New York State Middle Schools and Instructional Scheduling, Teaming and Common Planning: A Descriptive Study

This manuscript has been peer-reviewed, accepted, and endorsed by the National Council of Professors of Educational Administration (NCPEA) as a significant contribution to the scholarship and practice of school administration and K-12 education.

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Data regarding the type of instructional scheduling utilized along with the use of teaming and common planning at the middle school level has not been collected nor reported on the New York State School Report Card, and therefore it is not known whether and how middle schools are implementing these three school supports. Consequently, the purpose of this research was to discover whether these three school supports are present or absent in New York State middle schools in order to provide direction for educators, administrators, community members, and policymakers in making informed decisions regarding middle level education in the State of New York. This descriptive study examined to what extent, if any, three school supports (instructional scheduling, teaming, and common planning) are in existence in New York State middle schools.

The results indicated that the majority of principals utilize a traditional departmentalized schedule with interdisciplinary and/or single-graded teaming with varying duration and frequencies of team, grade level, and departmental common planning. Statistically significant differences existed between specific principals' beliefs and grade configuration, school location, and years of principal experience at current school.

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Middle level education is critical for the learning, development, and success of young adolescents (National Middle School Association, 2010a). The number of middle schools nationally has increased from less than 5,000 in 1971 to more than 13,000 in 2008 (McEwin & Greene, 2011). A plethora of school supports are put into place at this level to assist and maximize student learning. The importance of three school supports (instructional scheduling, teaming, and common planning) at the middle school level has been discussed and examined by scholars and advocacy organizations.

In general, and for the purposes of this study, teaming refers to a way of organizing staff so that a group of teachers share: the same group of students, responsibility for planning, teaching, and evaluating the curriculum and instruction, similar schedules and the same area of the school building (Boyer & Bishop, 2004). Furthermore, common planning is defined as a regularly scheduled time during the school day when staff members who teach the same students meet for planning, parent conferences, material preparation, and student evaluation (Kellough & Kellough, 2008).

In both *Turning Points: Preparing American Youth for the 21st Century* (Carnegie Council on Adolescent Development, 1989) and *Turning Points 2000: Educating Adolescents in the 21st Century* (Jackson, Davis, Abeel, Bordonaro, & Carnegie Foundation on Adolescent Development, 2000) the authors examined a theoretical framework of a middle school model focusing on the following three variables as they related to learning: scheduling instructional periods to maximize learning, creating small communities for learning, and providing time for teachers to plan and prepare together. In addition, research that has focused on the middle school level has found that these three school supports – together or separately – have a positive impact on student learning (Gill, 2012; Boyer & Bishop, 2004; Brown, 2001; Cook & Faulkner, 2010; Flynn, Lawrenz, & Schultz, 2005; Grenda & Hackmann, 2014; Kiefer & Ellerbrock, 2012; Mattox, Hancock, & Queen, 2005; Mertens, 2013; Mertens & Flowers, 2006; Wallace, 2007; Wilson, 2007).

The empirical research conducted in the past 10 years regarding instructional scheduling found, to some extent, that the type of instructional schedule could have a positive influence on student achievement. Mattox et al. (2005) examined the effects of block scheduling on middle school students' math achievement over a 6-year period and concluded that student achievement improved each year in mathematics as schools transitioned from traditional to block scheduling. Gill (2011) examined differences in the performance of students on state examinations of math and reading relative to whether the student was exposed to an A/B (alternating day) block schedule or a traditional schedule. Gill (2011) concluded that there were no significant differences between the percentage of students earning a pass/advance score in reading and math in the traditional or block scheduled schools. Flynn, Lawrenz, & Schultz (2005) examined block scheduling and mathematics and the potential differences in engagement in standards-based curriculum and instruction practices between block scheduling and traditional scheduling schools. They concluded that despite some differences, the data demonstrated that teachers in both types of schedules (block and traditional) tend to follow similar patterns of whole class instruction, small group instruction, and individual student work.

