completed the questionnaires, for a return rate of 52%. Three questionnaires were disqualified because more than half of the questions were left unanswered. A balance of rural, suburban, and urban school districts was present within the final sample. An overview of the organizational structures represented by the teachers in the sample is provided in Table 1.

Table 1
Organizational Structures Represented by Teachers in Study

Organizational structure	Number of teachers
Grades 6–8	70 (.67)
Grades 7–8	21 (.20)
Grades 5–8	12 (.12)
Grades 5–6	1 (.01)

n = 104

As noted, Paul George previously used this survey instrument in his 2007 research, which was published by the Florida League of Middle Schools. He suggested contacting Dr. Ken McEwin regarding the questionnaire (personal communication, February 12, 2010). When asked about any available reliability data, McEwin indicated the survey instrument is a modification of the one used by William Alexander in 1963 in his classic study of middle schools. Alexander and McEwin replicated the study approximately 20 years later in 1986. McEwin insisted the instrument is a variation of one that has been used and accepted by authorities since the 1960s. No reliability tests have been run (or requested) in subsequent years (personal communication, February 15, 2010).

The current school enrollments in the sample are displayed in Table 2.

Teachers in the study perceived that several elements of the middle school concept are implemented fully in their schools (see Table 3). Granted, the numbers varied as to the strength of those convictions. The highest total (87%) came in response to the presence of an after-school extra-curricular program. Next, 79% of respondents believed that teachers in their building are chosen based on their certification, interest, and skill with young adolescents, as opposed to content area knowledge only. Active learning strategies centered on the learning styles of young adolescents were reported at full implementation

Table 2
School Enrollment

250 or less	2 (.02)
250–500	34 (.33)
500–750	42 (.40)
More than 750	26 (.25)

n = 104

Table 3
Levels of Implementation of Middle School Components within Schools

	Never been implemented	Implemented in the past, but not currently	Implemented now, but less fully than in prior years	Currently implemented fully
After-school extra-curricular program	3 (.02)	1 (.01)	10 (.10)	90 (.87)
Teachers chosen on the basis of their certification, interest, and skill with young adolescents	6 (.06)	7 (.07)	9 (.09)	82 (.79)
Active learning strategies	7 (.07)	10 (.10)	16 (.15)	71 (.68)
Interdisciplinary team organization	7 (.07)	10 (.10)	17 (.16)	70 (.67)
A curriculum with a broad range of exploratory opportunities	15 (.14)	10 (.10)	28 (.27)	51 (.49)
Building facilities designed especially for middle school students	36 (.34)	10 (.10)	7 (.07)	51 (.49)
Regular, systematic faculty/ administrator shared decision-making model	21 (.20)	9 (.09)	24 (.23)	50 (.48)
Comprehensive transition programs for sixth graders and rising eighth graders	41 (.38)	10 (.10)	11 (.11)	42 (.41)
Primarily heterogeneous grouping	24 (.23)	14 (.13)	29 (.28)	37 (.36)
Teacher-based guidance, advisory, or mentoring program	29 (.28)	26 (.25)	16 (.15)	33 (.32)
Flexible scheduling controlled, in part, by teams of teachers	47 (.45)	16 (.15)	8 (.08)	33 (.32)
Staff development and program renewal focused on the unique characteristics of young adolescents	20 (.19)	25 (.24)	28 (.27)	31 (.30)
Special interest activities program emphasizing student and teacher choice	48 (.46)	27 (.26)	7 (.07)	22 (.21)
A long block schedule of no more than five periods per day	69 (.66)	19 (.18)	1 (.01)	15 (.15)
Organizational arrangements that encourage long-term teacher-student relationships	73 (.70)	19 (.18)	5 (.05)	7 (.07)

$n = 104$

by 68% of respondents. The next tenet with a high level of full implementation was the use of interdisciplinary teams (67%). Three components were close to the 50% mark: building facilities designed especially for middle school students (49%); curriculum with a broad range of exploratory opportunities (49%); and a regular, systematic faculty/administrator shared decision-making model (48%).

Also captured in Table 3 are those tenets for which a clear majority of respondents selected the "never been implemented" option. Seventy percent of the teachers indicated that organizational arrangements that encourage long-term teacher-student relationships (looping, multiage grouping, school-within-school, multiyear houses) were not in place. A long block schedule of no more than five periods per day was reported as "never been implemented" by 66% of teachers. According to 46% of respondents, special interest activities programs emphasizing student and teacher choices were also reported as "never been implemented."

