Seton Hall University eRepository @ Seton Hall

Seton Hall University Dissertations and Theses (ETDs)

Seton Hall University Dissertations and Theses

Fall 12-9-2014

A Study of Instructional Scheduling, Teaming, and Common Planning in New York State Middle Schools

Chad M. Corey chad.corey@student.shu.edu

Follow this and additional works at: https://scholarship.shu.edu/dissertations Part of the <u>Elementary and Middle and Secondary Education Administration Commons</u>

Recommended Citation

Corey, Chad M., "A Study of Instructional Scheduling, Teaming, and Common Planning in New York State Middle Schools" (2014). *Seton Hall University Dissertations and Theses (ETDs)*. 2021. https://scholarship.shu.edu/dissertations/2021

A STUDY OF INSTRUCTIONAL SCHEDULING, TEAMING, AND COMMON PLANNING IN NEW YORK STATE MIDDLE SCHOOLS

 $\mathbf{B}\mathbf{Y}$

CHAD M. COREY

Dissertation Committee

Robert Starratt, Ed.D., Mentor Gerard Babo, Ed.D., Committee Member Jan Hammond, Ed.D., Committee Member

Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Education Seton Hall University

SETON HALL UNIVERSITY COLLEGE OF EDUCATION AND HUMAN SERVICES OFFICE OF GRADUATE STUDIES

APPROVAL FOR SUCCESSFUL DEFENSE

Doctoral Candidate, **Chad Corey**, has successfully defended and made the required modifications to the text of the doctoral dissertation for the **Ed.D**. during this **Fall Semester 2014**.

DISSERTATION COMMITTEE (please sign and date beside your name)
Mentor: The KO Pterrouk / 13 B. 3 and
Dr. Robert Starratt 16 Gov/ 4 Starrey 12-9-2019
A
Committee Member:
Dr. Gerard Babo // 4000 12/9/14
Committee Member:
Dr. Jan Hammond / 2/9/14

The mentor and any other committee members who wish to review revisions will sign and date this document only when revisions have been completed. Please return this form to the Office of Graduate Studies, where it will be placed in the candidate's file and submit a copy with your final dissertation to be bound as page number two. © Copyright by Chad M. Corey, 2014 All Rights Reserved

ABSTRACT

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. For the purposes of this study, middle schools were defined as schools that contained the grade configurations of 5-8, 6-8, and 7-8. The sample surveyed was comprised of 232 New York State middle school principals in school districts with an average need/resource capacity. Instrumentation for the data collection was through a five-part self-administered online web survey. Demographic data of the participating principals and their school along with the data collected from the research questions were analyzed using descriptive, inferential, and nonparametric statistics. In addition, demographic characteristics and principals' beliefs regarding these three school supports were also analyzed.

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. Implications for practice along with recommendations for future research, policy and practice were also discussed. It was the intent of this researcher that the data collected provides administrators and policymakers with an additional layer of information regarding the use of these three school supports among New York State middle schools and serve as a reference to further understand the extent to which they are being implemented.

Keywords: middle school, instructional scheduling, teaming, common planning

iv

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my mentor, Dr. Starratt, for his guidance, support, and wisdom that he has shared with me during this process. It is impossible to convey in words the care, compassion, and knowledge that he has provided me with on this journey. I would also like to thank my committee members, Dr. Babo and Dr. Hammond who are two model educators who consistently provided me with thorough and timely feedback. Thank you to Dr. Babo for sharing his wealth of knowledge and understanding of statistics. My first two classes at Seton Hall were with Dr. Babo, so it is fitting for my coursework to culminate with him being a part of the committee. Thank you to Dr. Hammond for encouraging me to pursue my doctorate. My first educational leadership class at SUNY New Paltz was with Dr. Hammond, so it also fitting for my doctoral coursework to conclude with her being a part of the committee dissertation process, these three educational leaders were always supportive, insightful, and inspiring and for that I will always be thankful.

Completing this degree would not have been possible without the love and support from my family. First and foremost the biggest thank you goes to my wife, Courtney, for her encouragement, support, and flexibility throughout this process. Soon after we started dating, I applied to Seton Hall University and five years later we are happily married and have our beautiful son Connor. Courtney, I cannot express the confidence you have given me to achieve and I love you from the bottom of my heart. CT4E!

I would also like to thank my mother, father, and sister for their never-ending support of me. In addition, thank you to my friends and colleagues for their support. In particular, thank you to those friends and colleagues with whom I have been fortunate to have "morning", "vault", "car" and "chili's" conversations.

V

DEDICATION

This work is dedicated in loving memory of my grandparents (Ruth Corey, Joseph Corey, Belle Fuchs, and Abe Fuchs) who would have loved to have been able to celebrate and share this accomplishment with me and my family. You will always be in my thoughts.

ACKNOWLEDGMENTS. v DEDICATION vi TABLE OF CONTENTS. vii LIST OF TABLES. x I. INTRODUCTION. 1 Background. 1 Statement of the Problem. 2 Purpose of the Study. 2 Research Questions. 4 Study Design and Methodology. 5 Significance of the Study. 6 Limitations and Delimitations. 7 Assumptions. 8 Definition of Terms. 8 Organization of Dissertation. 10 II. REVIEW OF RELATED LITERATURE. 11 Literature Search Procedures. 12 Instructional Time Schedules. 12 Impirical Research. 20 Teaming. 21 Empirical Research. 33 Synthesis. 33 Common Planning. 34 Synthesis. 33 Influence of Other Variables on Student Learning. 44 School Leadership and Classroom Instruction. 45 Synthesis. 49 Conclusion.	ABSTRACT	iv
DEDICATION vi TABLE OF CONTENTS vii LIST OF TABLES x I. INTRODUCTION 1 Background 1 Statement of the Problem 2 Purpose of the Study 2 Research Questions 4 Study Design and Methodology 5 Significance of the Study 6 Limitations and Delimitations 7 Assumptions 8 Definition of Terms 8 Organization of Dissertation 10 II. REVIEW OF RELATED LITERATURE 11 Literature Search Procedures 11 Criteria for Research 12 Instructional Time Schedules 12 Empirical Research 23 Synthesis 200 Teaming 21 Empirical Research 23 Synthesis 33 Common Planning 34 Empirical Research 33 School Leadership and Classroom Instruction 45 Synthesis 43 Influence of Other Variables on Student Learning 44 <td>ACKNOWLEDGMENTS</td> <td>v</td>	ACKNOWLEDGMENTS	v
TABLE OF CONTENTS. vii LIST OF TABLES. x I. INTRODUCTION. 1 Background. 1 Statement of the Problem. 2 Purpose of the Study. 2 Research Questions. 4 Study Design and Methodology. 5 Significance of the Study. 6 Limitations and Delimitations. 7 Assumptions. 8 Definition of Terms. 8 Organization of Dissertation. 10 II. REVIEW OF RELATED LITERATURE. 11 Literature Search Procedures. 11 Criteria for Research. 12 Instructional Time Schedules. 12 Empirical Research. 13 Synthesis. 20 Teaming. 21 Empirical Research. 23 Synthesis. 33 Common Planning. 34 Empirical Research. 35 Synthesis. 43 Influence of Other Variables on Student Learning. 44 School Leadership and Classroom Instruction. 45 Synthe	DEDICATION	vi
LIST OF TABLES. x I. INTRODUCTION 1 Background 1 Statement of the Problem 2 Purpose of the Study 2 Research Questions 4 Study Design and Methodology 5 Significance of the Study. 6 Limitations and Delimitations 7 Assumptions. 8 Definition of Terms. 8 Organization of Dissertation. 10 II. REVIEW OF RELATED LITERATURE. 11 Literature Search Procedures. 11 Criteria for Research. 12 Instructional Time Schedules. 12 Empirical Research. 13 Synthesis. 20 Teaming. 21 Empirical Research. 21 Empirical Research. 33 Common Planning. 34 Empirical Research. 35 Synthesis. 35 Synthesis. 35 Synthesis. 35 Synthesis. 44 School Leadership and Classroom Instruction 45	TABLE OF CONTENTS.	vii
I. INTRODUCTION. 1 Background. 1 Statement of the Problem. 2 Purpose of the Study. 2 Research Questions. 4 Study Design and Methodology. 5 Significance of the Study. 5 Limitations and Delimitations. 7 Assumptions. 8 Definition of Terms. 8 Organization of Dissertation. 10 II. REVIEW OF RELATED LITERATURE. 11 Literature Search Procedures. 11 Criteria for Research. 12 Empirical Research. 12 Empirical Research. 23 Synthesis. 20 Teaming. 23 Common Planning. 34 Empirical Research. 23 Synthesis. 33 Conclusion. 44 School Leadership and Classroom Instruction 45 Synthesis. 49 Ocnclusion. 49 Conclusion. 49 Conclusion. 49 Research Design 51 Resear	LIST OF TABLES	x
I. INTRODUCTION 1 Background 1 Statement of the Problem 2 Purpose of the Study. 2 Research Questions 4 Study Design and Methodology 5 Significance of the Study. 6 Limitations and Delimitations 7 Assumptions 7 Assumptions 8 Definition of Terms 8 Organization of Dissertation 10 II. REVIEW OF RELATED LITERATURE 11 Literature Search Procedures 11 Criteria for Research 12 Instructional Time Schedules 12 Empirical Research 13 Synthesis 20 Teaming 21 Empirical Research 23 Synthesis 33 Common Planning 34 Empirical Research 35 Synthesis 43 Influence of Other Variables on Student Learning 44 School Leadership and Classroom Instruction 45 Synthesis 49 Conclusion 49		21
Background1Statement of the Problem2Purpose of the Study2Research Questions4Study Design and Methodology5Significance of the Study6Limitations and Delimitations7Assumptions8Definition of Terms8Organization of Dissertation10II. REVIEW OF RELATED LITERATURE11Literature Search Procedures11Criteria for Research12Instructional Time Schedules20Teaming21Empirical Research23Synthesis20Teaming21Empirical Research33Common Planning34Empirical Research35Synthesis43Influence of Other Variables on Student Learning44School Leadership and Classroom Instruction45Synthesis49Conclusion49III. RESEARCH DESIGN AND METHODOLOGY51Research Design51Research Design51 </td <td>I. INTRODUCTION</td> <td>1</td>	I. INTRODUCTION	1
Statement of the Problem 2 Purpose of the Study 2 Research Questions 4 Study Design and Methodology 5 Significance of the Study 6 Limitations and Delimitations 7 Assumptions 8 Definition of Terms 8 Organization of Dissertation 10 II. REVIEW OF RELATED LITERATURE 11 Literature Search Procedures 11 Criteria for Research 12 Instructional Time Schedules 12 Empirical Research 20 Teaming 21 Empirical Research 23 Synthesis 20 Teaming 21 Empirical Research 33 Common Planning 34 Empirical Research 35 Synthesis 33 Influence of Other Variables on Student Learning 44 School Leadership and Classroom Instruction 45 Synthesis 49 Conclusion 49 III. RESEARCH DESIGN AND METHODOLOGY 51 Research Questio	Background	1
Purpose of the Study.2Research Questions.4Study Design and Methodology.5Significance of the Study.6Limitations and Delimitations.7Assumptions.8Definition of Terms.8Organization of Dissertation.10II. REVIEW OF RELATED LITERATURE.11Literature Search Procedures.11Criteria for Research.12Instructional Time Schedules.12Empirical Research.13Synthesis.20Teaming.21Empirical Research.33Common Planning.34Empirical Research.35Synthesis.33Common Planning.44School Leadership and Classroom Instruction.45Synthesis.49Conclusion.49III. RESEARCH DESIGN AND METHODOLOGY.51Research Questions.52	Statement of the Problem	2
Research Questions 4 Study Design and Methodology 5 Significance of the Study 6 Limitations and Delimitations 7 Assumptions 8 Definition of Terms 8 Organization of Dissertation 10 II. REVIEW OF RELATED LITERATURE 11 Literature Search Procedures 11 Criteria for Research 12 Instructional Time Schedules 12 Empirical Research 13 Synthesis 20 Teaming 21 Empirical Research 33 Common Planning 34 Empirical Research 35 Synthesis 33 Common Planning 34 Empirical Research 35 Synthesis 45 Synthesis 47 Mifluence of Other Variables on Student Learning 44 School Leadership and Classroom Instruction 45 Synthesis 49 Conclusion 49 III. RESEARCH DESIGN AND METHODOLOGY 51 Research Questions <t< td=""><td>Purpose of the Study</td><td>2</td></t<>	Purpose of the Study	2
Study Design and Methodology. 5 Significance of the Study. 6 Limitations and Delimitations. 7 Assumptions. 8 Definition of Terms. 8 Organization of Dissertation. 10 II. REVIEW OF RELATED LITERATURE. 11 Literature Search Procedures. 11 Criteria for Research. 12 Instructional Time Schedules. 12 Empirical Research. 13 Synthesis. 20 Teaming. 21 Empirical Research. 23 Synthesis. 33 Common Planning. 34 Empirical Research. 35 Synthesis. 35 Synthesis. 35 Synthesis. 35 Synthesis. 44 School Leadership and Classroom Instruction. 45 Synthesis. 49 Conclusion. 49 III. RESEARCH DESIGN AND METHODOLOGY. 51 Research Questions. 52 Research Questions. 52 <td>Research Questions</td> <td>4</td>	Research Questions	4
Significance of the Study 6 Limitations and Delimitations. 7 Assumptions. 8 Definition of Terms. 8 Organization of Dissertation. 10 II. REVIEW OF RELATED LITERATURE. 11 Literature Search Procedures. 11 Criteria for Research. 12 Instructional Time Schedules. 12 Empirical Research. 13 Synthesis. 20 Teaming. 21 Empirical Research. 23 Synthesis. 23 Synthesis. 33 Common Planning. 34 Empirical Research. 35 Synthesis. 43 Influence of Other Variables on Student Learning. 44 School Leadership and Classroom Instruction. 45 Synthesis. 49 Conclusion. 49 III. RESEARCH DESIGN AND METHODOLOGY 51 Research Questions. 52 Research Questions. 52	Study Design and Methodology	5
Dignitations and Delimitations 7 Assumptions 8 Definition of Terms 8 Organization of Dissertation 10 II. REVIEW OF RELATED LITERATURE 11 Literature Search Procedures 11 Criteria for Research 12 Instructional Time Schedules 12 Empirical Research 13 Synthesis 20 Teaming 21 Empirical Research 33 Synthesis 33 Common Planning 34 Empirical Research 35 Synthesis 43 Influence of Other Variables on Student Learning 44 School Leadership and Classroom Instruction 45 Synthesis 49 Conclusion 49 III. RESEARCH DESIGN AND METHODOLOGY 51 Research Design 51 Research Questions 52	Significance of the Study	6
Assumptions 8 Definition of Terms. 8 Organization of Dissertation. 10 II. REVIEW OF RELATED LITERATURE. 11 Literature Search Procedures. 11 Criteria for Research. 12 Instructional Time Schedules. 12 Empirical Research. 13 Synthesis. 20 Teaming. 21 Empirical Research. 23 Synthesis. 33 Common Planning. 34 Empirical Research. 35 Synthesis. 43 Influence of Other Variables on Student Learning. 44 School Leadership and Classroom Instruction. 45 Synthesis. 49 Conclusion. 49 III. RESEARCH DESIGN AND METHODOLOGY. 51 Research Design. 51 Research Questions. 52	Limitations and Delimitations	7
Assumptions 8 Definition of Terms. 8 Organization of Dissertation. 10 II. REVIEW OF RELATED LITERATURE. 11 Literature Search Procedures. 11 Criteria for Research. 12 Instructional Time Schedules 12 Empirical Research. 13 Synthesis. 20 Teaming. 21 Empirical Research. 23 Synthesis. 33 Common Planning. 34 Empirical Research. 35 Synthesis. 35 Synthesis. 35 Synthesis. 43 Influence of Other Variables on Student Learning. 44 School Leadership and Classroom Instruction 45 Synthesis. 49 Conclusion. 49 III. RESEARCH DESIGN AND METHODOLOGY. 51 Research Design. 51 Research Questions. 52	A symptions	8
Definition of Terms 10 II. REVIEW OF RELATED LITERATURE 11 Literature Search Procedures 11 Criteria for Research 12 Instructional Time Schedules 12 Empirical Research 13 Synthesis 20 Teaming 21 Empirical Research 23 Synthesis 33 Common Planning 34 Empirical Research 35 Synthesis 33 Influence of Other Variables on Student Learning 44 School Leadership and Classroom Instruction 45 Synthesis 49 III. RESEARCH DESIGN AND METHODOLOGY 51 Research Design 51 Research Questions 52	Definition of Terms	0 Q
II. REVIEW OF RELATED LITERATURE. 11 Literature Search Procedures. 11 Criteria for Research. 12 Instructional Time Schedules. 12 Empirical Research. 13 Synthesis. 20 Teaming. 21 Empirical Research. 23 Synthesis. 23 Synthesis. 33 Common Planning. 34 Empirical Research. 35 Synthesis. 35 Synthesis. 35 Synthesis. 43 Influence of Other Variables on Student Learning. 44 School Leadership and Classroom Instruction. 45 Synthesis. 49 Conclusion. 49 III. RESEARCH DESIGN AND METHODOLOGY. 51 Research Design. 51 Research Questions. 52	Organization of Discortation	10
II. REVIEW OF RELATED LITERATURE. 11 Literature Search Procedures. 11 Criteria for Research. 12 Instructional Time Schedules. 12 Empirical Research. 13 Synthesis. 20 Teaming. 21 Empirical Research. 23 Synthesis. 23 Synthesis. 23 Synthesis. 33 Common Planning. 34 Empirical Research. 35 Synthesis. 33 Common Planning. 34 Empirical Research. 35 Synthesis. 43 Influence of Other Variables on Student Learning. 44 School Leadership and Classroom Instruction. 45 Synthesis. 49 Conclusion. 49 III. RESEARCH DESIGN AND METHODOLOGY. 51 Research Design. 51 Research Questions. 52		10
Literature Search Procedures11Criteria for Research12Instructional Time Schedules12Empirical Research13Synthesis20Teaming21Empirical Research23Synthesis33Common Planning34Empirical Research35Synthesis43Influence of Other Variables on Student Learning44School Leadership and Classroom Instruction45Synthesis49Conclusion49III. RESEARCH DESIGN AND METHODOLOGY51Research Questions52	II. REVIEW OF RELATED LITERATURE	11
Criteria for Research12Instructional Time Schedules12Empirical Research13Synthesis20Teaming21Empirical Research23Synthesis33Common Planning34Empirical Research35Synthesis43Influence of Other Variables on Student Learning44School Leadership and Classroom Instruction45Synthesis49Conclusion49III. RESEARCH DESIGN AND METHODOLOGY51Research Questions52	Literature Search Procedures	11
Instructional Time Schedules12Empirical Research13Synthesis20Teaming21Empirical Research23Synthesis33Common Planning34Empirical Research35Synthesis43Influence of Other Variables on Student Learning44School Leadership and Classroom Instruction45Synthesis49Conclusion49III. RESEARCH DESIGN AND METHODOLOGY51Research Design51Research Questions52	Criteria for Research	12
Empirical Research13Synthesis20Teaming21Empirical Research23Synthesis33Common Planning34Empirical Research35Synthesis43Influence of Other Variables on Student Learning44School Leadership and Classroom Instruction45Synthesis49Conclusion49III. RESEARCH DESIGN AND METHODOLOGY51Research Design51Research Questions52	Instructional Time Schedules	12
Synthesis 20 Teaming 21 Empirical Research 23 Synthesis 33 Common Planning 34 Empirical Research 35 Synthesis 43 Influence of Other Variables on Student Learning 44 School Leadership and Classroom Instruction 45 Synthesis 49 Conclusion 49 III. RESEARCH DESIGN AND METHODOLOGY 51 Research Design 51 Research Questions 52	Empirical Research	13
Teaming. 21 Empirical Research. 23 Synthesis. 33 Common Planning. 34 Empirical Research. 35 Synthesis. 35 Synthesis. 43 Influence of Other Variables on Student Learning. 44 School Leadership and Classroom Instruction. 45 Synthesis. 49 Conclusion. 49 III. RESEARCH DESIGN AND METHODOLOGY. 51 Research Design. 51 Research Questions. 52	Synthesis	20
Empirical Research 23 Synthesis 33 Common Planning 34 Empirical Research 35 Synthesis 43 Influence of Other Variables on Student Learning 44 School Leadership and Classroom Instruction 45 Synthesis 49 Conclusion 49 III. RESEARCH DESIGN AND METHODOLOGY 51 Research Design 51 Research Questions 52	Teaming	$\frac{-0}{21}$
Synthesis 33 Common Planning 34 Empirical Research 35 Synthesis 43 Influence of Other Variables on Student Learning 44 School Leadership and Classroom Instruction 45 Synthesis 49 Conclusion 49 III. RESEARCH DESIGN AND METHODOLOGY 51 Research Design 51 Research Questions 52	Empirical Research	23
Common Planning. 34 Empirical Research. 35 Synthesis. 43 Influence of Other Variables on Student Learning. 44 School Leadership and Classroom Instruction. 45 Synthesis. 49 Conclusion. 49 III. RESEARCH DESIGN AND METHODOLOGY. 51 Research Design. 51 Research Questions. 52	Synthesis	33
Empirical Research. 35 Synthesis. 43 Influence of Other Variables on Student Learning. 44 School Leadership and Classroom Instruction. 45 Synthesis. 49 Conclusion. 49 III. RESEARCH DESIGN AND METHODOLOGY. 51 Research Design. 51 Research Questions. 52	Common Planning	34
Synthesis 43 Influence of Other Variables on Student Learning 44 School Leadership and Classroom Instruction 45 Synthesis 49 Conclusion 49 III. RESEARCH DESIGN AND METHODOLOGY 51 Research Design 51 Research Questions 52	Empirical Research	35
Influence of Other Variables on Student Learning. 44 School Leadership and Classroom Instruction. 45 Synthesis. 49 Conclusion. 49 III. RESEARCH DESIGN AND METHODOLOGY. 51 Research Design. 51 Research Questions. 52	Synthesis	13
Initial of Concert Variables on Student Learning 44 School Leadership and Classroom Instruction 45 Synthesis 49 Conclusion 49 III. RESEARCH DESIGN AND METHODOLOGY 51 Research Design 51 Research Questions 52	Influence of Other Variables on Student Learning	
Sensor Leadership and Classroom Instruction 49 Synthesis 49 Conclusion 49 III. RESEARCH DESIGN AND METHODOLOGY 51 Research Design 51 Research Questions 52 Substance 52	School Leadership and Classroom Instruction	15
Synthesis 49 Conclusion 49 III. RESEARCH DESIGN AND METHODOLOGY 51 Research Design 51 Research Questions 52	Sumthosis	40
49 III. RESEARCH DESIGN AND METHODOLOGY 51 Research Design 51 Research Questions	Conclusion	49
III. RESEARCH DESIGN AND METHODOLOGY. 51 Research Design. 51 Research Questions. 52	Conclusion	49
Research Design	III. RESEARCH DESIGN AND METHODOLOGY	51
Research Questions	Research Design	51
	Research Questions	52
Sample	Sample	52
Instrumentation 54	Instrumentation	54
Data Collection	Data Collection	56