Current research posits that teaming has a positive influence on school reform, students' social bonding, the fostering of an adolescent-centered community, student perceptions, pre-service training, and distributive leadership. Wallace (2007) examined students' perceived levels of social bonding with their peers by comparing two configurations of sixth grade students and core teachers and concluded that although the degree to which interdisciplinary teaching team configurations impact student social bonding is small, it is considered to be significant. Kiefer and Ellerbrock (2012) explored how one interdisciplinary team developed a responsive adolescent-centered

community for eighth-grade students. They discovered that the emergent relationship focused on organizational structures (interdisciplinary teaming, flexible scheduling, homeroom, team teachers and common planning time) that served as a way to promote the adolescent-centered community. Boyer and Bishop (2004) examined students' perceptions of effective interdisciplinary teaming and indicated that students had a sense of acceptance into a community along with a belief that decision-making was shared among students and teachers. In addition, the authors stated that students learned from each other and appreciated each other's differences and that being on a team increased their self-confidence.

Similarly, ten years of research concerning common planning indicates that the benefits include: improved student learning, more effective learning environment, better collaboration and networking, better communication, and more focused professional development. Cook and Faulkner (2010) examined the use of common planning time by two interdisciplinary teams in Kentucky. The researchers concluded that common planning time afforded the schools the opportunity to meet the needs of the children. Mertens (2013) examined common planning from the perspective of: What are the teachers' understandings of common planning time?, How do teachers use their common planning time?, How are teachers prepared professionally to use their common planning time? What are the perceived benefits of common planning time? What are the perceived barriers to common planning time? The results indicated that the most common activities during common planning were discussing student learning problems and facilitating special team activities. In addition, the authors concluded that teachers received small amounts of training on common planning during their pre-service preparation programs and that teams with higher levels of common planning time reported higher levels of interdisciplinary team practices.

Problem

Data regarding the type of instructional scheduling utilized along with the use of teaming and common planning at the middle school level has not been collected nor reported on the New York State (NYS) School Report Card, and therefore it is not known whether and how middle schools are implementing these three school supports, which have been identified in the literature as positively influencing student learning and efficacy (Jackson, Davis, Abeel, Bordonaro, & Carnegie Foundation on Adolescent Development, 2000). Consequently, the purpose of this research was to determine to what extent these three school supports are present or absent in NYS middle schools in order to provide direction for educators, administrators, community members, and policymakers in making informed decisions regarding middle level education in the State of New York. This descriptive study examined to what extent, if any, three school supports (instructional scheduling, teaming, and common planning) are in existence in NYS middle schools.

Purpose & Research Questions

The purpose of this study was to determine to what extent the three school supports previously discussed, instructional scheduling, teaming, and common planning are either absent or present in NYS middle schools. The current literature on middle level education has indicated the need for additional research to be conducted on this topic (Mertens & Flowers, 2006; National Middle School Association, 2010a; National Middle School Association, 2010b). Additionally, this study was designed to support the seven identified research recommendations of the National Middle School Association (NMSA, 2010a) to expand the middle grades education research base.

Three research questions were addressed in this study. The first research question focused on the current instructional scheduling practices of NYS middle schools categorized with an average need/resource capacity. A need/resource capacity (N/RC) category is a measure of the ability of a district to meet the needs of its students with local resources. The second research question examined to what extent, if any, is teaming present or absent in NYS middle schools categorized with an average need/resource capacity. The final research question explored to what extent, if any, is common planning present or absent in NYS middle schools categorized with an average need/resource capacity.

Methodology

Survey Construction and Data Collection

The research design used in this study was a descriptive quantitative survey that identified the presence or absence of three school supports (instructional scheduling, teaming, and common planning) in NYS middle schools. A self-administered online web survey, provided through Survey Monkey (surveymonkey.com), was designed to identify the presence or absence of these three school supports and was completed by a selected sample of NYS middle school principals. The web based survey consisted of closed-ended questions, partially open-ended questions, or Likert rating scale questions and statements.

Prior to conducting the study, the survey was piloted to determine validity and reliability through submission to a panel of experts for critique and after revisions to a group of middle school principals. Survey reliability was found to be .75 using Cronbach's Alpha, which more than met the accepted criterion level.70.

A limitation of this study was that the sample was restricted to NYS middle schools with an average need/resource capacity and therefore cannot be generalized to other middle schools with different need/resource capacities. A second limitation was that the sample was restricted to NYS middle schools with either grades five through eight, sixth through eight, or seven through eight and therefore cannot be generalized to other middle schools with different grade configurations. A delimitation of this study was that district and school websites were used to determine current principal names and email addresses.