A lack of fit with state testing and accountability measures was the primary reason for the current lack of fully implemented middle school components within the respondents' schools, although none of the options surpassed a 50% majority (see Table 4).

A "lack of fit with state testing/accountability" should be presumed to mean that teachers and school administrations felt the need to replace some tenets of the middle school philosophy with teacher-centered approaches that focus on test-taking skills and memorization of lower-level facts.

On this issue, 11 teachers provided written comments in addition to their ratings. According to one teacher, "We have poor principal leadership." Another teacher expressed, "We have too many administrative decisions that do not support staff recommendations." Yet another teacher explained, "We moved away from a very interdisciplinary program because of the onset of OAT testing and poor first-year performance in social studies."

Teachers were asked to choose the most likely explanation for their schools' ability to maintain the components of the middle school program believed to be currently present (see Table 5). Faculty buy-in was the reason selected most.

Results of how the teachers perceived the effects of high-stakes testing, state testing, and accountability measures on various components in their schools are displayed in Table 6.

A chi square analysis comparing the teachers across the three states on each of the fixed responses for each of the tenets revealed significant differences

Table 4
Teachers' Best Explanation for Decline in Middle School Components

Lack of fit with state testing/accountability	50 (.48)
Funding	29 (.28)
Central office opposition	21 (.20)
Faculty opposition	4 (.04)
Parent/community support	0 (.00)

n = 104

Table 5
Teachers' Best Explanation for Their Schools' Ability to Maintain Middle School Components

Faculty buy-in	51 (.49)
Perceived success with state testing/accountability	32 (.31)
Central office support	14 (.13)
Parent/community support	4 (.04)
Funding	3 (.03)

n = 104

Table 6
Teacher Perceptions of the Effects of High-Stakes Testing/Accountability on Their School

	Negative effect	Positive effect	No effect
Achievement gap	49 (.47)	33 (.32)	22 (.21)
Advisory program	30 (.29)	23 (.22)	51 (.49)
Curriculum	44 (.42)	53 (.51)	7 (.07)
Electives	58 (.56)	21 (.20)	25 (.24)
Gifted programs	42 (.40)	37 (.36)	25 (.24)
Instructional delivery	48 (.46)	46 (.44)	10 (.10)
Instructional grouping	42 (.40)	41 (.39)	21 (.22)
Practices	38 (.37)	52 (.50)	14 (.13)
Remediation practices	22 (.21)	76 (.73)	6 (.06)
Scheduling	46 (.44)	28 (.27)	30 (.29)
School climate	68 (.65)	26 (.25)	10 (.10)
Staff development	43 (.41)	36 (.35)	25 (.24)
Student learning	56 (.54)	40 (.38)	8 (.08)
Teacher planning time	46 (.44)	26 (.25)	32 (.31)
Teaming	34 (.33)	36 (.35)	34 (.32)
Transition programs	27 (.26)	20 (.19)	57 (.55)

$n = 104$

on two items. Kentucky teachers comprised a significantly higher total of those respondents who believed high-stakes testing/accountability had a positive effect on electives within their schools, while Ohio teachers recorded a significantly higher number of respondents who indicated high-stakes testing/accountability had a negative impact on instructional delivery.

The results of how teachers perceived high-stakes testing/state testing and accountability have affected the use of *time* in their schools in displayed in Table 7.

A chi square analysis comparing the teachers across the three states on each of the fixed responses for each of the tenets in Table 7 revealed significant differences on three items. The representation of Indiana teachers who believed high-stakes testing/accountability had a negative effect on time available for advisory programs was significantly higher than that of Kentucky or Ohio; Indiana teachers' choice was "no effect" for the same tenet. The number of Ohio middle school teachers who felt high-stakes testing/accountability had no effect on remediation was statistically significant.

Teachers were asked to reflect on curriculum changes at their schools. Sixty-seven percent reported seeing additional core courses, remediation, and pullout/tutoring courses. Twenty-three percent expressed that no substantial changes have been made, while 10% perceived additional enrichment, elective or exploratory courses, and activities.