TABLE OF CONTENTS

Data Analysis	58
Summary	50
IV. THE FINDINGS	59
Research Questions and Data Analysis	62
Demographic Data	64
Research Question 1	69
Type of Instruction Schedule	69
Instructional Scheduling History	72
Instructional Scheduling Beliefs	73
Research Question 2	80
Type of Teaming	81
Teaming History	83
Teaming Beliefs	84
Research Question 3	89
Type of Common Planning	90
Common Planning History	94
Common Planning Beliefs	95
Research Question 4.	99
Instructional Scheduling and Teaming	100
Instructional Scheduling and Common Planning	101
Teaming and Common Planning	102
Middle School Supports Beliefs	103
Summary	107
V. SUMMARY, RECOMMENDATIONS, AND CONCLUSIONS	109
Statement of the Problem	109
Purpose of the Study	
Research Questions	112
Summary of Procedures	112
Demographic Data	113
Summary of the Findings in Relationship to the Research Ouestions	
Research Question 1	. 114
Research Question 2	117
Research Question 3	119
Research Question 4	121
Implications for Practice	123
Recommendations for Future Research	. 125
Recommendations for Policy and Practice	127
Conclusion	130
	150
REFERENCES	132

APPENDICES

APPENDIX A:	Survey Sample	137
APPENDIX B:	IRB Permissions	143
APPENDIX C:	Pilot Group	146
APPENDIX D:	Survey	149
APPENDIX E:	Letter of Solicitation	170

LIST OF TABLES

Table		Page
1	Percentages and Frequencies for Gender of Respondents	. 64
2	Descriptive Statistics for Age of Respondents	. 64
3	Descriptive Statistics for Years of Principal Experience in Current School	65
4	Descriptive Statistics for Years of Administration Experience	. 65
5	Percentages and Frequencies for Highest Degree Earned	65
6	Percentages and Frequencies for Grades Included in Middle School	. 65
7	Descriptive Statistics for Student Population	66
8	Percentages and Frequencies for School Location	66
9	Percentages and Frequencies for Racial/Ethnic Student Populations	. 66
10	Descriptive Statistics for Students Receiving Either Free or Reduced Lunch	. 67
11	Descriptive Statistics for Student Attendance	. 67
12	Descriptive Statistics for Student Suspension	. 67
13	Percentages and Frequencies for Adequate Yearly Progress (AYP) in English	
	Language Arts (ELA)	67
14	Descriptive Statistics for ELA Scores: Levels II, III, and IV	. 68
15	Percentages and Frequencies for Adequate Yearly Progress (AYP) in Math	68
16	Descriptive Statistics for Math Scores: Levels II, III, and IV	68
17	Chi Square Analysis on Type of Instructional Schedule	70
18	Percentages and Frequencies for Exploratory/Encore Subjects	. 71
19	Percentages and Frequencies for Structure of Remedial Instruction	. 71
20	Percentages and Frequencies for Structure of Special Education Instruction	72

21	Percentages and Frequencies for Structure of English Language Learner	
	Instruction	72
22	Descriptive Statistics for Length of Time Instructional Schedule Has Been in	
	Existence	73
23	Percentages and Frequencies for Changes in Instructional Schedule	73
24	Percentages and Frequencies for Interest in Modifying Instructional Schedule	73
25	Friedman Test on Instructional Scheduling Models	74
26	Kruskal-Wallis Test on Instructional Scheduling Models Ranked by Grade	
	Configuration	75
27	Chi-Square Analysis on Instructional Scheduling Beliefs	76
28	Friedman Test on Instructional Scheduling Beliefs	79
29	Percentages and Frequencies for Teaming Utilized	81
30	Percentages and Frequencies for Type of Teaming Utilized	81
31	Percentages and Frequencies for Grade Levels that use Teaming	81
32	Percentages and Frequencies for Students Randomly Assigned to Teams	82
33	Percentages and Frequencies for Students Teamed with Same Group of	
	Students Throughout Middle School	82
34	Descriptive Statistics for Percentage of Students Fully Teamed	82
35	Percentages and Frequencies for Staff Members Assigned to Teams	83
36	Chi-Square Analysis on Academic Teachers Assigned to Teams	83
37	Percentages and Frequencies for Teams That Have a Team Facilitator/Leader	83
38	Percentages and Frequencies for Changes in Teaming Structure	84

39	Percentages and Frequencies for Interest in Modifying or Changing	
	Teaming Structure	84
40	Chi-Square Analysis on Teaming Beliefs Per Question	85
41	Friedman Test on Instructional Scheduling Beliefs	87
42	Kruskal-Wallis Test on Teaming Beliefs Ranked by School Location	88
43	Chi-Square Analysis on Common Planning in Middle Schools	90
44	Chi-Square Analysis on Common Planning in All Grade Levels	90
45	Chi-Square Analysis on Principal Provided with Agenda for Common Planning	90
46	Chi-Square Analysis on Team Common Planning	91
47	Chi-Square Analysis on Frequency of Team Common Planning	91
48	Descriptive Statistics for Length of Team Common Planning	91
49	Percentages and Frequencies for Usage of Team Common Planning	91
50	Chi-Square Analysis on Grade Level Common Planning	92
51	Chi-Square Analysis on Frequency of Grade Level Common Planning	92
52	Descriptive Statistics for Length of Grade Level Common Planning	92
53	Percentages and Frequencies for Usage of Grade Level Common Planning	93
54	Chi-Square Analysis on Departmental Common Planning	93
55	Chi-Square Analysis on Frequency of Departmental Common Planning	94
56	Descriptive Statistics for Length of Departmental Common Planning	94
57	Percentages and Frequencies for Usage of Departmental Common Planning	94
58	Percentages and Frequencies for Changes in Common Planning Structure	95
59	Percentages and Frequencies for Interest in Modifying Common	
	Planning Structure	95

60	Chi-Square Analysis on Common Planning Beliefs
61	Friedman Test on Common Planning Beliefs
62	Kruskal-Wallis Test on Common Planning Beliefs Ranked by School Location 98
63	Friedman Test on Common Planning Types
64	Percentages and Frequencies for Instructional Schedule and Teaming100
65	Percentages and Frequencies for Instructional Schedule and Type of Teaming 101
66	Percentages and Frequencies for Instructional Schedule and Common Planning102
67	Percentages and Frequencies for Instructional Schedule and Type of
	Common Planning
68	Percentages and Frequencies for Teaming and Common Planning103
69	Percentages and Frequencies for Type of Teaming and Type of
	Common Planning
70	Chi-Square Analysis on Middle School Support Beliefs104
71	Friedman Test on Middle School Support Beliefs 105
72	Kruskal-Wallis Test on Teaming Beliefs Ranked by Years of Principal
	Experience at Current School 106
73	Friedman Test on Middle School Supports

CHAPTER I

INTRODUCTION

Background

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. This study examined whether and how three specific school supports (instructional scheduling, teaming, and common planning) are in existence in New York State middle schools.

The importance of these three school supports at the middle school level has been discussed and examined by scholars and advocacy organizations. 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 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 (Allen 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). Discovering whether these three school supports are present or absent in New

York State middle schools will provide direction for educators, administrators, community members, and policymakers in making informed decisions regarding middle level education.

Statement of the 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 School Report Card, and therefore it is not known whether and how middle schools are implementing these three school supports. I acknowledge the possibilities that some schools might use only one or two of these school supports while others might use multiple supports in combination. Research at the middle school level has found that these three school supports – together or separately – had a positive impact on student learning. This descriptive study examined the current instructional scheduling, teaming, and common planning practices of New York State middle schools.

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). It is important to determine whether these three school supports are present or absent in New York State middle schools in order to provide direction for the continued development of middle school programs and assist administrators and policymakers in making informed decisions to positively impact the student learning process.

Purpose of the Study

The purpose of this study is to provide a descriptive profile of three school supports (instructional scheduling, teaming, and common planning) to be used to determine if they are either absent or present in New York State middle schools. Research has indicated that these three school supports can have a positive impact of student learning. Literature and research conducted focusing on middle school has indicated the need for additional research to be

conducted (Mertens & Flowers, 2006; National Middle School Association, 2010a; National Middle School Association, 2010b). In particular, Mertens and Flowers (2006) stated that a critical issue facing middle level education is the paucity of good, reliable research studies that have been able to demonstrate the link between components of the middle school philosophy and learning outcomes. This study will assist in advancing the research in this field by identifying the presence or absence of one or more of these three school supports and identifying when possible any unique features.

In addition, this study was designed to support the research recommendations of the National Middle School Association (NMSA, 2010a). The NMSA identified seven recommendations to expand the middle grades education research base. Three of these seven recommendations are followed in this study. The third recommendation is that middle level education needs additional studies that examine multiple components of the middle school concept and how these components interact. This study examined three school supports and their impact on middle school student learning. The fourth recommendation was that studies needed to be replicated. Although this descriptive study is not an exact replication of a previous study it does expand upon previous research that examined the practices of scheduling and teaming from a statewide perspective. Lastly, the sixth recommendation is that there is a need to establish a national database to address questions related to the middle school concept. The population of middle schools surveyed for this study provides a body of data that may illuminate patterns and trends that further research may confirm at the level of statistical reliability.

The population of New York State middle schools sampled included schools that have either a 5-8, 6-8, or 7-8 grade configuration. These three grade configurations were selected because they are the three most common among middle schools in the United States (McEwin & Greene, 2011). The middle schools selected for this study were limited to New York State school districts that were labeled as an average need/resource capacity (N/RC) district by the New York State Education Department for the 2011-2012 school year. This need/resource capacity index is a measure of the ability of a district to meet the needs of its student with local resources. More specifically, it is the ratio of the estimated poverty percentage to the combined wealth ratio.

Districts are assigned to one of the following seven categories: High N/RC - New York City, High N/RC - Large City Districts, High N/RC - Urban-Suburban Districts, High N/RC -Rural Districts, Average N/RC Districts, Low N/RC Districts, and Charter Schools (New York State Education Department, 2013). The average need/resource capacity category is defined by the New York State Education Department as all school districts between the 20th (0.770) and 70th (1.1835) percentile on the index. The category of average need/resource capacity was selected for this study because, with the exception of the high need/resource capacity - New York City, it contained the largest percentage of middle schools. In addition, this average need/resource capacity category includes middle schools from approximately two thirds of the counties in the state allowing for a statewide sampling to occur.

It is my intent that the data collected provide administrators and policymakers with an additional layer of information regarding the use of specific school supports among New York State middle schools. This data can serve as a reference to further understand the extent to which middle schools in New York State are implementing these school supports.

Research Questions

The following research questions were addressed in this study:

1. What are the current instructional scheduling practices of NYS middle schools categorized with an average need/resource capacity?

2. To what extent, if any, is teaming present or absent in New York State middle schools categorized with an average need/resource capacity?

3. To what extent, if any, is common planning present or absent in New York State middle schools categorized with an average need/resource capacity?

4. To what extent, if any, are all three school supports (instructional schedules, teaming, and common planning) found to exist simultaneously in New York State middle schools categorized with an average need/resource capacity?