It was assumed for this study that principals would answer the questions honestly and without bias in order to support the research being conducted. With a response rate of 28%, the sample was considered large enough to justify the exploration that certain patterns and trends might emerge from the analysis of the data collected to provide plausible conclusions that further, statistically reliable studies might confirm.

Sample

The participants were principals from NYS middle schools whose district was categorized as having an average need/resource capacity during the 2011-2012 school year. Middle schools included in this study had grade configurations comprised of 5 through 8, 6 through 8, and 7 through 8. These three grade configurations were selected because they account for approximately 89% of all separately organized public middle schools in the country (McEwin & Greene, 2011). The list of middle school principals and their email addresses were obtained by downloading the NYS School Report Card database for 2011-2012, along with the use of district/school websites to verify contact information.

Results

Demographic Results

The demographic information compiled indicated that the sample of principals surveyed was 81% male with an average age of 45 and an average of 5 years being principal of their school. The demographic data regarding the respondents' schools indicated that 60% of the middle schools were suburban and 65% consisted of grades 6, 7, and 8 with an average population of 704 students. With regard to race/ethnicity, 98% of the student population was identified as White. In addition, these middle schools had a 95% attendance rate, 5% suspension rate, 27% free/reduced lunch rate along with 76% of the middle schools maintaining yearly Adequate Yearly Progress (AYP) in ELA and 82% maintaining yearly AYP in Mathematics.

Instructional Scheduling

Findings regarding type of instructional schedule indicated that the sample of principals predominantly utilized a traditional departmentalized instructional schedule that offered a contingency of exploratory courses that include physical education, music, technology, art, health, and home and careers. Table 1 shows that approximately 70% of the respondents utilized a traditional departmentalized schedule. Chi-square analysis determined that the observed frequency of the type of instructional schedule selected by the respondents was statistically significant (χ^2 (6, N=65)=164.277, p<.001).

Table 1

Chi-square Analysis on Type of Instructional Schedule (N=65)

	Percentage	Frequency	Observed *N*	Expected *N*	Residual	Standardized Residual
Traditional Departmentalized Schedule	69.2%	45	45	9.3	35.7	11.70
Alternate Day Block Schedule	4.6%	3	3	9.3	-6.3	-2.07
Flexible Interdisciplinary Block Schedule	1.5%	1	1	9.3	-8.3	-2.72
Modular Schedule	1.5%	1	1	9.3	-8.3	-2.72

Rotating Schedule	3.1%	2	2	9.3	-7.3	-2.39
Dropped Schedule	0.0%	0	0	0	0	0.00
Rotating Dropped Schedule	7.7%	5	5	9.3	-4.3	-1.41
Other (please specify)	12.3%	8	8	9.3	-1.3	-0.43

Conversely, when examining preferred instructional scheduling models, a Friedman test for mean rank was found to be statistically significant (χ^2 (6, N=65)=219.105, p<.001) when respondents were asked to rank order from 1 through 7 the preferred instructional model. Table 2 displays the mean, mean rank and standard deviation for each instructional scheduling model. The most popular scheduling model was the Flexible Interdisciplinary Block Schedule with a mean rank of 2.15, while the least popular was the Rotating Dropped Schedule with a mean rank of 6.45.

Table 2

Friedman Test on Instructional Scheduling Models (N=65)

	N	Mean	Standard Deviation	Mean Rank
Flexible Interdisciplinary Block Schedule	65	2.15	1.314	2.15
Traditional Departmentalized Schedule	65	2.45	1.323	2.45
Alternate Day Block Schedule	65	3.32	1.592	3.32
Modular Schedule	65	3.63	1.206	3.63
Rotating Schedule	65	4.18	1.467	4.18
Dropped Schedule	65	5.82	.950	5.82
Rotating Dropped Schedule	65	6.45	1.392	6.45

In addition to ranking different types of instructional schedules, the respondents were asked to indicate their agreement or disagreement with 10 statements concerning the preferred preferences of an instructional schedule. Utilizing a Chi-square analysis of these responses all but

one of the 10 statements, *Longer class periods can have a positive influence on student behavior*, showed statistical significance. Table 3 displays the Chi-square results for instructional scheduling beliefs.

Table 3

Chi-square Analysis Results on Instructional Scheduling Beliefs (4-Strongly Agree; 3-Somewhat Agree; 2-Somewhat Disagree; 1-Strongly Disagree)*.