Ninety-four percent of the teachers believed that their district will continue the current middle level grade configuration and did not believe their district intends to open more K–8 schools in the future. Eighty-nine percent of the teachers would not favor the middle grades being included in an elementary building. When asked for the most recent time their faculty, as a unit, was involved in professional development dealing with the characteristics and needs of young adolescents, 38% indicated it occurred "within the last 6 months," while 22% believed it happened "more than a year ago." Fourteen percent of teachers said they "do not recollect any such training." Finally,

Table 7
Teacher Perceptions of the Effects of High-Stakes Testing/Accountability on the Use of Time in Their School

	Positive effect	Negative effect	No effect
Advisory program	14 (.13)	50 (.49)	40 (.38)
Area collaboration	38 (.37)	40 (.38)	26 (.25)
Cooperative learning	36 (.35)	48 (.46)	20 (.19)
Departmental/Subject	45 (.43)	38 (.37)	21 (.20)
Direct instruction	45 (.43)	47 (.45)	12 (.12)
Electives	6 (.06)	75 (.72)	23 (.22)
Gifted programs	20 (.19)	48 (.46)	36 (.35)
Instruction	41 (.39)	55 (.53)	8 (.08)
Remediation	60 (.58)	32 (.31)	12 (.12)
Staff development	31 (.30)	49 (.47)	24 (.23)
Teacher planning time	23 (.22)	56 (.54)	25 (.24)

$n = 104$

the survey asked teachers to consider their autonomy and freedom as a classroom teacher (i.e., the freedom to make choices about the program of your school without interference from central office) and indicate if they believe they have more or less autonomy and freedom than in prior years. Eighty-one percent felt they had less autonomy.

Discussion

Status of Middle School Components

The results from 104 middle school teachers in Indiana, Kentucky, and Ohio were quite similar to those uncovered by George in his 2007 investigation of administrative attitudes toward the current implementation levels of middle school tenets throughout Florida. Both studies have suggested that many elements of the middle school movement are declining within individual schools. However, the tri-state teachers reported that several components were doing well or very well in their building.

First, after-school extracurricular programs and interscholastic sports were found in a majority of the schools (87% currently fully implemented; 10% implemented, but less fully than in prior years), with only 3% of teachers reporting either low or no implementation of such programs. In George's (2007) study, a much smaller majority (53%) of administrators reported the attainment of extracurricular programs and interscholastic sports, so the teachers in Indiana, Kentucky, and Ohio were clearly more optimistic about the presence of this tenet, which provides a vehicle for academically focused opportunities and, likewise, gives students a sense of "belonging" at the school.

A large number of respondents also indicated that teachers in their schools were chosen based on their certification and skill with young adolescents (79% currently fully implemented; 9% implemented, but less fully than in prior years). Such a number was very consistent with George's (2007) study, which revealed that 72% of administrators felt the same way. The Carnegie Council on Adolescent Development (1989) report recommended that middle schools be staffed with teachers who are expert at teaching young adolescents and have the education and training necessary for the assignment. As recently as 1995, McEwin, Dickinson, and Jenkins found that fewer than one in four middle grades teachers had received specialized preparation before they began their careers. This practice of staffing middle level schools with teachers and other professional personnel who lack special preparation for working with young adolescents has been a perennial roadblock to excellence in middle level education. In short, preservice teacher programs, state departments of education, and the profession itself have struggled to divest themselves from the elementary-secondary mindset and, thus, largely have failed to recognize the essentiality of introducing specific preparation programs for middle level teachers. The results from this study would suggest that progress has, in fact, been made in the time since McEwin, Dickinson, and Jenkins released

their mid-1990s findings. As noted previously, Indiana, Kentucky, and Ohio have specific licensure/certification emphasizing middle grades education.

Sixty-seven percent of teachers conveyed that an interdisciplinary team organization was currently fully implemented, and 16% found this type of organization to be implemented, but less fully than in prior years. In George's (2007) study, however, 67% of all respondents described interdisciplinary team organization as "either present in much more limited fashion than in the past, once present but now completely absent, or never having been implemented" (p. 3). Interdisciplinary team organization is less fully functioning in a majority of Florida middle schools than in Indiana, Kentucky, and Ohio schools. Middle grades literature consistently identifies interdisciplinary teaming as the most significant contribution of the middle school movement to the education of young adolescents (Flowers, Mertens, Mulhall, & Crawczyk, 2007). Interdisciplinary teaming is certainly consistent with the structure outlined in *This We Believe* (National Middle School Association, 2003) and *Turning Points* (Carnegie Council for Adolescent Development, 1989), in that both documents call for organizational structures that support meaningful relationships and a shared vision that guides decisions. For students, teams offer stable relationships with teachers and peers (Jackson & Davis, 2000).

On the upside, teachers made continual progress in the area of active learning strategies based on the learning styles of young adolescents. Sixty-eight percent of the 104 teachers in the study reported these strategies as currently implemented fully, and 15% reported them to be implemented now, but less fully than in prior years, for a combined total of 83%, while George's study similarly found a combined 84%. Because cognitive growth occurs irregularly and gradually, most middle level students require ongoing, concrete, experiential learning to develop intellectually (National Middle School Association, 2003).