Study Design and Methodology

This study was a descriptive study that examined the presence or absence of three school supports (instructional schedules, teaming, and common planning) among New York State middle schools categorized with an average need/resource capacity. A self-administered online web survey (see Appendix D) examining these practices was created by me, reviewed by a panel of experts for content validity, and piloted to test for reliability. Included in the pilot test were middle school administrators from New York State whose districts were categorized with a need/resource capacity other than average. The population surveyed for this descriptive study was 232 New York State middle school principals in school districts with an average need/resource capacity (see Appendix A). For the purposes of this study, middle schools were defined as schools that contained the grade configurations of 5-8, 6-8, and 7-8. These three grade configurations were selected because they accounted for approximately 89% of all separately organized public middle schools in the county (McEwin & Greene, 2011). Descriptive, inferential, and nonparametric statistics were utilized to examine the data and report the findings.

Significance of the Study

This descriptive study adds to the body of research and literature already conducted by examining the presence or absence of three specific middle school supports. Research and literature regarding middle school has indicated that the three school supports of scheduling instruction, teaming, and common planning can have positive influences on student learning. New York State collects data from schools and districts on a yearly basis that includes: enrollment, average class size, demographic factors, attendance and suspensions, teacher qualification, teacher turnover rate, staff counts, and student performance (NYSED, 2013). However, not included in this yearly report are data indicating the presence or absence of specific instructional schedules, teaming, and common planning practices for middle schools.

Furthermore, the need for this descriptive study was supported by the document developed by both the New York State Department of Education and New York State Board of Regents entitled "Essential Elements of Standards-Focused Middle-Level Schools and Programs" (University of the State of New York, 1999). One of the six essential elements noted in this document was organization and structure. In particular, this element refers to teacher teams sharing responsibility for educating a common group of students, common planning for teachers sharing responsibility for a common group of students, and schedules with flexible time assignments.

This study is significant, not only for the collection of data not presently available, but for the use of that data to point to policies, practices, and/or programs that could be needed or modified for increased support of improved learning in all middle schools in an average need/resource capacity district.

Limitations and Delimitations

The following limitations and delimitations were present in this study:

1. The sample was restricted to New York State middle schools with an average need/resource capacity and therefore cannot be generalized to other middle schools with different need/resource capacities.

2. The sample was restricted to New York State 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.

3. District and school websites were used to determine current principal names and email addresses.

In addition, it was the intent of this study to be statistically reliable through obtaining a minimum response rate of 35% when examining the absence or presence of these three school supports. Although I made a concerted effort (through three different electronic solicitations), a 28% response rate was obtained. I, along with the committee, believed that this study would still provide value to this research field by opening the door to examine how middle school principals in New York State utilize these three school supports. Plausible conclusions were able to be drawn examining similarities, differences, and contradictions regarding instructional scheduling, teaming, and common planning. In addition, this study has value in terms of examining the beliefs and understanding of principals with regard to middle school supports. This study started applying the foundation for further research with a larger amount of subjects to be conducted that examine middle school supports.

Assumptions

The following assumptions were utilized in this study:

1. It was assumed for this study that principals would answer the questions honestly and without bias in order to support the research being conducted.

2. It was assumed that the survey instrument being utilized to conduct the research would be valid, reliable, and appropriate for the research being conducted.

3. Although the sample of participants did not meet the reliability assumption, 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.

Definition of Terms

What follows are the definitions of important terms used in the dissertation:

Middle school. Schools with grades configurations of 5-8, 6-8, and 7-8.

Traditional scheduling. This schedule consists of a fixed number of daily periods that are uniform in length with instruction being given within departmental configurations (Hackmann & Valentine, 2003).

Block schedule. This type of schedule allows students to take fewer classes for longer periods of time. A block schedule can take several forms that include: 4 x 4, alternating day, and Flexible/Alternate/Navigate (Queen, 2009).

4 x 4 block schedule. Classes in this model are taught in periods of approximately 90 minutes and meet for only a part of the school year, usually a semester. With this scheduling model, students have the opportunity to take eight different classes in one academic year (Queen, 2009).

Alternating block schedule. Classes in this model (also known as A/B Block Schedule) are taught in periods of approximately 90 minutes and meet every other day for the entire school year (Queen, 2009).

Flexible/Alternate/Navigate (FAN) block schedule. Classes in this model are taught either everyday or every other day and meet for either extended or shortened periods of time. Within this scheduling model, the master schedule includes an advisory period and a combination of core and elective classes (Queen, 2009).

Flexible Interdisciplinary Block Schedule (FIBS). This schedule consists of blocks of time for teaching teams. It provides individual teams the flexibility to determine how to best utilize this time for the core academic classes. This type of schedule has also been referred to as flexible block schedule and interdisciplinary block schedule (Hackmann & Valentine, 2003).

Modular scheduling. This type of scheduling allows for the school day to be divided into several modules in shorter amounts of time than a traditional schedule. A modular schedule allows for classes to occur in varying time allotments (Hackmann & Valentine, 2003).

Rotating schedule and rotating dropped schedule. The rotating schedule is a type of schedule that consists of classes rotating through different times of the school day. A variation of this type of schedule is the rotating dropped schedule that incorporates the dropping of one class daily into the rotation (Hackmann & Valentine, 2003).

Need/Resource Capacity (N/RC) category. This is a measure of the ability of a district to meet the needs of its students with local resources. More specifically, it is the ratio of the estimated poverty percentage which is the percentage of students eligible for free or reduced-price lunch to the combined wealth ratio which is the ratio of district wealth per pupil to state average wealth per pupil. There are seven need/resource capacity categories: High N/RC - New York City, High N/RC - Large City Districts, High N/RC - Urban-Suburban Districts, High

N/RC - Rural Districts, Average N/RC Districts, Low N/RC Districts, and Charter Schools (New York State Education Department, 2013).

Average Need/Resource Capacity districts. This includes all districts between the 20th (0.770) and 70th (1.1835) percentiles on the index (New York State Education Department, 2013).

Interdisciplinary teaming. It is 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).

Common planning. 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).

Pull outs. For the purposes of this study, this term refers to the removal of a student(s) from a regularly scheduled class in order to provide a type of remedial, special education, or English Language Learner service.

Organization of the Dissertation

While this chapter provides an introduction and overview to the study, Chapter II consists of a literature review related to the work in this study. Chapter III discusses the research design, the methodology and instrument used for collecting the data to answer the research questions and the analysis procedures enacted to process the data. Chapter IV presents the research findings while Chapter V discusses the conclusions, recommendations, and future research implications.

CHAPTER II

REVIEW OF RELATED LITERATURE

This study provides a descriptive profile of three school supports (instructional scheduling, teaming, and common planning time) to be used to determine their presence or absence in New York State middle schools. This review of literature examines the peer-reviewed empirical studies conducted within the past 10 years that focused on these three school supports. In addition, this literature review culminates in the development of the theoretical foundation for this study, which is the potential indirect influence of these three school supports on student learning through the variables of school leadership and classroom instruction. Determining the presence or absence of these three school supports is important in assisting administrators in improving practices, programs and policies to maximize student learning.

This first section provides an introduction and overview to the literature review. The second section provides the literature search procedures utilized, and the third section examines the criteria used in developing this chapter. The next three sections discuss the three school supports of instructional scheduling, teaming, and common planning. The seventh section examines the theoretical foundation previously mentioned while the last section provides a summary of this literature review and an overview of the next chapter.

Literature Search Procedures

A search was conducted to locate the literature and research pertaining to the topics of instructional scheduling, teaming, and common planning. This search included: peer-reviewed journals, relevant historical and current texts, and literature obtained from various educational associations and organizations that focused on the purpose of this study. Electronic publications were obtained through educational databases that included Education Resources Information Center (ERIC), Academic Search Premier, EBSCOhost, and ProQuest. In addition to

educational databases, general web-based searches were performed using Google to access various professional websites and additional articles and publications. The following keywords or combination of keywords were used to obtain relevant literature and research: middle school, middle grades, scheduling, instructional schedule, block schedule, alternating-day schedule, flexible block schedule, modular schedule, rotating schedule, teaming, interdisciplinary teaming, grade-level teaming, school leadership, classroom instruction, common planning, and common planning time.

Criteria for Research

Criteria for studies used in this literature review included the following:

1. Only empirical studies were reviewed that utilized middle schools from the United States and had one of the following three grade configurations (5-8, 6-8, or 7-8).

2. Only peer-reviewed research was examined in this literature review to ensure a level of quality and credibility along with best research practices within this field of research.

3. Only studies conducted within the last 10 years were reviewed unless considered a seminal work by other researchers and scholars.

4. Non peer-reviewed research and literature were only referenced to provide a historical, theoretical, or informational perspective of the development and philosophy of middle-level schools and student learning.

5. Both quantitative, qualitative, and mixed-method studies were included in this literature review.

Instructional Time Schedules

The importance of instructional scheduling as a school structure at the middle school level has been discussed and examined by scholars and advocacy organizations (Alexander, 1969; Hackman, 2002; Hackmann & Valentine, 2003; Queen, 2009; Rettig & Canady, 2000). One of the seminal reports on middle-level education, *Turning Points: Preparing American Youth for the 21st Century* (Carnegie Council on Adolescent Development, 1989) states that in order for all students to learn, educational programs need to meet the needs of all students by scheduling class periods to maximize learning and expand the structure of opportunities for learning. This theme is echoed in a follow-up report, *Turning Points 2000: Educating Adolescents in the 21st Century* (Jackson et al., 2000), which presents the benefits of the flexible scheduling of periods with regards to instructional goals and student needs. In another seminal report, *This We Believe: Keys to Educating Young Adolescents* (National Middle School Association, 2010a), how schedules with larger segments of time allow teachers to provide more in depth learning experiences to students is discussed.

This section of the literature review examines peer-reviewed empirical research conducted on types of instructional schedules that have been published within the past 10 years. Although several empirical research studies have been conducted that examined types of instructional schedules, many of them are dissertations (Bush, 2003; Caplinger, 2013; Dunham, 2009; Martinez, 2010; Mattox, 2001; Smith, 2010; Todd, 2007). Although it appears that there have not been many empirical peer-reviewed research studies conducted in the past ten years, the studies that have been conducted on type of instructional schedule focused on student achievement, curriculum and instructional practices, and teacher perceptions. This section examines these studies and is followed by a section that synthesizes the research and discusses future implications.

Empirical Research

One focus of the peer-reviewed empirical research conducted on types of instructional schedules is the examination of the influence or impact that the type of instructional schedule has on academic achievement. In a longitudinal study conducted by Mattox et al. (2005), the

researchers examined the effects of block scheduling on middle school students' math achievement over a 6-year period. The participants in the study were approximately 9,000 sixthgrade students who attended five different middle schools in a suburban school district in the southeastern United States. The average enrollments of these racially diverse middle schools ranged from approximately 800 to 1,200 students. The number of teachers in each middle school ranged from 54 to 73 with three of the five middle schools having some National Board Certified teachers.

This mixed-methods longitudinal study focused first on courses being taught using traditional schedules during the initial 3 years of study. Characteristics of this traditional schedule included: 50 to 55 minute class periods, reorganization of students between class periods, and students assignment to courses based on academic ability level. During the second 3 years of this study, courses in the five middle schools that were using one or more forms of block scheduling were examined. These different forms of block scheduling included 4 x 4, alternate day, and flexible/alternate/navigate (FAN) models. At the conclusion of each academic year, student achievement in mathematics was measured using the mandated state assessment. In addition, Mattox et al. (2005) interviewed a select group of teachers and reviewed school records to assist in the identification of additional variables that impacted the math achievement of students.

The results were reported by means, standard deviations, and sample sizes of mathematics achievement by school, academic year, and schedule. Mattox et al. (2005) indicated that student achievement improved each year in mathematics after all five schools transitioned from traditional to block scheduling. More specifically, the results indicated that although student achievement in mathematics improved in all five schools, during the first year of the transition to block scheduling there were no significant differences in math achievement in schools A, C, D, and E. Significant differences did occur in math achievement with these four schools in the second and third years of block scheduling with effect sizes of .21, .58, .45, and .40 (at the p<.01 level of significance). With regard to school B, significant differences existed for all 3 years after implementing block scheduling and the effect sizes of these differences were .36, .59, and .46 (at the p<.01 level of significance). Mattox et al. (2005) indicated that this finding of consistent improvement in mathematics achievement after transitioning to block scheduling was important because each of the five middle schools had different characteristics and no other significant changes occurred in the schools during this 6-year time period. Therefore, they concluded that the type of instructional schedule had been isolated as a variable and that it accounted for the observed student improvement in mathematics.

This study made a contribution to this field of research by examining the impact or influence of instructional schedules at the middle school level. A strength of this study is that the researchers used the valid and reliable dependent variable of state assessments over a 6-year period of time. Providing details about the type of block scheduling that each middle school adopted would have added more depth to the study. A limitation of this study is that only one school district was sampled. Researchers should exercise caution regarding transferability of these results to other school districts and populations. In addition, researchers should exercise caution when assuming the variable of instructional schedule was isolated by these researchers. Replicating this study using a different population of middle schools would be valuable to the understanding of the influence of different types of instructional schedules on student achievement. Lastly, it would be valuable to this field of research to further explore longitudinally the influence instructional scheduling has on student achievement.

While Mattox et al. (2005) conducted a longitudinal study that examined the effect of block scheduling on middle school students' math achievement, Gill (2011) measured student

achievement in math and reading using state assessments given within 1 year. In a study published 6 years after that of Mattox et al. (2005), 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. In addition, the researcher examined if the percentage performance on state examinations differed by race on the reading and math. The sample for the study included 43 middle schools in Virginia's Region IV and was comprised of approximately 34,000 students. Twenty-three of the middle schools utilized a block schedule while the remaining 20 used a traditional schedule. For the schools in this study, the alternating block schedule consisted of 80 to 90 minutes per block meeting every other day while the traditional schedules consisted of 40 to 60 minute classes that met on a daily basis.

The design of Gill's (2011) study was non-experimental since the researcher had no control over the independent variables of schedule types, ethnicity, and school. Data were analyzed using descriptive statistics, independent-measure *t* tests, and an analysis of variance (ANOVA). The results indicated that there were no significant differences (using a p<.05 level of significance) between the percentage of students earning a pass/advance score in reading and math in the traditional or block scheduled schools. However, the results did indicate a significant difference (using a p<.05 level of significance) regarding race in that a larger percentage of Black and Hispanic students earned pass/advanced scores in the A/B block scheduled schools.

Although this study by Gill (2011) contributed to the existing research on instructional scheduling by examining two different forms of schedules and their impact on student achievement, it was narrow in scope and had limitations. The researcher discussed limitations created by the small sample size, lack of random selection, and the use of test data for only 1

year, along with the absence of considering teacher practices, skills, and classroom experiences. A strength of the study is that, in addition to examining the differences in overall student achievement between two different scheduling configurations, the researcher explored the impact scheduling configurations had on ethnicity and race. Further research examining different subgroups and student performance in different instructional scheduling configurations would be beneficial to this field and would add to the current body of research.

While the two aforementioned studies examined student assessments, another focus area found in the peer-reviewed empirical research was the examination of curriculum and instruction practices as they related to type of instructional schedule. In a study published the same year as Mattox et al. (2005), 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. The sample utilized in this study included: 62 middle schools (25 block scheduled middle schools and 39 traditional scheduled middle schools), 156 middle school teachers (71 teachers in a block schedule and 85 teachers in a traditional schedule), and 60 middle school principals (23 principals in a block schedule and 37 principals in a traditional schedule). The teachers, schools, and principals used in this study were located in Louisiana, Illinois, and Colorado. Teacher characteristics among the groups were similar in that of the 156 teachers surveyed, there was no significant difference in their teaching experience (block schedule: M=5.59, SD=1.97, traditional schedule: M=5.76, SD=2.26).

The design of the study utilized a quantitative survey design for teachers and principals. The principals were asked questions regarding school enrollment, grade levels, percent of students eligible for free or reduced lunch, and percent of Caucasians. The teacher survey focused on the degree of standards-based mathematics instruction by asking teachers to indicate their use of seventeen different types of instructional activities. The results of the study by Flynn et al. (2005) indicated 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. In addition, the results indicated that there were several differences in means scores between the two different types of schedules. *T*-tests were utilized to determine if any of the differences were considered statistically significant. When controlling for school socioeconomic status (SES), only the item of Writes reflections in notebook or journal, was statistically significant (*t*=2.695, *df*=136, and *p*=.01).

A strength of the study conducted by Flynn et al. (2005) is that a sample of teacher, principal, and school characteristics was used from across multiple states. A limitation or weakness of this study is the difference in SES status of the block and traditional scheduled schools. The researcher indicated that in the traditional schools sampled, over 50% of the students were eligible for free or reduced lunch, while in the block schedule schools the percentage of student eligible for free or reduced lunch was 20%. The comparison of instructional schedules among school with different socioeconomic statuses raises a concern about the reliability and transferability of these results. My study has been designed to examine the types of instructional scheduling in middle schools in New York State that have students from similar socioeconomic backgrounds. In addition, providing details regarding the specific types of block schedules utilized by the 25 middle schools would have added an additional layer of strength to Flynn's et al. (2005) study. It is also important to note that regardless of the type of schedule utilized (block or traditional), the pedagogical strategies employed by these two groups of teachers were similar. It could be hypothesized that similar patterns of teaching, such as the ones in this study, would result in similar results. A future area of study could focus on

why the pedagogical strategies were not altered between the traditional and block scheduling teachers.