Instructional schedule should allow teachers an opportunity to see students at different times during the day (χ^2 (3, *N*=64)=48.875, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
1	1	16.0	-15.0	-3.75
2	5	16.0	-11.0	-2.75
3	36	16.0	20.0	5
4	22	16.0	6.0	1.5
Total	64			

The instructional schedule should support flexibility for periods to be of different lengths. (χ^2 (3, *N*=63)=38.270, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
1	3	15.8	-12.8	-3.22
2	4	15.8	-11.8	-2.97
3	27	15.8	11.3	2.82
4	29	15.8	13.3	3.32

Total	63			

An instructional schedule can have a positive influence on student learning. (χ^2 (1, *N*=65)=36.938, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
3	8	32.5	-24.5	-4.30
4	57	32.5	24.5	4.30
Total	65			

Longer class periods can have a positive influence on student learning. (χ^2 (2, *N*=64)=19.344, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
2	5	21.3	-16.3	-3.53
3	27	21.3	5.7	1.23
4	32	21.3	10.7	2.32
Total	64			

Longer class periods can have a positive influence on student behavior. (χ^2 (2, *N*=64)=4.156, *p*<.125)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
2	18	21.3	-3.3	-0.71
3	29	21.3	7.7	1.67

4	17	21.3	-4.3	-0.93
Total	64			

Longer class periods can have a positive influence on the relationship between teacher and student (χ^2 (2, *N*=64)=19.906, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
2	5	21.3	-16.3	-3.53
3	33	21.3	11.7	2.53
4	26	21.3	4.7	1.02
Total	64			

The current instructional schedule in my school meets the needs of all students (χ^2 (3, *N*=64)=25.875, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
1	4	16.0	-12.0	-3.00
2	21	16.0	5.0	1.25
3	30	16.0	14.0	3.50
4	9	16.0	-7.0	-1.75
Total	64			

The current instructional schedule in my school meets the needs of all remedial students. (χ^2 (3, *N*=64)=36.250, *p*<.001)

	Observed *N*	Expected *N*	Residual	Standardized Residual
1	3	16.0	-13.0	-3.25
2	27	16.0	11.0	2.75
3	29	16.0	13.0	3.25
4	5	16.0	-11.0	-2.75
Total	64			

The current instructional schedule in my school meets the needs of all special education students (χ^2 (3, *N*=64)=24.375, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
1	2	16.0	-14.0	-3.50
2	20	16.0	4.0	1.00
3	29	16.0	13.0	3.25
4	13	16.0	-3.0	-0.75
Total	64			

The current instructional schedule in my school meets the needs of all ELL students. (χ^2 (3, *N*=60)=22.533, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
1	2	15.0	-13.0	-3.36
2	19	15.0	4.0	1.03
3	27	15.0	12.0	3.10

4	12	15.0	-3.0	-0.78
Total	60			

(*Chi-square statistic appears under each statement)

In addition to the Chi-square analysis, a Friedman test for mean rank was used to analyze how the respondents' answers were rank ordered with regard to the relative importance of these 10 statements with 5 being very important and 1 the least important. Table 4 shows the mean, mean ranks, and standard deviations for scheduling beliefs with all 10 items sorted in mean rank order. The Friedman test for mean rank order was found to be statistically significant, (χ^2 (9, N=59)=219.105, p<.001). The mean ranks of an instructional schedule can have a positive influence on student learning (8.36) and longer class periods can have a positive influence of student learning (6.68) had the strongest agreement while the strongest disagreement was regarding the instructional schedule meeting the needs of all remedial (3.56) and all students (4.13).

Table 4

Friedman Test on Instructional Scheduling Beliefs (N=59)

	N	Mean	Standard Deviation	Mean Rank
An instructional schedule can have a positive influence on student learning	59	3.88	.326	8.36
Longer class periods can have a positive influence on student learning	59	3.44	.650	6.68
Longer class periods can have a positive influence on the relationship between teacher and student	59	3.34	.633	6.28
The instructional schedule should support flexibility for periods to be of different lengths	59	3.27	.806	6.22
The instructional schedule should allow teachers an opportunity to see students at different times during the day	59	3.22	.671	5.92
Longer class periods can have a positive influence on student behavior	59	2.98	.754	4.84
The current instructional schedule	59	2.81	.776	4.52

in my school meets the needs of all special education students				
The current instructional schedule in my school meets the needs of all ELL students	59	2.83	.791	4.51
The current instructional schedule in my school meets the needs of all students	59	2.69	.749	4.13
The current instructional schedule in my school meets the needs of all remedial students	59	2.56	.650	3.56

Teaming

Findings with regard to teaming indicated that the sample of principals predominantly utilized interdisciplinary and/or single-graded teaming across all grades with students randomly assigned and mostly scheduled on team. The predominant composition of teams consisted of academic teachers and that approximately half of the principals reported that team facilitators/team leaders were utilized in their middle school. Table 5 shows that almost half of the teams consisted of four teachers, a statistically significant finding (χ^2 (4, N=61)=42.167, p<.001).