A near majority (49%) of teachers described their buildings as facilities designed especially for young adolescents. Often, the physical learning environment prevalent in elementary and high school buildings does not coincide with the peculiar needs and interests of young adolescents. Conversely, schools designed specifically for young adolescents typically take critical design issues such as scale (breaking up the middle school into smaller parts), organization (small communities or clusters for learning), and overall appearance (conveying a message that learning is fun and that school is important and welcoming) into great consideration.

Implementation of other key components of the middle school concept was far less promising. Organizational arrangements that encourage long-term teacher-student relationships (e.g. looping, multiage grouping, school-within-school, multiyear houses) were never implemented, according to 70% of teachers, and implemented in the past, but not currently, according to18% of teachers. Such a finding is not altogether surprising. In Daniel's (2007) *NMSA Research Summary on Multiage Grouping,* he reported that research on this topic at the middle level is scarce, due, in large part, to the relative infrequency of the practice. Interestingly, Kentucky was once considered to be in the forefront of multiage grouping in middle schools but has seen the scope of its multiage initiative reduced by half (Pardini, 2005). In the same way, George (2007) found strategies that lengthen the time teachers and students stay together to be "largely absent from Florida middle schools" (p. 3).

Sixty-six percent affirmed that a long block schedule of no more than five periods per day was never implemented, and 18% claimed it was implemented in the past, but not currently. Again, such findings are not necessarily peculiar to the three states included in this study. Daniel (2007) conceded that middle school advocates, for several decades, have promoted flexible scheduling (including block scheduling), but middle grades schools have been slow to jettison the traditional fixed-period day. The rationale behind flexible scheduling remains the opportunity for students to experience more time for engagement with a variety of learning strategies. George (2007) declared block scheduling to be nonexistent in 92% of Florida middle schools.

Effects of Accountability Measures

Teachers expressed that high-stakes testing/state testing and accountability measures had some positive effects within their respective schools. Seventy-three percent declared that remediation practices had been positively influenced. Fifty-one percent of respondents believed that curriculum was positively affected. Fifty percent felt that the use of "best" practices was positively impacted. Correspondingly, in his Florida study, George (2007) reported that 70% of administrators believed that accountability measures had positively impacted

curriculum. These results differ from Faulkner and Cook (2005), who found that teachers in Northern Kentucky felt, "First and foremost, that the pressures of state assessments, including the seventh grade portfolio assessment, have negatively influenced the curriculum" (p. 10).

Conversely, school climate (65%), electives (56%), student learning (54%), and the achievement gap (47%) were all components of a middle school program that testing had adversely affected. A margin of teachers perceived that testing had no effect on transition programs (55%) or advisory programs (49%). George's (2007) findings were similar, except 58% of the administrators in his study reported that accountability had *positively* affected the achievement gap.

When reflecting on the effect of high-stakes testing/ state testing and accountability measures on the use of time within their schools, only remediationdrew a majority of "positive effect" responses, with 58% of teachers recording such an opinion. Components for which the use of time was believed to be negatively affected by testing included: electives (72%), job planning time (54%), advisory (49%), instruction (53%), staff development (47%), gifted programs (46%), and cooperative learning (46%). The argument could certainly be made that these particular components are the core of the middle school philosophy. If teachers are spending considerable time in preparation for state mandated tests, they clearly have less time for meaningful systemic reform (i.e., teaching for student understanding; self-direction and autonomy; and providing opportunities for interaction among students).

Conclusion and Implications

In total, the results from this tri-state study suggest that middle school teachers still consider the middle school concept to be quite relevant and applicable in their buildings. Of the 14 components included in the survey, a majority of teachers found 11 of the tenets to be at some level of implementation, either "currently fully implemented" or "implemented now, but less fully than in prior years." The real issue appears to be the intensity, integrity, and strength with which the components are actually implemented. In other words, the middle school movement itself may not be in question as much as the apparent inability to execute the philosophy as intended. A large majority of respondents did not foresee their buildings making a switch to a K–8 structure, which would seem to challenge much of the literature that heralds a mass exodus away from middle schools due to perceived low student performance, parent dissatisfaction, costs, and school size. While slight numerical differences existed, the data from this study were strikingly similar to the findings of George with his administrators in Florida, suggesting that the middle school movement is retaining its position as a critical factor in middle level reform but is, perhaps, in the process of teetering, not so much in ideology but in realization.