While the aforementioned study by Flynn et al. (2005) examined instructional scheduling focused on student achievement and curriculum and instructional practices, this next study explored teacher perceptions of block scheduling. In a study conducted by Brown (2001), middle school teachers who were teaching in a 4 x 4 semester block scheduling configuration were interviewed. The sample size included 10 teachers from two different middle schools in a mid-Atlantic state. The average years of teaching experience among the 10 interviewed teachers was 14 years, and all of the teachers had taught in both the traditional and the 4 x 4 block scheduling formats. The grade levels that the sampled teachers taught included sixth, seventh, and eighth grades, and the subjects taught included math, science, English, social studies, and library media.

The design of the study was a qualitative research method that utilized the interpretivist theory. The method for collecting data was interviews that were taped and transcribed by the researcher. Brown (2001) designed a nonscheduled interview guide that consisted of 25 questions that focused on the ability of the 4 x 4 semester block schedule to meet the developmental learning needs of students, along with the beliefs that middle school teachers have about the effect the 4 x 4 schedule has on their instructional behaviors and curricular decisions. The length of the interviews ranged from 35 to 55 minutes.

The findings from the collected data were divided into four themes. The first theme was altering instruction, and focused on teachers stating that they utilize a larger variety of instructional strategies in the block-scheduling configuration. The second theme was the perceived effect on student learning, and the finding was that 9 of 10 teachers believed that the 4 x 4 scheduling format had a positive effect on their students' learning. The third theme reflected

the effects on curricula and the respondents' belief that curriculum needs to be adjusted (from a positive perspective) in the block scheduling format. The final theme that emerged from Brown's (2001) study was the impact on student assessment with half of the teachers indicating that assessment strategies (not assessment methods) needed to be altered in a 4 x 4 scheduling format. Overall, the data obtained for this study indicated that teacher perceptions with regard to implementing a 4 x 4 block schedule alter instruction and assessment in ways that encourage improved student learning.

A strength of this study conducted by Brown (2001), is the in-depth analysis of teacher perceptions regarding a specific type of block scheduling. In addition, the in-depth analysis added strength to the study by choosing a sample of teachers who had experience teaching in both a block and traditional scheduling format. This qualitative study by Brown (2001) examined and reported actions within a specific place and time. Therefore, with this limitation researchers should exercise caution in generalizing these findings to other populations. This study by Brown (2001) contributed value to research examining middle school instructional scheduling. It might prove valuable to this field of research for additional studies to explore the beliefs of other stakeholders regarding types of middle school instructional schedules. It is my intent, that by conducting a study that examines the presence or absence of various types of instructional schedules in New York State middle schools, additional studies be conducted in the future that build upon the data collected.

Synthesis

In the most recent and comprehensive national survey regarding the status of practices and programs in America's middle schools, McEwin and Greene (2011) stated that 72% of respondents reported that daily uniformed periods were the most commonly utilized instructional time schedule at their school. This percentage has decreased from 86% in 1993 and 75% in 2001. It appears that although literature, research, and middle level organizations are placing more value on the block and flexible types of instructional schedules, the majority of middle schools still utilize a traditional fixed-period schedule. The empirical research conducted in the past 10 years that was reviewed found, to some extent, the positive influences block scheduling could have on student achievement (Brown, 2001; Mattox et al., 2005). To further understand the potential influence or impact that types of instructional schedules have on student achievement, further empirical research needs to be conducted. It would be in the interest of this field of research for longitudinal studies to be conducted examining student achievement in different scheduling configurations. In addition, it would be of interest for additional studies to explore the finding by Mattox et al. (2005) that student achievement differs by race and ethnicity depending upon the type of instructional scheduling. Furthermore, none of the research reviewed examined the affective tone of the relationship between the teacher and students. It could be hypothesized that the longer instructional periods would encourage greater familiarity between the two groups. The present study, examines the beliefs of middle school principals about the influence longer instructional periods have on the teacher-student relationship. It will also add to the existing body of research by collecting data that has never been previously collected regarding the types of instructional scheduling utilized by a specific socioeconomic population of New York State middle schools.

Teaming

The importance of teaming as a school structure at the middle school level has been discussed and examined by scholars and advocacy organizations. The value of teaming has been supported by many of the seminal reports that focused on middle level education. In a speech presented at a conference for school administrators in 1963, Alexander discussed his view of a middle school stating that grouping students into teams of teachers is important. Almost 40

years later in the document *Turning Points: Preparing American Youth for the 21st Century* prepared by the Carnegie Council on Adolescent Development (1989), one of the recommendations for transforming middle grade schools focused on creating small communities for learning to encourage the development of relationships between students and adults. In a follow-up document published 11 years later titled *Turning Points 2000: Educating Adolescents in the 21st Century*, Jackson et al. (2000) echoed the recommendations by stating that within the teaming structure students are able to receive both the attention of a single teacher or a group of teachers. In another seminal report, *This We Believe: Keys to Educating Young Adolescents* (National Middle School Association, 2010a), it is discussed how interdisciplinary teams are a significant part of high-performing schools and that teaming can have an impact on improving student achievement.

This section of the literature review examines peer-reviewed empirical research conducted within the past 10 years that focused on teaming. Although several empirical studies have been conducted that examined teaming, a large amount of this research occurred prior to the 10-year limit placed on this literature review. The studies that have been conducted on teaming within the 10 years prior to the current study focused on school reform, student social bonding, the fostering of an adolescent-centered community, student perceptions, preservice training, and distributive leadership. Also, it should be noted that when reviewing this research a theme that emerged was common planning time. Since this has been viewed as a key component of the middle-level concept, research focusing specifically on common planning time will be discussed in the next section of this literature review. This section will examine the studies on teaming, followed by a section that synthesizes the research and discusses future implications.
Empirical Research

One focus of the empirical research conducted on teaming was the influence it has had on whole school reform. For the purposes of this review of the literature, one study will be discussed. Mertens and Flowers (2006) conducted a study that examined the implementation and effectiveness of a comprehensive school reform design program focused on middle schools and young adolescents. Titled "Middle Start," this reform program began in 1994 and focused on increasing the quality of teaching and learning among Michigan's middle schools. The targeted for this program was schools and districts with large populations of at-risk students. The sample for this study included three different groups. The first group consisted of 11 middle schools that received comprehensive school improvement (CSI) grants and had over 40% free/reduced lunch student populations. The second group consisted of 18 middle schools that received lunch populations. The third group, the control group, consisted of 43 middle schools that did not received any grant monies or additional services.

The design of this study by Mertens and Flowers (2006) was a longitudinal quasiexperimental design with multiple sources of data. The data collected for this study were collected through the School Improvement Self-Study, which is a data collection system developed at the University of Illinois. This data collection system consists of different sets of survey measures that include teacher, student, administrator, and parent. Each of the three groups in the study had data collected over the course of multiple school years.

Although this study examined many facets of school reform, for the purposes of this literature review the results with regard to organizational structure are discussed. Mertens and Flowers (2006) examined school-level interdisciplinary teaming implementation. After examining the results of their study, Mertens and Flowers (2006) created three school-level interdisciplinary teaming implementation categories: teaming in all middle grades with high levels of common planning time, teaming in all grades with low level of common planning time, and some or no teaming. Schools in the comprehensive school reform demonstration group made the most progress in implementing the highest level of interdisciplinary teaming. Over the course of a 2-year period from 1999 to 2001, the percentage of comprehensive school reform demonstration schools' common planning time increased from 11% to 56%. In addition, the researchers concluded that comprehensive school reform demonstration schools had the most significant gains (at the p<.05 level of significance) for all team practices during their grant period (range from a p=.001 to a p=.037 level of significance). The interdisciplinary team practices included: curriculum coordination, coordination of student assignments and assessments, parent contact, and contact with other staff. In addition, the results indicated that schools (regardless of group) that engaged in high levels of common planning time had the largest achievement gains (25% in reading and 14% in math).

This study contributes to the research by examining middle school teaming from the perspective of school reform. A strength of this study is that it included the element of common planning time, which is further examined in the next section of this literature review. In addition, the study incorporated the impact of teaming on academic achievement. A limitation of the research by Mertens and Flowers (2006) is that it focused on a specific demographic population. Researchers should use caution when transferring these results to other populations with different demographics. Although Mertens and Flowers (2006) did not examine the reasons why teaming practices increased at a higher rate in the middle schools that received grants than compared to the control group, it would be of interest to this researcher as to why this occurred. This study by Mertens and Flowers (2006) examined the concept of school reform with a middle school population that included a large population eligible for free/reduced lunch. The current study

that this researcher is conducting will examine the presence or absence of teaming in New York State middle schools that have been categorized as having an average need/resource capacity by the New York State Education Department (NYSED).

While Mertens and Flowers (2006) examined teaming from the school reform perspective, Wallace (2007) examined students' perceived levels of social bonding with their peers by comparing two configurations of sixth grade students and core teachers. The sample for the study included approximately 250 sixth grade students in a 100-student/4-teacher team format and approximately 250 sixth grade students in the 50-student/2-teacher team format. School selection was restricted to middle schools in Wisconsin, and a sample of 10 teams were matched on size, socioeconomic status, percent of minority students, percent of students eligible for free/reduced lunch, and special education programs.

The design of Wallace's (2007) study was a matched pairs design that utilized sixth grade interdisciplinary teams. This method was selected to minimize the effects of other variables on the outcomes. The instrumentation used in this study was the Social Bonding Scales (SBS) from the Wisconsin Youth Survey. In particular this survey measured three types of social bonding: peers, school, and teachers. The subscales were checked for internal validity and had the following alpha coefficients: peers (.72), school (.76), and teachers (.76). Two-tailed *t*-tests were conducted on each of the separate matched pairs with each measure of social bonding to determine if the interdisciplinary teaming configuration produced different effects.

The results indicated that when comparing the combined scores of the five schools with one teaming configuration to the five schools of the other teaming configuration, the students' scores on the two teacher teams were significantly higher on all three measures of social bonding (peer: M=3.23, SD=.45, df=408, p=.010; school: M=3.36, SD =.55, df=397, p=.000; and teacher: M=3.30, SD =.53, df=396, p=.016). In addition, the results indicated that although the degree to

which interdisciplinary teaching team configurations impact student social bonding is small, it is considered to be significant.

The study by Wallace (2007) contributed to the overall research on teaming by its exploration of the effects of interdisciplinary teaming on social bonding. One of the strengths of this study is in its design. Wallace (2007) used a matched pair methodology that grouped similar samples to control for variables that may have impacted the results. A limitation of the study that was acknowledged by Wallace (2007) was the unknown with regard to schools using social bonding criteria in teaming selection. It would have added to the study for Wallace (2007) to explore the influence that social bonding has or does not have on the teaming configuration process. Lastly, Wallace (2007) acknowledged the fact that certification played a role in the flexibility of interdisciplinary teaming in that sixth grade teachers typically had more of a general certification than seventh and eighth grade teachers who had a more specific certification area. It would be of interest to me to determine if a two-teacher team is more common in sixth grade compared to seventh and eighth grade due to the difference in scope of certification. This concept is explored in my study within the teaming section of the survey that will be administered to principals.

While Wallace (2007) examined the impact of interdisciplinary teaming on social bonding, Kiefer and Ellerbrock (2012) explored how one interdisciplinary team developed a responsive adolescent-centered community for eighth-grade students. The sample for this study was purposefully selected and included nine participants from a middle school located within a large socioeconomically and ethnically diverse school district in the southeastern United States. The nine participants included four eighth grade students, four eighth grade team teachers, and one principal. The four teachers and students were from a split-level (seventh and eighth grade) team that included 56 eighth-grade students. Kiefer and Ellerbrock (2007) utilized a within-site, qualitative, case study approach to gather information as to how one interdisciplinary team developed an adolescent-centered environment that was responsive to student needs. During the spring of the 2009 school year, data were collected from observations, individual interviews, and focus group interviews. An inductive approach was used to analyze the data for patterns from which conclusions could be drawn.

Two types of emergent relationships that served as a way to promote an adolescentcentered community within the eighth grade students' interdisciplinary team were found. The first emergent relationship focused on organizational structures (interdisciplinary teaming, flexible scheduling, homeroom, and common planning time) that served as a way to promote the adolescent-centered community. In addition, the second emergent relationship was that team teachers (teacher characteristics and practices) aided in promoting this community.

Kiefer and Ellerbrock's (2007) study contributed to the existing research that had examined middle school supports by its exploration of how an adolescent-centered community developed and how it was fostered within an interdisciplinary team. Kiefer and Ellerbrock's (2007) study raises the question as to whether the variable of social bonding had an indirect effect on student learning. Due to the nature of case study methodology, one limitation discussed by Kiefer and Ellerbrock (2007) was that the sample included only nine participants. Although the study was part of a larger study that had a sample size of 23 participants, caution should be exercised regarding the transferability of these results to other populations. Kiefer and Ellerbrock (2007) stated that the interdisciplinary team from which the participants were selected was a multi-graded team of seventh-grade and eighth-grade participants. It would have added to the study if an explanation was provided as to why a multi-graded team was selected and if a discussion had been provided as to the potential differences that might have occurred with regard to social bonding if the sample interdisciplinary team was homogenous by grade level. In addition, the Kiefer and Ellerbrock (2007) study raises a question as to whether social bonding has an indirect effect on student learning. When middle school principals are surveyed for the purposes of my study, questions will be asked inquiring about their beliefs regarding the influence identity and belonging has on student learning.

While the sample used by Kiefer and Ellerbrock (2007) included teachers, students, and a principal, Boyer and Bishop (2004) focused specifically on the student perceptions of interdisciplinary teaming. The purpose of their study was to analyze students' perceptions of effective interdisciplinary teaming. The sample for this study included 77 final-year, middle-level students. The study was conducted within three middle schools in New England. A purposeful sample was utilized for both site and student selection. A panel was used, comprised of middle-level researchers, to select one team from each of the three schools. The first team was a two-teacher team in which sixth grade teachers and students looped together to seventh grade and was in its second year of existence. The second team was a three-teacher team that included sixth, seventh, and eighth grade students and was in existence for 10 years. The third team was a four-teacher team that included fifth, sixth, seventh and eighth grade students and was in existence for 31 years.

Qualitative methods were used to investigate students' perceptions of effective teams. Multiple data collection methods were used including: participant observation, document review, journal writing, focus groups, and photo-elicitation interviews. All 77 students participated in a free-write, while 12 students (three from each team) participated in the focus group, photography interview, and individual interviews. Boyer and Bishop (2004) indicated that their data collection was ongoing throughout the study and organized using inductive analysis for emerging patterns and themes. Data was collected in the forms of transcriptions, field notes, and journal free writes.

The findings of the study were organized into three sections. The first section focused on long-term relationships, and how students indicated a sense of acceptance into a community and knowing other students. Students reported that they had a sense of history associated with their team. The second section focused on the democratic learning environment and how students believed that decision making was shared among students and teachers. In addition, Boyer and Bishop (2004) noted that each team had a regular team meeting that was led by students. The last section focused on tolerance for others and how students learned from each other and appreciated each other's differences. Students indicated that being on a team increased their self-confidence.

The study by Boyer and Bishop (2004) contributes to the body of research on middlelevel teaming by exploring student perceptions. A strength of this study by Boyer and Bishop (2004) is that the researcher used purposeful sampling and used a panel of experts to select the teams allowing for diversity among the teams. Although there was diversity in the make-up of team in terms of teachers and years as a team, a limitation of the study is that looping occurred if the team was comprised of only one grade or the team was multi-graded. There were no teams in the sample that were single graded and that did not loop. Therefore, researchers should exercise caution in transferring these findings to other compositions of teams other than the ones used in this study. In addition, Boyer and Bishop (2004) did not mention the variable of team size. It would be of interest to determine the potential difference in results by team depending on the teacher to student ratio. The survey that will be administered to middle school principals in the present study will include demographic information about average student to teacher ratios for teams.

29

While the aforementioned studies focused on school reform, student's social bonding, and the fostering of an adolescent-centered community, Wilson (2007) examined teaming from a preservice training perspective by simulating interdisciplinary teaming for a semester with 24 preservice middle school teachers. This study occurred as part of a required course at a midwest university that recently received the National Council for Accreditation of Teacher Education (NCATE) status for its middle level program. After completion of this course, these 24 preservice middle school teachers would enroll in their senior year student teaching. When selecting team placement, Wilson (2007) considered content area majors and created eight, threeperson teams. There was no attempt on the part of Wilson (2007) to match personalities.

The design of Wilson's (2007) research was an action research study in which the researcher worked with preservice teachers to improve their understanding and ability to operate within a middle level interdisciplinary team. Data were collected through student artifacts, a researcher journal, tape-recorded interviews, and field notes. The data were analyzed using both grounded theory and constant comparative methods.