Table 5

Chi-square Analysis on Academic Teachers Assigned to Teams (N=61)

	Percentage	Frequency	Observed *N*	Expected *N*	Residual	Standardized Residual
2 Teachers	3.3%	2	2	12.0	-10.0	-2.89
3 Teachers	9.8%	6	6	12.0	-6.0	-1.73
4 Teachers	44.3%	27	27	12.0	15.0	4.34
5 Teachers	34.4%	21	21	12.0	9.0	2.60
> 5 Teachers	8.2%	5	4	12.0	-8.0	-2.31

Regarding teaming beliefs, a Chi-square analysis was conducted and determined that all nine Likert-scale items were statistically significant. Table 6 shows the Chi-square frequencies for teaming beliefs.

Table 6

Chi-square Analysis Results on Teaming Beliefs Per Question (4-Strongly Agree; 3-Somewhat Agree; 2-Somewhat Disagree; 1-Strongly Disagree)*

Teaming has a positive influence on the way classroom instruction is carried out and taught χ^2 (2, *N*=63)=34.667, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
2	1	21.0	-20.0	-4.37
3	23	21.0	2.0	0.44
4	39	21.0	18.0	3.93
Total	63			

Teaming has a positive influence on the culture of learning within the school χ^2 (2, *N*=63)=48.667, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
2	2	21.0	-19.0	-4.15
3	15	21.0	-6.0	-1.31
4	46	21.0	25.0	5.46
Total	63			

Teaming has a positive influence on student learning. (χ^2 (1, *N*=62)=7.806, *p*<.005)				
	Observed *N*	Expected *N*	Residual	Standardized Residual

3	20	31.0	-11.0	-1.97
4	42	31.0	11.0	1.97
Total	62			

Teaming has a positive influence on student behavior (χ^2 (2, *N*=63)=32.000, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
2	1	21.0	-20.0	-4.37
3	25	21.0	4.0	0.87
4	37	21.0	16.0	3.49
Total	63			

Teaming provides students with a greater sense of identity and belonging (χ^2 (2, *N*=63)=22.952, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
2	6	21.0	-15.0	-3.28
3	20	21.0	-1.0	-0.22
4	37	21.0	16.0	3.49
Total	63			

Teachers are prepared with the collaboration and communication skills needed to be an effective team (χ^2 (2, *N*=62)=17.452, *p*<.001)

	Observed *N*	Expected *N*	Residual	Standardized Residual
2	11	20.7	-9.7	-2.13
3	36	20.7	15.3	3.36
4	15	20.7	-5.7	-1.25
Total	62			

Teachers would benefit from receiving professional development on teaming. (χ^2 (2, *N*=63)=38.381, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
2	2	21.0	-19.0	-4.15
3	19	21.0	-2.0	-0.44
4	42	21.0	21.0	4.59
Total	63			

Teams have the ability to function in a leadership capacity (χ^2 (2, *N*=63)=21.238, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
2	4	21.0	-17.0	-3.71
3	32	21.0	11.0	2.40
4	27	21.0	6.0	1.31
Total	63			

Team facilitators/leaders have the ability to function in a leadership capacity (χ^2 (2, N=63)=24.000, p<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
2	3	21.0	-18.0	-3.93
3	33	21.0	12.0	2.62
4	27	21.0	6.0	1.31
Total	63			

(*Chi-square statistic appears under each statement)

In addition to the Chi-square analysis, a Friedman test was used to analyze how the respondents' answers ranked with regard to agreement or disagreement with the nine statements. Table 7 shows the means, mean ranks, and standard deviations. The Likert scale items are sorted in mean rank order. The Chi-square associated with this Friedman test was found to be statistically significant (χ^2 (8, N=62)=92.472, p<.001). The mean ranks of *Teaming has a positive influence on the culture of learning within the school* (5.86) and *Teachers would benefit from receiving professional development on teaming* (5.49) had the strongest agreement while the strongest disagreement was regarding *Teachers are prepared with the collaboration and communication skills needed to be an effective team* (3.23) and *Teams have the ability to function in a leadership capacity* (4.35).