A particularly telling survey item was the item regarding teacher perception of curriculum changes within their schools. Only 10% of the respondents believed there to be an increase in enrichment, elective or exploratory courses while 67% reported an increase in core courses, remediation, pullout and tutoring classes. Much of this imbalance has been attributed to the emphasis on state testing and the subsequent need to focus on content coverage. Consistent with this trend, 81% of the teachers felt they had less autonomy now than in previous years.

Strong and *consistent* professional development remains at the core of the middle school movement. "One-shot" workshops tend to increase awareness but are typically not deep enough or engaging enough to develop new knowledge and skills that can be applied with confidence to actual classroom teaching. This study served to isolate areas of concern, while simultaneously articulating the tenets, which appear to be implemented in most schools in a satisfactory manner. As a result, precious professional development time can be used to strengthen those areas in which middle school teachers believe the middle school concept has experienced decline rather than to continually revisit those components for which concurrence is already in evidence.

Limitations of the Study

This study recognized that self-report descriptive research of this nature cannot establish cause-and-effect, or answer *why* middle level teachers feel the way they do about the various tenets of the middle school philosophy. Resolution of such issues would require conducting additional studies using other research designs. For instance, a future qualitative study in the form of an interview study might focus on the in-depth perceptions of teachers and allow for elaboration as to the reasons certain middle school components are either not in place at all or have not been implemented vigorously.

Sampling in this study used only so-named middle schools and did not include middle grades configurations in elementary buildings or schools referred to as "junior high schools." The selection process was limited to those middle level schools for which a roster of teachers could be attained with reasonable effort after a particular school was randomly selected. While a randomly selected school was disqualified only twice, readers of this study should be aware of the inherent sampling bias. Data, of course, are limited to those teachers who received a questionnaire and returned it. Because a single teacher was selected from each school, it is very possible, and quite likely, that other educators in the same building might hold differing perspectives on the implementation of these various middle school concepts. Although the sample size for this study was adequate, generalizability of the results should not be overstated. As with any questionnaire, respondents can be unduly influenced by the scope of their general understanding and private interpretations of question content, by any anticipatory mindset that may be present, and by the amount of time devoted to thoughtfully completing the instrument. For instance, a given respondent may not necessarily interpret "teaming" as anything more than common grade level planning time.

Because the informed consent presented to potential respondents promised anonymity, data were subsequently collected and analyzed as aggregate data. Individual questionnaires were not isolated for examination. Thus, the capability for post hoc analysis was extremely limited due to the presence of group data only.

Future Research Needed

The endeavor initiated with this study calls for further extension. As George (2007) noted when he sought replication of his work, it is generally accepted that the middle school philosophy is followed with greater integrity in certain regions and geographic districts than in others. The question again begs if the tendencies exposed in this study are a territorial peculiarity or a national trend. Extension of the study into other sections of the country, along with increased sample sizes, would serve to capture the attitudes of more and more teachers.

Recommendations

The stakeholders within the middle school movement must recognize and acknowledge the erosion of many key components of the philosophy within a substantial number of schools but, at the same time, be reinvigorated by data from this study that suggest a large percentage of important tenets are still quite visible. Increasing efforts to educate administrators, teachers, and the public about the misconceptions regarding the middle school movement is at the center of recovery. Reformers must argue, as did Beene and Lipka (2006), that much of the harsh criticism leveled at the middle school concept is, in fact, based on observed practices in classrooms and buildings where the model is not sufficiently implemented as originally conceived. Then, professional development must be intensive and continually emphasize that the middle school model is a coherent *package* built around student engagement, improved relationships between teachers and students, small collaborative teaching teams, and an integrated curriculum. The characteristics are interdependent and must be implemented in concert (National Middle School Association, 2003). The model was never intended to be viewed as a group of disparate elements from which to pick and choose. Finally, there must be renewed commitment to continue to recruit, train, and hire teachers (and administrators) with specialized knowledge about teaching young adolescents.

In his 2007 study, George commented that perhaps the emergent middle school of the 21st century will evolve into a school that effectively incorporates and balances both accountability and developmental responsiveness. To flourish, the middle school movement must reconcile the inevitability of state testing (and its critical elements of curriculum clarity, targeted instruction, and public scrutiny) with the type of culture, vision, and leadership characterized in *This We Believe* (National Middle School Association, 2003). George (2007) recalled a conversation with William Alexander in which Alexander stated, "If the middle school concept, and the movement associated with it, stopped evolving, it would cease to be a dynamic, creative force in the education of young adolescents" (p.10). If those who teach and work with middle level students can ever succeed in moving the middle school concept from theory to practice, we may find that the solution for meeting the academic, emotional, and social needs of young adolescents has been right there all along—we simply never unwrapped it.

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