By using the multiple sources of data collection, Wilson (2007) was able to develop themes, advance her findings, and provide historical context to the study. In terms of findings, three overlapping themes emerged. The first theme was team cohesiveness and community while focusing on respect, support, and chemistry/team dynamics. The second theme was preservice teachers developed the skills necessary for working on effective teams that included collaboration, compromise, and interpersonal communication. The last theme that emerged from Wilson's (2007) study was that preservice teachers recognized and valued the authenticity of their experience in terms of virtual teaming and concerns about reality.

This action research study added to the literature and research on interdisciplinary teaming. Unlike the studies that were previously reviewed, this study by Wilson (2007) provided

preservice teachers with a simulated experience of working with other teachers on an interdisciplinary team. The limitations of the study that are acknowledged by Wilson (2007) included the inability to generalize results and the potential bias that came as a result of the researcher having an active role in the research. In addition, another limitation of the study was that the simulated experience did not include any interaction or involvement with middle school students. The level of effectiveness that these eight teams demonstrated could have been different if students had an active role in the study. Future areas of research could expand upon this study by following these students into their student teaching and examine their skill sets working with real interdisciplinary middle level teams.

The last theme that emerged from reviewing the research on teaming is the advantages and challenges of distributing leadership in middle-level schools. In a study by Grenda and Hackmann (2014) the leadership practices of three middle school principals were examined. The research explored how successful middle school principals were at utilizing distributed leadership practices within their schools. In addition to the overarching research question, four sub-questions were explored. For the purposes of this section of the literature review, the subquestion, How does the presence of interdisciplinary teaming facilitate distributed leadership practices in middle-level schools?, will be examined. The sample for Grenda and Hackman's (2014) study included three middle-level schools within the same state in the midwestern United States. The sampling was purposeful in that principals were identified as successful learning leaders who utilized distributed leadership practices. Principals were selected who met specific criteria such as student academic performance, high levels of faculty engagement, and having served at least 3 years in their current position.

The first middle school was comprised of grades 6, 7, and 8 and had a population of approximately 1,100 students with 10 interdisciplinary teams consisting of four to five teachers

and approximately 90 students for each team. The principal was in his 13th year as principal of the school and was responsible for hiring approximately 70% of the current faculty. The second middle school was comprised of only grades 7 and 8 and had a population of approximately 800 students with an unreported number of teams by grade level. The principal was in his 15th year as principal of the school with a young staff averaging 2 years of teaching experience. Lastly, the third middle school was comprised of grades 6, 7, and 8 with an unreported number of teams by grade level. The principal was in her 8th year as principal of the school.

Grenda and Hackmann's (2014) study used a qualitative multiple-site case study design. The primary data collection methods were interviews and observations. Each of the three principals were interviewed three times while various other faculty members were interviewed one time. These faculty members included: assistant principals, deans of students, interdisciplinary team leaders, committee chairs, teachers' union leadership, disciplinary coaches, and teacher mentors. An inductive, thematic analysis of the interview, observation, and collected artifact data was conducted. Grenda and Hackmann (2014) utilized coding to identify themes and patterns. The coding of the data was completed through the use of the NVivo qualitative analysis software.

The findings of the study were divided into different themes that included: developing empowering organizational structures, developing structures that support a culture of democratic governance, teachers leading in curriculum and professional development, building management, principals surrounding themselves with experts to address improvement, a variety of leadership may make accurate communication a challenge, and interdisciplinary teams are a platform for school-wide decision making. For the purposes of this literature review, the last theme regarding interdisciplinary teams is discussed. One pattern that emerged was that in all three schools the team leaders also served in a building-wide leadership capacity. The team leaders were considered an important connection between the school administration and the teaching staff. In addition, Grenda and Hackmann (2014) identified that the collaborative nature of interdisciplinary teams assisted in forwarding building initiatives.

This study contributed to the existing body of literature on teaming because it examined how principals built on the interdisciplinary teaming structure to encourage democratic governance. A strength of this study is that interdisciplinary teaming was explored from the leadership perspective of middle school principals. The idea of teaming being associated with school leadership is explored further in this literature review. A limitation of this study that was discussed by the researchers was that the purposeful sampling procedures might not have identified all principals within the state who met the criteria. In addition, another limitation of the study was the assumption that if middle schools had interdisciplinary teaming that they had other components of the middle school concept in place. A future study might explore a random sample of principals to determine differences in leadership philosophy and implementation. The current study samples from an entire population of middle school principals, and data is collected regarding the three school supports of instructional scheduling, teaming, and common planning.

Synthesis

In the most recent and comprehensive national survey regarding the status of practices and programs in America's middle schools, McEwin and Greene (2011) state that the percentage of middle schools organized into teams was 72% in 2009. This represents a decrease of 5% from 77% in 2001. It appears that although literature, research, and middle level organizations are placing value on organizing students onto interdisciplinary teams, approximately 25% of middle schools are not utilizing this form of student organization. The empirical research conducted in the past 10 years that was discussed, indicates that teaming had a positive influence in terms of school reform, students' social bonding, the fostering of an adolescent-centered community, student perceptions, preservice training, and distributive leadership. It appears important for future studies to examine teaming using both different and larger populations. In addition, only one study by Grenda and Hackmann (2014) focused specifically on teaming and the influence it had on school leadership. School leadership is part of the theoretical foundation for the present study, and it is examined in a later section of this literature review.

Common Planning

In addition to instructional scheduling and teaming, the importance of common planning as a school support at the middle school level has been discussed and examined by scholars and advocacy organizations. One of the seminal reports on middle-level education, *Turning Points: Preparing American Youth for the 21st Century* (Carnegie Council on Adolescent Development, 1989) states that common planning with teachers allows students to be provided with clear expectations of achievement. This theme is expanded upon in a follow-up report, *Turning Points 2000: Educating Adolescents in the 21st Century* (Jackson et al., 2000). The authors stated that it is important to provide team planning time to teachers. Another seminal report, *This We Believe: Keys to Educating Young Adolescents* (National Middle School Association, 2010a), discussed how regular common planning is necessary so teams can plan curriculum, assess student work, discuss current research, and reflect on practices.

This section of the literature review examines empirical research conducted within the past 10 years that focused on common planning. Although several empirical research studies have been conducted that examined common planning, it appears that a significant amount of research occurred prior to the 10-year limitation placed on this literature review. The themes that emerged from the empirical studies conducted within the last 10 years concerned common planning time benefits such as: improved student learning, a more effective learning environment, improved collaboration and networking, communication, and professional development. The

following section will examine these studies and is followed by a section that provides a synthesis of the research and a discussion of the implications for common planning.

Empirical Research

In a study by Cook and Faulkner (2010) that was later expanded upon and included in the Middle Level Education Research Special Interest Group (MLER SIG) common planning time project, the use of common planning time by two interdisciplinary teams in Kentucky was explored. In particular, the study had three overarching research themes: factors and characteristics that enhance common planning time effectiveness, beliefs and perceptions of teachers concerning their use of common planning time, and topics and activities addressed during common planning time. The sampling for this study was purposeful in that the researchers focused on the effective use of common planning time in high performing middle schools. Criteria for inclusion included: reported use of common planning time, reputation for academic excellence as measured by state assessment results, and designation as a Kentucky School to Watch.

With regard to descriptions of the schools, the first school had an approximate population of 750 students with 7% having free/reduced lunch status and 12% classified with a disability. The first school's adjusted accountability index on the 2007 state accountability assessment was 104. Cook and Faulkner (2010) do not provide details as to how the accountability assessment index was created. The second school had an approximate population of 700 students with 18% having free/reduced lunch status and 18% classified with a disability. The second school's adjusted accountability index on the 2007 state assessment was 93. The 25 participants in the study were from six different teams; one from each grade level in each school. The six teams had an average of 9 years of total teaching experience with an average of 5 years of middle school teaching experience.

Cook and Faulkner (2010) collected data through the use of interviews, observations, and the identification of demographic information. The data was transcribed and codes were developed that identified common trends and themes. The results indicated that common planning time was considered necessary to the success of each of the three schools. The specific findings were divided into three themes of common vision and mission, clearly defined goals for common planning time, and effective building level leadership.

With regard to common vision and mission, Cook and Faulkner's (2010) findings indicated that teachers consistently stated in interviews that the primary goal of the school was to meet the needs of the children and that common planning time afforded them that opportunity. In terms of clearly defined goals for common planning time, both schools included three distinct types of planning: interdisciplinary team, grade level, and professional learning communities. Interdisciplinary team planning mainly focused on student behavior and academic issues along with parent communication and planning units of study. In addition to the interdisciplinary team focuses, the grade level planning focused on school policies and assessment requirements, and the professional learning community planning examined curriculum alignment as well as common assessment development and the analysis of student assessment data. Lastly, with regard to effective building level leadership, it was noted that the principals in both schools created an environment of professionalism and high expectations. In addition, the researchers stated that common planning time was supported at both the building and districts levels through staff development, finances, communication, and scheduling.

The study by Cook and Falkner (2010) contributes to the research conducted on common planning time through the examination of its use in two Kentucky middle schools. A strength of this study was in the purposeful sampling of two high achieving middle schools. By limiting the sample to high achieving middle schools, the school performance variable was more controlled. A limitation of the study was that the results could not be generalized to other populations of middle schools. It would add to the existing research on common planning for the study to be replicated using a sample of middle schools from different regions of the country. An additional limitation was that the specifics of the frequency and duration of common planning time were not examined or discussed. The possibility exists that depending upon the frequency and duration of common planning, it might be difficult to allocate time for the three different types of common planning that the researchers discussed. The study conducted by me will further the research related to common planning from a different sample of middle schools.

The most comprehensive research study conducted to date that examined common planning time was by the Middle Level Education Research Special Interest Group (MLER SIG) (Mertens, 2013), which is affiliated with the peer-reviewed, Journal of the American Educational Research Association (AERA). Before examining the empirical research conducted by the MLER SIG, a summary of the formation and history of this group is provided.

In 2006, the MLER SIG started an initiative to further understand common planning time based on the needs revealed by the expanding middle grades research such as: additional large scale longitudinal studies, replication of previous studies, and the necessity to create a national level database (Mertens, 2013). The common planning time project (Mertens, 2013) addressed the following five primary research questions: (a) What are the teachers' understandings of common planning time?, (b) How do teachers use their common planning time?, (c) How are teachers prepared professionally to use their common planning time?, (d) What are the perceived benefits of common planning time?, and (e) What are the perceived barriers to common planning time? (*"A national research project revitalizes and strengthens a SIG's membership, leadership, and the quality of research in the field"*, 2011).

This common planning time project was implemented in two phases. The first phase began in November of 2007 and used a qualitative design, which permitted the researchers to observe middle school common planning meetings and conduct teacher interviews. The second phase began in November of 2009 and during this phase quantitative data was collected on elements of common planning through the use of an online teacher survey. Although numerous individual studies were conducted in both phases of this project, for the purposes of this review of literature summaries of the overall analysis of both phase 1 and phase 2 are discussed. After discussing these two phases, limitations and strengths of the study are examined.

In phase 1, approximately 22 researchers observed middle school common planning time meetings and conducted teacher interviews. The project researchers observed approximately 80 common planning time meetings and interviewed approximately 220 teachers who were involved in those meetings. These data were collected from 29 different schools in 13 states beginning in November of 2007 and finishing in 2009. All researchers utilized a standardized observation and interview protocol. Each researcher submitted their collected data along with transcriptions to the national database for the project.

The primary analysis involved coding teachers' responses and calculating their frequencies. The findings were organized to answer the five overarching research questions. In terms of demographics, the average teaching experience was approximately 11 years with an average of 9 years of middle school teaching experience, while the average teacher team size was approximately 5 teachers serving an average 118 students. Lastly, the average time for common planning was approximately 3 days per week averaging approximately 45 minutes each meeting.

The first research question asked about teachers' understandings of common planning time. The findings (in order of most to least) indicated that teachers thought common planning time was used to: address student-related issues, focus on curriculum concerns, coordinate with teachers, address scheduling issues, meet with parents, foster community between teacher and student, receive professional development, and celebrate teachers' accomplishments.

The second research question asked about teachers' uses of common planning time. The findings (in order of most to least) indicated that teachers used common planning time to: address student issues, collaborate over curriculum, meet with parents, organize field trips, plan projects, reflect on lessons, address scheduling conflicts, and share teaching practices. The third research question asked how teachers were prepared professionally to use common planning time. The findings indicated that 31% of the teachers majored in middle school education and 42% of those teachers did their student teaching within a team setting. In addition, 78 teachers responded that they did not receive any training on common planning while attending college, while 138 teachers indicated that no professional development had been offered.

The fourth research question asked about perceived barriers to common planning time. The findings were organized into the following three categories: general barriers, meeting issues, and negative effects. General barriers included inadequate time, personality issues, and limited time with other teachers. Meeting issues included off-task behaviors, timeliness, and administration's use of common planning time. Regarding negative effects, the results were divided into negative effects or no negative effects for teachers, students, teams, or school. The largest number of responses indicated that common planning had no negative effects for teachers, students, teams, or school.

The final research question for phase 1 of the study asked about the perceived benefits of common planning time. The findings were organized into the following three categories: overall benefits, benefits by role, and student learning and achievement. Overall benefits included: communication, collaboration and networking with peers, student-centered approach, planning and coordinating efforts, community, consistent expectations, and professional development.

Those who benefited included: teachers, students, teams, and schools. Student learning and achievement benefits included: improved instruction, student progress monitoring, positive learning environments, support for struggling students, specific strategies or teaching approaches, consistent expectations and additional supports. Overall, the most common perceived benefit for all roles was community.

Phase 2, the quantitative phase of the project, was the part of the process during which data from middle grade teachers was collected through the use of an online survey about common planning time. In particular, the survey asked about their preparation and training, attitudes and experiences, engagement levels, and the challenges and benefits of common planning time. This initial analysis of the phase 2 data collection included 510 teacher surveys from 23 schools in 7 states. The demographics of the sample were as follows: 35% of the teachers taught sixth grade, 30% taught seventh, and 35% taught eighth. In addition, 32% of the teachers had worked in the middle level for less than 5 years while 43% had taught middle school students between 6 and 15 years.

The survey used during this phase of the project was developed by the Center for Prevention Research and Development (CPRD) at the University of Illinois. The CPRD designed, managed, and processed the survey data. The lead researchers for this common planning study spoke to the validity and reliability of the survey design by stating that the constructs of their survey have been used prior by CPRD for national survey data collection. With regard to data analysis, descriptive statistics (frequencies and percentages) were calculated along with bivariate analyses of the descriptive variables. In addition, analyses of variance (ANOVA) were utilized to examine the potential impact that the amount of common planning time had on interdisciplinary teaming variables. The first findings discussed by Mertens (2013) focused on team structure. Ninety-two percent of the sample of 510 teachers reported that teaming occurred in all middle-level grades in their school. In addition, the average team was comprised of approximately 5 teachers with 150 students. With regard to common planning time, 12% of the teachers indicated there was no common planning time while 45% met at least once or twice a week and 31% met four or more times a week. Lastly, the reported average length of common planning time sessions was 44 minutes.

The second overarching research question asked how teachers use their common planning time. The findings were reported in three categories that included common planning activities, team practices, and team decision making. With regard to common planning activities, the three most frequent activities were: discussing student behavior problems/issues, discussing student-learning problems/issues, and planning special team activities. In terms of team practices, the three with the highest mean score were: discussing problems of specific students and arranging for help (M=5.58), discussing school-wide issues (M=5.01), and coordinating efforts with special education, title 1, music, and bilingual education (M=4.99). The mean scores were measured on a 7-point, Likert-type scale. When examining team decision making, the three with the highest mean score were: team activities (M=4.21), kind and amount of homework that students receive (M=4.17), and team goals (M=4.12). These mean scores were measured on a 5-point, Likert-type scale.

The third overarching research question asked how teachers were professionally prepared to use common planning time. The findings were divided into two categories, preservice preparation program and professional development experiences. With regard to preservice preparation program, 74% of the teachers indicated that they learned a small amount about common planning. In addition, 42% of the teachers reported that they had worked with teams as part of their student teaching assignment. When participation in professional development was examined, the three items with the highest mean score were: addressing student behavior (M=3.4), addressing student learning (M=3.3), and functioning as a team (M=3.1). The mean scores were measured on a 5-point, Likert-type scale. Lastly, the three items with the highest mean score with regard to professional development needs were: integrating technology (M=2.5), coordinating and integrating curriculum (M=2.4), and coordinating or developing student assessments (M=2.2). These mean scores were measured on a 4-point, Likert-type scale.

The fourth and fifth research questions examined teachers' perceptions of the benefits and barriers of common planning time. The survey included 26 items that examined common planning time. The mean scores, based on a 5-point, Likert-type scale, indicated that teachers did not believe that any of the 26 items were a barrier (mean range of 3.4 to 4.5).