Table 7

Friedman Test on Instructional Scheduling Beliefs (N=62)

	N	Mean	Standard Deviation	Mean Rank
Teaming has a positive influence on the culture of learning within the school	62	3.71	.524	5.86
Teaming has a positive influence on student learning	62	3.68	.471	5.74
Teachers would benefit from receiving professional development on teaming	62	3.65	.546	5.49
Teaming has a positive influence on the way classroom instruction is carried out and taught	62	3.61	.523	5.48

Teaming has a positive influence on student behavior	62	3.58	.529	5.32
Teaming provides students with a greater sense of identity and belonging	62	3.50	.671	5.02
Team facilitators/leaders have the ability to function in a leadership capacity	62	3.39	.583	4.50
Teams have the ability to function in a leadership capacity	62	3.37	.607	4.35
Teachers are prepared with the collaboration and communication skills needed to be an effective team	62	3.06	.650	3.23

Common Planning

Findings with regard to common planning indicate that the sample of principals predominantly utilized team, grade level and departmental common planning for coordinating instruction, creating assessments and teacher preparation with varying durations and frequencies depending on the type of common planning. Table 8 shows that approximately 90% of the principals who responded reported that their middle schools utilized common planning, χ^2 (1, N=63)=35.063, p<.001). Table 9 shows that approximately 90% of the principals who responded to the survey reported that their middle schools utilized common planning in all grades, χ^2 (1, N=54)=32.667, p<.001).

Table 8

Chi-square Analysis on Common Planning in Middle Schools (N=63)

	Percentage	Frequency	Observed *N*	Expected *N*	Residual	Standardized Residual
Yes	87.3%	55	55	31.5	23.5	4.19
No	12.7%	8	8	31.5	-23.5	-4.19

Table 9

Chi-square Analysis on Common Planning in All Grade Levels (N=54)

	Percentage	Frequency	Observed	Expected *N*	Residual	Standardized

			N			Residual
Yes	88.9%	48	48	27.0	21.0	4.04
No	11.1%	6	6	27.0	-21.0	-4.04

Regarding common planning beliefs, a Chi-square analysis was conducted and determined that all four of the Likert-scale rating statements were statistically significant. Table 10 shows the Chi-square results for common planning beliefs.

Table 10

Chi-Square Analysis Results on Common Planning Beliefs (4-Strongly Agree; 3-Somewhat Agree; 2-Somewhat Disagree; 1-Strongly Disagree)*

Common planning time has a positive influence on the way instruction is carried out and taught (χ^2 (21, N=60)=11.267, p<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
3	17	30.0	-13.0	-2.37
4	43	30.0	13.0	2.37
Total	60			

Common planning time has a positive influence on the culture of learning within the school (χ^2 (1, N=60)=8.067, p<.005)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
3	19	30.0	-11.0	-2.01
4	41	30.0	11.0	2.01
Total	60			

Common planning time has a positive influence on student learning (χ^2 (2, *N*=60)=42.700, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
1	1	20.0	-19.0	-4.25
3	17	20.0	-3.0	-0.67
4	42	20.0	22.0	4.92
Total	60			

Teachers would benefit from receiving professional development on how to effectively utilize common planning time (χ^2 (2, *N*=60)=57.700, *p*<.001)				
	Observed *N*	Expected *N*	Residual	Standardized Residual
2	1	20.0	-19.0	-4.25
3	12	20.0	-8.0	-1.79
4	47	20.0	27.0	6.04
Total	60			

(*Chi-square statistic appears under each statement)

In addition to the Chi-square analysis, a Friedman test was used to analyze how the respondents' answers ranked with regard to their agreement or disagreement with the four statements. Table 11 shows the means, mean ranks, and standard deviations. The Likert scale items were sorted in mean rank order. The Chi-square statistic associated with the Friedman test was not found to be statistically significant (χ^2 (3, *N*=60)=2.471, *p*<.481)

Table 11

Friedman Test on Common Planning Beliefs (N=60)