This review of the initial analysis from the MLER SIG project on common planning time provided an in depth analysis and insight, from both the quantitative and qualitative perspectives, into common planning practices in middle-level schools. Although this was a nationally-based study with many researchers, a strength of this study is its methodology. Research assistants in both phases of the study were required to attend training sessions on the protocols of conducting interviews, observing common planning time, and administering the teacher survey. In addition, each assistant received a training manual that contained information regarding the necessary documents, protocols, and information to be gathered and this contributed to consistency in the methodology.

In addition, both the qualitative and quantitative findings of this mixed-methods study support each other. Overall, both methodologies revealed that the most common activities during common planning were discussing student learning problems and facilitating special team activities. In addition, both types of research revealed that teachers received small amounts of training on common planning during their preservice preparation programs. Furthermore, the results from phase 2 of this project indicated that teams with higher levels of common planning time reported higher levels of interdisciplinary team practices. This finding is consistent with the aforementioned study by Mertens and Flowers (2006).

Although not discussed by Mertens (2013) in their overall analysis of this mixed-method designed study, there are some limitations to this study. First, the compositions of the teams in terms of homogenous or heterogeneous grade levels were not examined. It would be of interest to examine specific teachers' perceptions of common planning time relative to whether they were part of a team that was single or multi-graded. In addition, the researchers did not examine the variable of teams having a team leader or facilitator. Research has indicated (Grenda & Hackmann, 2014) that having a teacher lead the team can influence school leadership. These variables related to the composition of teams and use of a team leader are explored in the survey used in the present research study.

Lastly, it should be noted that Mertens (2013) indicated that this analysis was preliminary with the data collection for the quantitative phase ending in 2012. Although this appears to be the most extensive study to date, research should continue to explore the operation of common planning time along with exploring the relationship with student learning.

Synthesis

In the most recent and comprehensive national survey of the status of practices and programs in America's middle schools, McEwin and Greene (2011) found that 77% of schools provided five or more common planning periods per week to academic teachers. It appears that although literature, research, and middle level organizations place value on common planning, there is a population of middle schools that have either no common planning time or less than five periods per week. The empirical research examined in this section indicated that common planning benefits include: improved student learning, more effective learning environment, better collaboration and networking, better communication, and more focused professional development. It appears important that additional studies be conducted to examine the frequency and duration of common planning. It seems clear to me that the influence of common planning time is, in part, impacted by its frequency and duration. In addition, there appears to be a lack of common planning teaching in preservice preparation programs. Further research should explore teacher preparation programs with regard to common planning. The previous three sections of this literature review examined the school supports of type of instructional schedule, teaming, and common planning and their influence on student learning. The next section will explore the direct influence of other variables on student learning.

Influence of Other Variables on Student Learning

Research on the three middle-level school supports of instructional scheduling, teaming, and common planning reviewed in this chapter indicates that there is some influence on improved student learning when these supports exist. The extent to which these school supports directly or indirectly influence student learning is not as clearly identified in the research. However, research has clearly indicated that there are other variables that have more of a direct influence of student learning than these three school supports. Two variables that directly influence student learning are school leadership and classroom instruction. These were the variables explored to create a theoretical framework for my study. The influence instructional scheduling, teaming, and common planning have on the student learning process is in part achieved indirectly through the student learning variables of school leadership and classroom instruction. This section of the literature review examines a seminal research study that explored the influences these three school supports had on school leadership and classroom instruction.

School Leadership and Classroom Instruction

In one of the most extensive research studies to examine variables influencing student learning, Wahlstrom, Louis, Leithwood, and Anderson (2010) examined the nature of successful educational leadership and how leadership improved both educational practices and student learning. The researchers claimed, and supported with research, the notion that leadership is next only to classroom instruction as having the most influence on student learning. The study was a mixed-method design that included: qualitative case studies, large-scale quantitative studies of leadership effects on schools and students, effects of specific leadership practices, and leadership effects on student engagement. The overall sample for the study included participants from 9 states, 43 school districts, and 180 elementary, middle, and secondary schools. The study had three main parts. The first part focused on what school leaders did to improve student achievement. The second part examined districts and their leaders and how they fostered school improvement while the final part focused on state leadership and relationships with districts. For the purposes of this literature review, the part that focused on what school leaders did to improve student achievement is examined.

This first part of Wahlstrom et al.'s (2010) study is divided into six sub-sections. The headings for the six sub-sections are: collective leadership effects on teachers and students, shared leadership: effects on teachers and students of principals and teachers leading together, patterns of distributed leadership by principals: sources, beliefs, interactions, and influences, leadership practices considered instructionally helpful by high performing principals and teacher interactions and student outcomes: poverty, size, level, and location, and a synthesis of implications for policy and practice about school leadership. Within three of these sections key findings are identified that have an indirect influence on the three middle-level supports of instructional

scheduling, teaming, and common planning. Findings from these three sections are discussed next.

The sub-section on collective leadership by Wahlstrom et al. (2010) examined the effects on teachers and students and produced a key finding that is relevant to the middle-level school supports of teaming. Wahlstrom et al. (2010) discussed that higher-performing schools give greater influence to teacher teams, parents, and students. The sample for this sub-study was based on data that was collected from surveys by 2,570 teachers in 90 different schools. Wahlstrom et al. (2010) analyzed the data using the Statistical Package for the Social Sciences (SPSS) and the following statistical tests: Cronbach's alpha, paired-sample *t*-tests, factor structure, hierarchical multiple regression, path-analytic techniques, and goodness-of-fit tests.

There were a total of nine different stakeholders used to measure collective leadership. The stakeholders included: students, parent advisory groups, some individual parents, some individual teachers, staff teams, teachers with designated leadership roles, building level administrators (other than principals), district-level administrators, and principals. Among the teacher sources of influence, teachers with designated leadership roles had the strongest influence (M=4.43, SD=.37, t=3.51, p<.01) followed by staff teams (M=4.36, SD=.41, t=5.54, p<.001) and some individual teachers (M=4.28, SD=.30, t=2.19, p<.05). Using the researchers' claim that leadership influences student learning, these results demonstrate that staff teams are viewed as a source of collective leadership and therefore indirectly influence student learning. These results support and strengthen the claims by middle-level researchers and scholars that teaming is an important and valuable component of the middle school concept in improving student learning.

While the first sub-section of the study by Wahlstrom et al. (2010) examined collective leadership, the next sub-section focused on shared leadership. In this particular sub-section

Wahlstrom et al. (2010) discussed a key finding that is relevant to the middle-level school supports of teaming and common planning. The key finding discussed was that leadership largely affected student achievement because effective leadership strengthened professional communities. Wahlstrom et al. (2010) indicated that professional communities were a strong indicator of instructional practices, which in turn were associated with student achievement. Wahlstrom et al. (2010) defined a professional community as an environment in which teachers worked together to improve their practice and student learning. There is overlap in this definition with the definitions of common planning and teaming that were discussed in previous sections of this literature review.

The sample for this sub-study by Wahlstrom et al. (2010) was based on data that was collected from two rounds of surveys by a total of over 8,000 teachers in 9 states, 43 school districts, and 180 elementary, middle, and secondary schools. Within this second sub-section, the researchers focused on the indirect nature of leadership effects by examining correlations between survey variables (focused instruction, professional community, shared leadership, instructional leadership, and trust) and student achievement (mathematics assessments). The results indicated that professional community has a significant indirect effect (p=.023, N=106) on student achievement. Using the researchers claim that leadership influenced student learning, these results demonstrate that professional communities are viewed as a source of shared leadership and therefore indirectly have influence on student learning. These results support and strengthen the claims by middle-level researchers and scholars that teaming and common planning are important and valuable components of the middle school concept in improving student learning.

The last sub-section focuses on leadership practices that are considered to be instructionally helpful by high-performing principals and teachers. In this particular sub-section,

Wahlstrom et al. (2010) discussed a key finding that is relevant to all three middle-level school supports of instructional scheduling, teaming and common planning. Wahlstrom et al. (2010) discussed that the most instructionally helpful leadership practices were: focusing the school on goals and expectations for student achievement, keeping track of teachers' professional development needs, and creating structures and opportunities for teachers to collaborate. Data were collected from a sub-sample of 12 principals and 65 teachers through teacher interviews, principal interviews, and classroom observations. In terms of the finding of creating structures and opportunities for teachers believed this to help instruction. Using the researchers' claim that leadership influences student learning, these results demonstrated that creating structures and opportunities for teachers to collaborate were viewed as instructionally helpful leadership practices, and therefore indirectly had an influence on student learning. These results support and strengthen the claims by middle-level researchers and scholars that instructional scheduling, teaming and common planning are important and valuable components of the middle school concept in improving student learning.

This extensive study by Wahlstrom et al. (2010) examining variables that influence student learning demonstrated that school leadership and classroom instruction have an impact on the student learning process. The major strengths of this study are the size of the database, multiple methodological approaches, multiple theoretical approaches, and the comprehensiveness of the leadership sources. Furthermore, the study by Wahlstrom et al. (2010) demonstrated that aspects of instructional scheduling, teaming, and common planning were associated with school leadership and classroom instruction. These conclusions are part of the theoretical foundation for my study in that these three middle school supports have a collective indirect influence on student learning through school leadership and classroom instruction.

Synthesis

This section examined other variables that influence student learning. For the purposes of this literature review, the two variables, school leadership and classroom instruction, were discussed. These are the variables explored to create a theoretical framework for my study. The importance and value for instructional scheduling, teaming, and common planning lies in the fact that they mainly have an indirect influence on student learning through the direct influences of school leadership and classroom instruction. In the study by Wahlstrom et al. (2010), student learning was measured by student test results on state assessments. This appears to be the dominant criteria for research studies. Additional research is needed to more comprehensively understand the influence these middle school supports can have on classroom instruction and thus on the success of all students as measured by formal assessments of learning.

Conclusion

This review of literature examined the studies that were published in peer-reviewed journals that were conducted within the past 10 years that focused on three middle-level school supports (i.e. instructional scheduling, teaming, and common planning time). In addition, the review of the literature helped to identify a theoretical foundation for the present study and its focus on the potential relationship between these three school supports and the larger complex variables of school leadership and classroom instruction. Although this review of the literature has clearly demonstrated that research has shown that these three school supports have a positive influence on middle school students, what is not as clear is how or to what extent these supports influence student learning. In order to provide additional clarity to the influence these three school supports have on student learning, there needs to be research regarding the presence, absence, type, frequency, and/or duration of these supports in middle schools. The present study provides a descriptive profile of instructional scheduling, teaming, and common planning time to

determine their presence or absence in New York State middle schools. The next chapter examines the research design and methodology used for this study.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

The purpose of this study was to provide a descriptive profile of three school supports (instructional scheduling, teaming, and common planning) and to determine whether they are absent or present in New York State middle schools. This chapter provides a discussion of the research design and methodology that was utilized. This first section is an overview of the six main sections. The second section explains the research design. The third section provides the research questions for this study. The fourth section describes the sample for this study. The fifth section describes the instrumentation that was used for this study. The final section describes the descriptive, inferential, and nonparametric statistical methods that were used to analyze the data.

Although the sample of participants did not meet the reliability assumption, the sample was considered large enough to justify the exploration of certain patterns and trends that emerged from the data collected to provide plausible conclusions that further research might confirm.

Research Design

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 New York State middle schools. A survey-designed study can provide a quantitative description of trends, beliefs, or attitudes of a population (Creswell, 2009). Descriptive research focuses on organizing and summarizing information from a collection of data or observations (Witte & Witte, 2010). Conducting a quantitative study was a practical approach to collecting data due to the potential sample size of 232 middle school principals dispersed throughout New York State. A self-administered online web survey (see Appendix D) was designed to identify the presence or absence of these three school supports in New York State middle schools whose school district was categorized as having an average need/resource capacity for the 2011-2012 school year. Data were collected from these middle school principals using either closed-ended questions, partially open-ended questions, or Likert rating scale questions and statements. The survey is discussed in detail in the instrumentation section of this chapter.

Research Questions

As discussed in Chapter I, the following research questions are addressed in this study:

1. What are the current instructional scheduling practices of NYS middle schools categorized as having an average need/resource capacity?

2. To what extent, if any, is teaming present or absent in New York State middle schools categorized as having an average need/resource capacity?

3. To what extent, if any, is common planning time present or absent in New York State middle schools categorized as having an average need/resource capacity?

4. To what extent, if any, are all three school supports (instructional schedules, teaming, and common planning time) found to exist simultaneously in New York State middle school categorized as having an average need/resource capacity?

Sample

The participants in this study were principals from New York State middle schools whose district was categorized as having an average need/resource capacity during the 2011-2012 school year. For the purposes of this study, middle schools included had grades 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 New York State School Report Card database for 2011-2012, along with the use of district/school websites to verify contact information. The New York State School Report Card is published annually and made publicly available by the New York State Education Department.

To determine whether the survey would be reliable and valid, it was first submitted to a panel of experts for their critique. The panel consisted of the mentor of this dissertation, the readers of this dissertation, and administrators with middle school experience. After modifications were made to the survey in the light of the experts' suggestions, permission was requested from the Seton Hall University Institutional Review Board (IRB) (see Appendix B) to conduct a pilot survey. According to Andres (2012), the piloting process should be a test, in part, for the following components: the clarity and salience of the individual words, directions, questions, the response categories, the scales utilized, and the layout of the survey.

After receiving permission from the Seton Hall IRB to conduct the pilot study, I emailed a letter of solicitation to 97 middle school principals that included a link to the pilot survey (see Appendix C). The principals selected for the pilot study were from school districts that were categorized as having a need/resource capacity other than average during the 2011-2012 school year. A follow-up email reminder was sent to the principals asking them to complete the survey, if they had not already done so. I completed the pilot study by making any revisions based on recommendations that would improve the components of the survey.

Every effort was made by me to develop a valid and reliable survey instrument that would benefit this field of educational research. Although the sample of participants did not meet the reliability assumption, it was considered large enough to justify the exploration of patterns and trends that emerged from the data collected to provide plausible conclusions that future studies might confirm.

Instrumentation

The instrument used for data collection was a five-part, self-administered, online web survey. The three aspects of the survey format (self-administered, online, and web) were chosen to maximize the accuracy and quality of information that could be collected from the participants. According to Andres (2012), there are several advantages to a self-administered online web survey. The advantage of self-administration is that since participants are able to complete the survey at their leisure (within a specified timeframe), the responses may be more reflective, thoughtful, and accurate. Furthermore, Andres (2012) noted that surveys that are read by the participant can utilize lengthier lists of similar questions and can be developed with more complex response categories.

In addition to the advantage of a survey being self-administered, Andres (2012) also noted some benefit to surveys being completed online. These benefits included: cost, environmental considerations, quick data collection, and ease of follow up with nonrespondents. Andres (2012) did express caution about the use of Internet surveys because there are parts of any population that does not have regular access to computers and the Internet. With regard to the present descriptive study, the non-sampling coverage error would be minimal since computers, Internet, and email are part of everyday working life for principals.

The last advantage of a survey format is that it is web-based. According to Andres (2012) there are two types of online surveys, email and web surveys. An email survey is more basic, while a web-based survey allows for more features. Some of the features of a web-based survey include the embedding of audio/video streaming along with the sequencing of questions (Andres, 2012). In addition, Andres (2012) pointed out that data can be automatically collected and this limits the costs and human error factors. Lastly, the web-based survey was tested on multiple browsers to ensure that it had a consistent layout.

The survey questions used for this study examined the presence or absence of three school supports among New York State middle schools whose district has been categorized as having an average need/resource capacity during the 2011-2012 school year. In addition, the survey accounted for the possibility that some schools used only one or two of these school supports, while others might use multiple supports in combination. Each of the five parts of the survey are described below.

The first part of the survey focused on the instructional schedules utilized by New York State middle schools. Questions were asked about the different aspects of the instructional schedule, including its structure and course offerings. In addition, questions were asked that focused on the perceptions and beliefs of the principals regarding instructional scheduling. Data were collected using either closed-ended, partially open-ended, or Likert-type rating scale questions and statements.

The second part of the survey focused on collecting data about the presence or absence of any teaming that was occurring within the middle school. Questions were asked about the different types and configurations of teaming, including grade level and/or whether the teaming was interdisciplinary. In addition, questions were asked about the perceptions and beliefs of the principals regarding teaming. Data were collected using either closed-ended, partially open-ended, or Likert-type rating scale questions and statements.

The third part of the survey asked about the presence or absence of any common planning that was occurring within the middle school. Questions asked about the different configurations of common planning, including its intended purposes. In addition, questions were asked about the perceptions and beliefs of the principals regarding common planning. Data were collected using either closed-ended, partially open-ended, or Likert-type rating scale questions and statements. The fourth part of the survey provided an opportunity for general reflections by the participants. Questions were asked that included ranking the influence of these three school supports. In addition, questions were asked about the perceptions and beliefs of the principals regarding the interconnectedness of these three school supports. Data were collected using either closed-ended, partially open-ended, or Likert-type rating scale questions and statements.

The final part of the survey asked for demographic information that included the respondents' gender, age, years of experience, professional education, and their perceptions of school characteristics. The data collected from this part of the survey were used to identify any association between the presence or absence of these three school supports and individual or school background information.

Data Collection

I utilized survey methodology to collect quantitative data. After receiving approval from the Seton Hall University Institutional Review Board to conduct the pilot study, a letter of solicitation (see Appendix E) was sent electronically through surveymonkey.com to 97 potential participants. This letter explained the study and asked for their participation in responding to an online survey. In addition to providing information about how to access the survey using surveymonkey.com, the letter of solicitation for the pilot study included a statement about: my affiliation with Seton Hall University, the purpose of the research, the anticipated time required to complete the survey, the description and procedures of the survey format, the volunteer nature of the pilot survey, the ways that anonymity would be preserved, and the ways that the data would be securely stored. Also, potential participants were informed that they were allowed to discontinue their participation at any time.

A time frame of 7 days was allotted for the principals to complete the pilot survey. An email reminder was sent through surveymonkey.com to those principals who did not respond to the letter of solicitation after the 7 day timeframe had expired. Once the pilot study was tested and determined to be both reliable and valid, I applied to the Seton Hall University IRB to obtain approval for conducting the study.

After receiving approval from the Seton Hall University IRB to conduct the study, a letter of solicitation was sent electronically through my Seton Hall University email account to 232 potential participants explaining the study and asking for their participation in responding to an online survey. It was decided by me and my dissertation committee that the likelihood of the principals receiving the email would be greater if it was sent directly from a university email system as opposed to a survey software company website.

In addition to providing information about how to access the survey using surveymonkey.com, the letter of solicitation for the study included a statement about: my affiliation with Seton Hall University, the purpose of the research, the anticipated time required to complete the survey, the description and procedures of the survey format, the volunteer nature of the pilot survey, the ways that anonymity would be preserved, and the ways that the data would be securely stored. Also, potential participants were informed that they were allowed to discontinue their participation at any time.

A time frame of 10 days was allotted for the principals to complete the survey. Two additional reminders (in 2-week intervals) were sent electronically through my Seton Hall University email account to potential participants. A reminder email was not sent to participants who had emailed me a message indicating that they had completed the survey. The online survey allowed participants to electronically submit their responses to the questionnaire. The protection of the participants' names and other identifying information were of particular concern to me. In order to maintain their anonymity, all identifying information was excluded from this study. Upon completion of the survey, the participants' responses were electronically stored on the website of the survey company.

Data Analysis

This study was undertaken to examine several research questions regarding the presence or absence of three school supports (instructional scheduling, teaming, and common planning) in New York State middle schools whose districts have been categorized as having an average need/resource capacity during the 2011-2012 school year. I used descriptive, inferential, and nonparametric statistical methods to analyze the data. Although the sample of participants did not meet the reliability assumption, the sample was considered large enough to justify the exploration of patterns and trends that emerged from the data collected so as to provide plausible conclusions that further studies might confirm. The findings from this study are presented in Chapter IV.

Summary

This chapter provided the research design, research questions, sample, instrumentation, data collection procedures, and data analysis that were utilized in this study. This study examined the presence or absence of three school supports (instructional scheduling, teaming, and common planning) in New York State middle schools whose districts have been categorized as having an average need/resource capacity during the 2011-2012 school year.
CHAPTER IV

THE FINDINGS

The purpose of this study was to provide a descriptive profile of three school supports (instructional scheduling, tearning, and common planning) to determine whether they are either absent or present in New York State middle schools. The importance of these three school supports at the middle level has been discussed and examined by scholars and advocacy organizations. 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 et al., 2000) the authors examine the concepts of scheduling instructional periods to maximize learning, creating small communities for learning, and providing time for teachers to plan and prepare together. 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). It is important to determine whether these three school supports are present or absent in New York State middle schools in order to provide direction for the continued development of middle school programs and assist administrators and policymakers in making informed decisions to positively impact the student learning process.

This study was guided by four research questions. The research questions were as follows: (a) What are the current instructional scheduling practices of NYS middle schools categorized as having an average need/resource capacity? (b) To what extent, if any, is teaming present or absent in New York State middle schools categorized as having an average need/resource capacity? (c) To what extent, if any, is common planning time present or absent in New York State middle schools categorized as having an average need/resource capacity? (d) To what extent, if any, are all three school supports (instructional schedules, teaming, and common planning time) found to exist simultaneously in New York State middle schools categorized as having an average need/resource capacity?

Prior to conducting the study, the survey was piloted to determine validity and reliability. It was first submitted to a panel of experts for their critique and after revisions were made the survey was emailed to 97 middle school principals from school districts that have been categorized as having a need/resource capacity other than average during the 2011-2012 school year. After two electronic letters of solicitations, 26 responses were collected. Using this data, the survey reliability was found to be .75 using Cronbach's Alpha, which is above the criterion level of .70.

Using the methodology described in Chapter III, I utilized an online survey, which was distributed to 232 New York State middle school principals in school districts with an average need/resource capacity. Three electronic letters of solicitation were sent to the sample of 232 New York State middle school principals over the time span of approximately 2 months. These three electronic letters of solicitations resulted in 66 principals completing the survey.

It was my intent that by obtaining a minimum response rate of 35% percent when examining the absence or presence of these three middle school supports this study would be statistically reliable. Although I made a concerted effort (through three different electronic letters of solicitation), a 28% response rate was obtained. I, along with members of the dissertation committee, believed that this study would still provide value to the research field by examining how middle school principals in New York State utilize these three school supports. Plausible conclusions were able to be drawn by examining the similarities, differences, and contradictions regarding instructional scheduling, teaming, and common planning. In addition, this study has value in that it examined the beliefs and understanding of principals with regard to middle school supports. The sample was considered large enough that certain patterns and trends would emerge from the data collected to provide plausible conclusions that future studies might confirm.

Middle schools included in the present study had grades 5 through 8, 6 through 8, or 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 category of average need/resource capacity was selected because, with the exception of the high need/resource capacity - New York City, it contained the largest percentage of middle schools. In addition, this average need/resource capacity category includes middle schools from approximately two thirds of the counties in the state and this permitted statewide sampling. The list of middle school principals and email addresses was obtained by downloading the New York State School Report Card database for 2011-2012, and district/school websites were used to verify contact information. The New York State Education Department.

This chapter provides the results of the survey that was designed to provide a descriptive profile of three school supports (instructional scheduling, teaming, and common planning) to be used to determine whether they are either absent or present in New York State middle schools. A self-administered online web survey examining these practices was created by me, reviewed by a panel of experts for content validity, and a pilot study was conducted to test for reliability.

The three components to the survey format (self-administered, online, and web) were chosen to maximize the accuracy and quality of information collected from the participants. Data were collected using either closed-ended questions, partially open-ended questions, or Likert-type scale questions and statements. The remaining sections of this chapter detail the demographic information as it relates to the four research questions.

Research Questions and Data Analysis

The purpose of this study was to provide a descriptive profile of three school supports (instructional scheduling, teaming, and common planning) to be used to determine whether they are absent or present in New York State middle schools. The analysis began by conducting descriptive statistics for the survey items. Based on either the research questions or a specific survey item, additional analyses were conducted. These additional analyses were nonparametric statistical analyses, which included chi-square tests, Friedman tests, and Kruskal-Wallis tests.

Descriptive statistics organize and summarize information regarding a collection of data to assist in describing and analyzing patterns and trends. Descriptive statistics can be presented in the form of graphs, frequency distributions, means, medians, modes, ranges, variances, and standard deviations (Witte & Witte, 2009). Nonparametric tests are utilized when the assumptions of a parametric test are violated and they do not rely on assumptions about the shape or parameters of the population or sample (Leech, Barrett, Morgan, 2008). A chi-square test is a nonparametric test that compares the observed frequencies to expected frequencies. Included in the chi-square analyses are the standardized residuals that aid in determining which of the categories are the predominant contributors to the statistical significance of the chi-square (Hinkle, Wiersma, & Jurs, 2003). The Friedman Test utilizes rank-order for nonparametric data when there are two or more levels of one related sample (Leech et al., 2008).

To further analyze rank-ordered data, Mann-Whitney or Kruskal-Wallis tests can be performed. A Mann-Whitney test is utilized when there are two levels of independent variables to make comparisons while a Kruskal-Wallis test is the nonparametric equivalent of a one-way analysis of variance (ANOVA) and uses the mean ranks to compare the variables (Leech et al., 2008). It was my intent to utilize both of these nonparametric tests, if needed, to analyze the data. However, the independent variables in the present study required only the Kruskal-Wallis test to be performed.

The demographic survey items on which the Kruskal-Wallis tests were performed were: grade configuration, student population, school location, and years of principal experience at current school. The rationale for utilizing these four demographic variables was to explore if there was a statistically significant difference in the instructional scheduling, teaming, and common planning beliefs of middle school principals when compared with grade configuration, student population, school location, and years of principal experience at current school. In addition, these four demographic variables have been examined and referenced in previous research and literature examining middle schools (Boyer & Bishop, 2004; Carnegie Council on Adolescent Development, 1989; Cook & Falkner 2010; George & Alexander, 1993; Grenda & Hackmann, 2014; Jackson & Davis, 2000; McEwin & Greene, 2011) but not utilized to compare the instructional scheduling, teaming, and common planning beliefs of middle school principals. Comparing these demographic items with principals' school support beliefs will assist in advancing the research in this field by identifying any unique features of how these middle school supports are utilized.

Survey items such as making adequate yearly progress consistently in English Language Arts and Math, principal gender, and highest degree earned were not analyzed due to the principals selecting the same answer approximately 80% of the time or more. In addition, the survey item that asked about free or reduced lunch percentage was not utilized due to the sample of middle schools having the same categorization of an average need/resource capacity, and therefore, similar estimated poverty percentages.

Demographic Data

This section of the chapter presents the demographic data collected from the respondents regarding themselves and their schools. The demographic data collected included: gender, age, years of experience, professional education, school configuration, school population, type of school location, percentage of students receiving free or reduced meals, attendance and suspension percentages, whether or not school has made Adequate Yearly Progress (AYP), and student performance percentages on both the English Language Arts (ELA) and math assessments. Descriptive statistics were used to analyze the data.

Table 1 shows that the majority of respondents to the survey were male principals.

Table 1

Percentages and Frequencies for Gender of Respondents (N=59)

	Percent	Frequency
Male	81.4%	48
Female	18.6%	11

Table 2 shows the mean, standard deviation, minimum and maximum ages of the respondents.

Table 2

Descriptive Statistics for Age of Respondents (N=56)

	Ν	Minimum	Maximum	Mean	Standard Deviation
Age of Respondents	56	32	63	45.02	7.646

Table 3 shows the descriptive statistics related to years of principal experience at present school.

Descriptive Statistics for Years of Principal Experience in Current School (N=57)

	Ν	Minimum	Maximum	Mean	Standard Deviation
Principal Experience	57	1	19	5.67	4.584

Table 4 shows the descriptive statistics for respondents' years of administrative

experience.

Table 4

Descriptive Statistics for Years of Administrative Experience (N=57)

	Ν	Minimum	Maximum	Mean	Standard Deviation
Administrative Experience	57	2	30	11.74	6.659

Table 5 shows the percentages for the highest degree earned.

Table 5

Percentages and Frequencies for Highest Degree Earned (N=58)

	Percentage	Frequency
Bachelor	0.0%	0
Master	87.9%	51
Doctorate	12.1%	7

Table 6 shows the percentages of respondents whose middle school contained specific

grade levels. The one response to the Other category was that the principal's school was a sixth

grade campus.

Table 6

Percentages and Frequencies for Grades Included in Middle School (N=66)

	Percentage	Frequency
5, 6, 7, 8	18.2%	12
6, 7, 8	65.2%	43
7, 8	15.2%	10
Other (please specify)	1.5%	1

Table 7 shows descriptive statistics for the student population of the respondents' middle school.

Table 7

Descriptive Statistics for Student Population (N=62)

	Ν	Minimum	Maximum	Mean
Student Population	62	110	2400	703.77

Table 8 shows the number and percentage of respondent schools that were in urban, rural,

and suburban locations.

Table 8

Percentages and Frequencies for School Location (N=58)

	Percentage	Frequency
Urban	6.9%	4
Rural	32.8%	19
Suburban	60.3%	35

Table 9 shows the number and percentage of racial/ethnic student populations in the

respondents' schools.

Table 9

Percentages and Frequencies for Racial/Ethnic Student Populations

	Percentage	Frequency
American Indian or Alaska Native	6.9%	4
Asian or Native Hawaiian/Other Pacific Islander	22.4%	13
Black or African American	63.8%	37
Hispanic or Latino	50.0%	29
Multiracial	19.0%	11
White	98.3%	57

Table 10 shows the descriptive statistics regarding students who received either free or

reduced lunch for the 2011-2012 school year.

Descriptive Statistics for Students Receiving Either Free or Reduced Lunch (N=49)

	Ν	Minimum	Maximum	Mean	Standard Deviation
Free or Reduced Lunch	49	6	75	27.49	16.666

Table 11 shows the descriptive statistics for attendance for the 2011-2012 school year.

Table 11

Descriptive Statistics for Student Attendance (N=50)

	Ν	Minimum	Maximum	Mean	Standard Deviation
Student Attendance	50	85	98	95.32	2.142

Table 12 shows the descriptive statistics for suspensions for the 2011-2012 school year.

Table 12

Descriptive Statistics for Student Suspension (N=46)

	Ν	Minimum	Maximum	Mean	Standard Deviation
Student Suspension	46	1	30	4.98	4.915

Table 13 shows the percentage of respondents' schools that made Adequate Yearly

Progress (AYP) in the previous 3 school years in English Language Arts (ELA).

Table 13

Percentages and Frequencies for AYP in ELA (N=55)

	Percentage	Frequency
Yes	76.4%	42
No	23.6%	13

Table 14 shows the descriptive statistics for students in the categories: partially

proficient, proficient, and exceeding proficient on the 2013 English Language Arts (ELA) assessment.

	Ν	Minimum	Maximum	Mean	Standard Deviation
Level II					
(Partially Proficient)	33	15	70	37.52	13.182
Level III					
(Proficient)	34	15	80	37.00	16.203
Level IV					
(Exceeding Proficient)	33	1	35	10.64	7.470

Descriptive Statistics for ELA Scores: Levels II, III, and IV (N=33, 34, 33)

Table 15 shows the number and percentage of respondents' schools that made Adequate

Yearly Progress (AYP) in mathematics during the previous 3 school years.

Table 15

Percentages and Frequencies for AYP in Mathematics (N=50)

	Percentage	Frequency
Yes	82.0%	41
No	18.0%	9

Table 16 shows descriptive statistics for students in the categories: partially proficient,

proficient, and exceeding proficient on the 2013 Mathematics assessment.

Table 16

Descriptive Statistics for Math Scores: Levels II, III, and IV (N=33, 34, 33)

	Ν	Minimum	Maximum	Mean	Standard Deviation
Level II					
(Partially Proficient)	33	10	70	38.79	14.467
Level III					
(Proficient)	34	8	85	36.21	17.942
Level IV					
(Exceeding Proficient)	33	1	30	9.73	7.954

This previous section of Chapter IV discussed the demographic data that was collected from the respondents. In general, the demographic data revealed a sample of predominantly male respondents in their mid-40's, with master degrees, who have been principals of their school for an average of 5 years. In general, the demographic data regarding the respondents' schools revealed a sample of predominantly suburban middle schools with grades 6, 7, and 8 that had an average population of 700 students, with a majority of the students reported to be White with regard to race/ethnicity. In addition, these middle schools had a high attendance rate, low suspension rate, low free/reduced lunch percentage, and regularly maintained AYP in ELA and math. The following sections examine each of the four research questions that guided this study.

Research Question 1

Research question 1: What are the current instructional scheduling practices of NYS middle schools categorized as having an average need/resource capacity?

The first part of the survey focused on gathering data regarding the instructional schedule utilized by New York State middle schools categorized as having an average need/resource capacity. This part of the survey was divided into two sections, with the first focusing on collecting instructional scheduling information and the second examining instructional scheduling beliefs. This section of Chapter IV is divided into three sub-headings: type of instructional schedule utilized, instructional scheduling history, and instructional scheduling beliefs.

Type of Instructional Schedule

There were five questions in the survey that addressed the type of instructional schedule utilized. Descriptive statistics were utilized to analyze the data. The third question on the survey asked respondents to select a response that best described the type of instructional schedule currently in existence at his or her school. Table 17 shows that approximately 70% of the respondents utilized a traditional departmentalized schedule, χ^2 (6, *N*=65)=164.277, *p*<.001). With regard to the *Other* category, the majority of the eight respondents that selected this category indicated that their instructional schedule is a combination of several of the scheduling types listed.

	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	4 504		2		6.0	2.07
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
Dronned Schedule	0.00/	0	0	0	0	0.00
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

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

In addition to gathering data on the type of instructional schedule utilized, there were four questions on the survey that examined exploratory/encore subjects along with remedial, special education, and English Language Learner (ELL) instruction. Survey question 9 asked what exploratory/encore subjects were offered during the school day. Table 18 shows that physical education, music, technology, and art were all offered during the school day. In addition, both health and home and careers were offered during the day in all but one of the respondents' schools. There were 22 respondents that checked the *Other* option. The majority of the exploratory/encore subjects listed in this category included: computers, languages other than English (LOTE), cyber-bullying, literacy, and Internet use.