	N	Mean	Standard Deviation	Mean Rank
Teachers would benefit from receiving professional development on how to effectively utilize common planning time	60	3.77	.465	2.60

Common planning time has a positive influence on the way instruction is carried out and taught	60	3.72	.454	2.50
Common planning time has a positive influence on student learning	60	3.67	.572	2.47
Common planning time has a positive influence on the culture of learning within the school	60	3.68	.469	2.43

In addition to indicating their agreement or disagreement with common planning statements, the respondents were asked to rank the three types of common planning types in order of importance. A Friedman test for mean rank was found to be statistically significant, (χ^2 (2, N=60)=22.800, p<.001)) when respondents were asked to rank from 1 through 3 the preferred type of common planning time. Table 12 shows the means, mean ranks, and standard deviations for common planning type models. The most popular type of common planning was team (1.50) followed by grade level (2.20) and lastly, departmental (2.30).

Table 12

Friedman Test on Common Planning Types (N=60)

	N	Mean	Standard Deviation	Mean Rank
Team Common Planning	60	1.50	.748	1.50
Grade Level Common Planning	60	2.20	.684	2.20
Departmental Common Planning	60	2.30	.788	2.30

Discussion

The results of this study have important implications for NYS Middle Schools with regards to teachers, school administrators, school districts, and boards of education who are interested in further understanding the practices and beliefs of middle school principals in NYS with an average need/resource capacity district regarding these three supports. This discussion will highlight important gaps between research/theory and practice among the sample of principals.

The first gap identified between research and practice focuses on the beliefs of principals regarding teaming; particularly their beliefs regarding teams and team leaders having the abilities to function in leadership capacities. Two of the three Likert-scale items to which principals demonstrated their strongest disagreement were the items that focused on teams and team leaders

functioning in a leadership capacity. Previous research studies (Grenda & Hackmann, 2014; Wahlstrom et al., 2010) have examined collective leadership and concluded that higher-performing schools give greater influence to teacher teams and that professional communities (teams) are strong indicators of successful instructional practices. These conclusions, drawn from previous research, are not in alignment with the beliefs of the sample in this study. An area of future research would be to explore this research-practitioner gap from a qualitative standpoint to further identify reasons for this disconnect.

A second gap identified between theory and practice focuses on the beliefs of principals regarding instructional scheduling. In particular, this implication focuses on the principals' belief regarding the type of instructional schedule that best meets the needs of their students. As previously discussed, the most popular instructional scheduling model among principals in this sample was flexible interdisciplinary block. Although flexible interdisciplinary block was the most popular in terms of ideal scheduling model, approximately 70% of the respondents utilized a traditional departmentalized schedule. Previous research studies (Mattox et al., 2005; Gill 2012) have examined instructional scheduling and concluded that the type of instruction schedule at the middle school level can have an influence on student learning. These conclusions are in alignment with the beliefs of principals' ideal instructional scheduling model but not in alignment with their current instructional scheduling model. These incongruent results directly speak to the work of Argyris (1993), where the organization or the leader of that organization "espouses" one thing but puts into practice something else entirely.

A possible reason for this incongruence or disconnect could be the current fiscal constraints that many public school districts are experiencing. The middle school supports suggested in the literature (Carnegie Council on Adolescent Development, 1989; Jackson, Davis, Abeel, Bordonaro, & Carnegie Foundation on Adolescent Development, 2000; National Middle School Association, 2010a; and National Middle School Association, 2010b) have financial implications that might be more costly than some districts want to commit to at this present time.

Conclusion

As previously discussed, middle level education is critical for the learning, development, and success of young adolescents (National Middle School Association, 2010a). In addition, the number of middle schools nationally has continued to increase from less than 5,000 in 1971 to more than 13,000 in 2008 (McEwin & Greene, 2011). This study provided a descriptive profile of three school supports (instructional scheduling, teaming, and common planning) to determine if they were either absent or present in NYS middle schools categorized with an average need/resource capacity. The importance of these three school supports at the middle level has been discussed and examined by scholars and advocacy organizations. The purpose of this study was to utilize the collected data to provide administrators and other stakeholders with an additional layer of information regarding the use of three specific school supports among New York State middle school principals whose districts were categorized as having an average need/resource capacity. It is the intent that the analysis of the data collected points to policies, practices, and/or programs that could increase support to improve student learning.

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