	Percentage	Frequency
Physical Education	100.0%	66
Music	100.0%	66
Technology	100.0%	66
Art	100.0%	66
Health	98.5%	65
Home and Careers	98.5%	65
Other (please specify)	33.3%	22

Percentages and Frequencies for Exploratory/Encore Subjects (N=66)

The final three questions in the section on instructional scheduling obtained information regarding the structure of remedial, special education and English Language Learner (ELL) instruction. For remedial, special education, and ELL instruction, Tables 19, 20 and 21 respectively, show that the respondents selected smaller student/teacher ratio classes, inclusion in mainstream, additional support period, and pull-outs as the most frequently utilized instructional supports. Although these were the most common selections, ELL differed in that the additional support period was utilized less frequently than it was for remedial and special education instruction.

Table 19

Percentages and Frequencies for Structure of Remedial Instruction (N=66)

	Percentage	Frequency
Smaller student/teacher ratio classes	77.3%	51
Inclusion in mainstream classes	72.7%	48
Pull outs	50.0%	33
Additional support period	72.7%	48
Extended school day programs	27.3%	18
Summer programs	37.9%	25
Other (please specify)	12.1%	8

Percentages and Frequencies for Structure of Special Education Instruction (N=66)

	Percentage	Frequency
Smaller student/teacher ratio classes	71.2%	47
Inclusion in mainstream classes	93.9%	62
Pull outs	42.4%	28
Additional support period	78.8%	52
Extended school day programs	15.2%	10
Summer programs	36.4%	24
Other (please specify)	10.6%	7

Table 21

Percentages and Frequencies for Structure of ELL Instruction (N=63)

	Percentage	Frequency
Smaller student/teacher ratio classes	44.4%	28
Inclusion in mainstream classes	63.5%	40
Pull outs	52.4%	33
Additional support period	41.3%	26
Extended school day programs	11.1%	7
Summer programs	14.3%	9
Other (please specify)	17.5%	11

Instructional Scheduling History

There were three questions in the survey that asked the type of instructional schedule utilized. Descriptive statistics were used to analyze the data. The fourth, fifth and sixth questions on the survey asked respondents how long the current instructional scheduling had been in existence, if it had been altered, and if so, why had it been changed. Table 22 shows that the average length of time that the current instructional schedule was in existence was approximately 10 years. Furthermore, Tables 23 and 24 show that the majority of respondents have made or are looking to make changes to their instructional scheduling structure. The last question regarding the history of the principals' instructional schedule asked why they were either looking or not looking to modify their current instructional schedule. The majority of the responses for wanting to modify their current instructional schedule focused on: additional time needed for ELA and math, increase instructional time, improve staff utilization, and budget reductions.

Table 22

Descriptive Statistics for Length of Time Instructional Schedule Has Been in Existence (N=53)

	Ν	Minimum	Maximum	Mean	Standard Deviation
Existence of					
Instructional Schedule	53	0	50	10.26	8.385

Table 23

Percentages and Frequencies for Changes in Instructional Schedule (N=66)

	Percentage	Frequency
Yes	63.6%	42
No	36.4%	24

Table 24

Percentages and Frequencies for Interest in Modifying Instructional Schedule (N=64)

	Percentage	Frequency
Yes	56.2%	36
No	43.8%	28

Instructional Scheduling Beliefs

To collect data about instructional scheduling beliefs, the respondents were asked to rank different types of instructional schedules and provide their beliefs on components of instructional scheduling. Descriptive and nonparametric statistics were used to analyze these data.

A Friedman test was used to analyze how the respondents ranked seven different instructional scheduling models. Table 25 shows the mean, mean rank and standard deviation for each instructional scheduling model and the table is presented in mean rank order from lowest to highest. All seven models were found to be statistically significant and the chi-square associated with this Friedman test was χ^2 (6, *N*=65)=219.105, *p*<.001). 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 25

	Ν	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

Friedman Test on Instructional Scheduling Models (N=65)

Further analysis was conducted to determine if there were any statistically significant differences between survey demographic items and the principals ranking of the instructional scheduling models. The four demographic items analyzed were grade configuration, student population, school location, and years of principal experience at current school. The analysis was conducted using a Kruskal-Wallis test, and the results indicated a statistically significant difference by the category of "grade configuration" at the .05 level of significance. The mean rank of "Rotating Dropped Schedule" for grades 5-8 (38.04) and grades 6-8 (34.48) were higher than the mean rank for grades 7-8 (20.00). There was only one response recorded for the *Other* category and that principal indicated that his or her school was solely comprised of sixth grade students. Table 26 shows the ranking of instructional scheduling models by grade configuration.

	Grade Configurations	Ν	Mean Rank	Asymptotic Significance
	5, 6, 7, 8	12	38.83	.403
Traditional	6, 7, 8	42	32.01	
Departmentalized	7, 8	10	32.45	
Schedule	Other	1	10.00	
	Total	65		
	5, 6, 7, 8	12	30.08	.551
Alternate Des Diasi	6, 7, 8	42	35.11	
Schedule	7, 8	10	29.40	
	Other	1	15.50	
	Total	65		
	5, 6, 7, 8	12	27.67	.550
Flexible	6, 7, 8	42	33.62	
Interdisciplinary	7, 8	10	35.15	
Block Schedule	Other	1	49.50	
	Total	65		
	5, 6, 7, 8	12	29.25	.830
	6, 7, 8	42	33.27	
Modular Schedule	7, 8	10	35.85	
	Other	1	38.00	
	Total	65		
	5, 6, 7, 8	12	39.42	.231
	6, 7, 8	42	29.73	
Rotating Schedule	7, 8	10	38.15	
	Other	1	42.00	
	Total	65		
	5, 6, 7, 8	12	29.17	.350
	6, 7, 8	42	32.37	
Dropped Schedule	7, 8	10	40.10	
	Other	1	34.50	
	Total	65		
	5, 6, 7, 8	12	38.04	.011
	6, 7, 8	42	34.48	
Rotating Dropped	7, 8	10	20.00	
Senedule	Other	1	40.50	
	Total	65		

Kruskal-Wallis Test on Instructional Scheduling Models Ranked by Grade Configuration

In addition to ranking different types of instructional schedules, the respondents indicated on a Likert scale their agreement or disagreement with 10 statements. A chi-square analysis and

a Friedman test were used to analyze these data. Utilizing a chi-square analysis, all except one of the Likert scale items showed statistical significance. The following Likert scale items were statistically significant: The 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), The instructional schedule should support flexibility for periods to be of different lengths χ^2 (3, N=63)=38.270, p<.001), An instructional schedule can have a positive influence of student learning χ^2 (1, N=65 = 36.938, p<.001), Longer class periods can have a positive influence on student learning χ^2 (2, N=64)=19.344, p<.001), Longer class periods can have a positive influence on the relationship between teacher and student χ^2 (2, N=64)=19.906, p<.001), The current instructional schedule in my school meets the needs of all students χ^2 (3, N=64)=25.875, p<.001), The current instructional schedule in my school meets the needs of all remedial students χ^2 (3, N=64)=36.250, p<.001), The current instructional schedule in my school meets the needs of all special education students χ^2 (3, N=64)=24.375, p<.001), and The current instructional schedule in my school meets the needs of all ELL students χ^2 (3, N=60)=22.533, p<.001). The one Likert scale item that was not statistically significant was Longer class periods can have a

positive influence on student behavior χ^2 (2, *N*=64)=4.156, *p*<.125). Table 27 shows the chisquare frequencies for instructional scheduling beliefs.

Table 27

Chi-Square Analysis 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				
	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				
	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					
	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						
	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					
	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				
	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				
	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				
	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				
	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				
	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			

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 10 statements. Table 28 shows the mean, mean ranks, and standard deviations for scheduling beliefs. The items are sorted in mean rank order. They were all 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).

	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 in				
my school meets the needs of all				
special education students	59	2.81	.776	4.52
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

Friedman Test on Instructional Scheduling Beliefs (N=59)

Further analysis was conducted to determine if there were any statistically significant differences when comparing survey demographic items to the principals' instructional scheduling beliefs. The four demographic items analyzed were grade configuration, student population, school location, and years of principal experience at current school. The analysis was conducted using a Kruskal-Wallis test, and the results indicated that there were no statistical significant differences at the p<.05 level of confidence. The results of this analysis are further discussed in Chapter V.

This section of Chapter IV discussed the instructional scheduling data collected. The data indicated that the a sample of principals predominantly utilized a traditional

departmentalized instructional schedule that offered a contingency of encore/exploratory courses that include physical education, music, technology, art, health, and home and careers. In addition, the scheduling structure for remedial, special education, and ELL students took the form of smaller student/teacher ratio classes, inclusion in mainstream classes, and pullout programs.

With regard to instructional scheduling history, the data indicate that the sample of principals predominately utilized an instructional schedule that was in existence for an average of 10 years. The majority of principals indicated that they had either changed or were looking to modify the current instructional schedule. When examining instructional scheduling models, the majority of respondents believed that the flexible interdisciplinary block schedule best fit the needs of their students, followed by the traditional departmentalized schedule, and the alternating day schedule. Lastly, regarding instructional scheduling beliefs, the majority of principals indicated that an instructional schedule could have a positive influence on student learning along with longer class periods.

Research Question 2

Research question 2: To what extent, if any, is teaming present or absent in New York State middle schools categorized as having an average need/resource capacity?

The second part of the survey collected data on the presence or absence of any teaming that was occurring within New York State middle schools categorized as having an average need/resource capacity. Similar to the instructional scheduling section of the survey, the teaming section of the survey was divided into two parts: the first focused on teaming information and the second examined teaming beliefs. This section of Chapter IV is divided into the following three groups for the analysis of the teaming data: type of teaming currently utilized, teaming history, and teaming beliefs.

Type of Teaming

With regard to the type of teaming utilized, a series of nine questions on the survey focused on the characteristics of teaming at the respondents' middle schools. The first question asked if the respondents' middle schools utilized teaming. Table 29 shows that over 95% of the principals that responded to the survey utilized teaming in some capacity. The next five questions examined the types, grades, and student assignment of teams. Tables 30-34 show that the teams in the respondents' middle schools were predominately interdisciplinary and/or single graded across all grade levels and that the majority of students were randomly assigned to teams. In addition, the collected data indicate that approximately 90% of students were fully teamed.

Table 29

Percentages and Frequencies for Teaming Utilized (N=64)

	Percentage	Frequency
Yes	95.3%	61
No	4.7%	3

Table 30

Percentages and Frequencies for Type of Teaming Utilized (N=61)

	Percentage	Frequency
Interdisciplinary	59.0%	36
Single Grade Level	73.8%	45
Multiple Grade Levels	13.1%	8
Other (please specify)	4.9%	3

Table 31

Percentages and Frequencies for Grade Levels that use Teaming (N=61)

	Percentage	Frequency
5th Grade	14.8%	9
6th Grade	86.9%	53
7th Grade	90.2%	55
8th Grade	83.6%	51

Percentages and Frequencies for Students Randomly Assigned to Teams (N=61)

	Percentage	Frequency
Yes	63.9%	39
No	36.1%	22

Table 33

Percentages and Frequencies for Students Teamed with Same Group of Students Throughout

Middle School (N=61)

	Percentage	Frequency
Yes	26.2%	16
No	73.8%	45

Table 34

Descriptive Statistics for Percentage of Students Fully Teamed (N=61)

	Ν	Minimum	Maximum	Mean	Standard Deviation
Fully Teamed	61	33	100	90.28	16.901

While the previous five questions focused on the types, grades, and student assignment of teams, the next series of questions examined the teachers' assignment to teams. Table 35 shows that the predominant composition of teams consisted of academic teachers. Table 36 shows that almost half of the teams consisted of four teachers, χ^2 (4, *N*=61)=42.167, *p*<.001). The final question with regard to the type of teaming utilized was in reference to the use of a team facilitator/team leader. Table 37 shows that approximately half of the principals reported that team facilitators/team leaders were utilized in their middle school.

Percentages and Frequencies for Staff Members Assigned to Teams (N=61)

	Percentage	Frequency
Academic Teachers	98.4%	60
Exploratory/Encore Teachers	24.6%	15
Remedial Teachers	21.3%	13
Special Education Teachers	80.3%	49
English Language Learner (ELL) Teachers	9.8%	6
Teaching Assistants or Paraprofessionals	26.2%	16
Principal or Assistant Principal	18.0%	11
Department Chair	4.9%	3
School Counselor	34.4%	21
Other (please specify)	3.3%	2

Table 36

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
Greater than 5 Teachers	8.2%	5	4	12.0	-8.0	-2.31

Table 37

Percentages and Frequencies for Teams That Have a Team Facilitator/Leader (N=61)

	Percentage	Frequency
Yes	50.8%	31
No	49.2%	30

Teaming History

Within the teaming section of the survey, there were three questions that addressed the history of teaming at the respondents' schools. Questions 19 and 20 on the survey asked respondents if the current teaming structure had been changed or altered, and if they were looking or not looking to modify it. Tables 38 and 39 show that the majority of respondents had

made changes to the teaming structure, but were not looking to make any additional changes. The last question asked why the principal looked or did not look to modify his or her current structure for teaming. The majority of the responses for not wanting to modify the current teaming structure focused on: cuts to existing budget and staffing, changes recently made, current structure fitting the academic, social and emotional needs of students, lack of support from staff and/or district administration, and declining enrollment.

Table 38

Percentages and Frequencies for Changes in Teaming Structure (N=61)

	Percentage	Frequency
Yes	65.6%	40
No	34.4%	21

Table 39

Percentages and Frequencies for Interest in Modifying or Changing Teaming Structure (N=61)

	Percentage	Frequency
Yes	34.4%	21
No	65.6%	40

Teaming Beliefs

To collect data regarding teaming beliefs, the respondents were asked to indicate on a Likert-type scale their agreement or disagreement with nine statements. A chi-square analysis, along with a Friedman test, were used to analyze these data. Utilizing a chi-square analysis, all of the following Likert-scale items were statistically significant: Teaming has a positive influence on the way classroom instruction is carried out and taught χ^2 (2, *N*=63)=34.667, *p*<.001), Teaming has a positive influence on the culture of learning within the school χ^2 (2, *N*=63)=48.667, *p*<.001), Teaming has a positive influence on student learning χ^2 (1, *N*=62)=7.806, *p*<.005), Teaming has a positive influence on student behavior

 χ^2 (2, *N*=63)=32.000, *p*<.001), Teaming provides students with a greater sense of identity and belonging χ^2 (2, *N*=63)=22.952, *p*<.001), Teachers are prepared with the collaboration and communication skills needed to be an effective team χ^2 (2, *N*=62)=17.452, *p*<.001), Teachers would benefit from receiving professional development on teaming χ^2 (2, *N*=63)=38.381, *p*<.001), Teams have the ability to function in a leadership capacity" χ^2 (2, *N*=63)=21.238, *p*<.001), and Team facilitators/leaders have the ability to function in a leadership capacity χ^2 (2, *N*=63)=24.000, *p*<.001). Table 40 shows the chi-square frequencies for teaming beliefs. Table 40

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

Те	eaming has a positive int	fluence on the way classr	oom instruction is carrie	d out and taught
	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							
	Observed N Expected N Residual Standardized Resid						
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						
	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					
	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							
	Observed N Expected N Residual Standardized Resid						
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						

Teacher	s are prepared with the c	collaboration and commu	nication skills needed to	be an effective team
	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							
	Observed N Expected N Residual Standardized Residu						
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							
	Observed N Expected N Residual Standardized Resi						
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							
	Observed N Expected N Residual Standardized Residu						
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						

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 41 shows the means, mean ranks, and standard deviations. The Likert scale items are sorted in mean rank order. They were all found to be statistically significant and the chi-square associated with this Friedman test was 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 41

	Ν	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

Friedman Test on Instructional Scheduling Beliefs (N=62)

Further analysis was conducted to determine if there were any statistically significant differences when comparing survey demographic items to the principals' teaming beliefs. The four demographic items analyzed were grade configuration, student population, school location, and years of principal experience at current school. The analysis was conducted using a Kruskal-Wallis test, which indicated a statistically significant difference by the category of school location at the .05 level of significance. The mean rank of, Teaming has a positive influence on

student learning for rural (23.17) and suburban (30.86) were lower than the mean rank for urban

(39.00). Table 42 indicates how the principals' teaming beliefs were ranked by school location.

Table 42

	School Location	N	Mean Rank	Asymptotic Significance
	Urban	4	34.38	.716
Teaming has a positive influence	Rural	19	28.00	
carried out and taught.	Suburban	35	29.76	
C	Total	58		
	Urban	4	31.00	.117
Teaming has a positive influence on the culture of learning within	Rural	19	24.29	
the school.	Suburban	35	32.16	
	Total	58		
	Urban	4	39.00	.049
Teaming has a positive influence	Rural	18	23.17	
on student learning.	Suburban	35	30.86	
	Total	57		
	Urban	4	42.50	.060
Teaming has a positive influence	Rural	19	24.50	
on student behavior.	Suburban	35	30.73	
	Total	58		
	Urban	4	35.50	.326
Teaming provides students with a greater sense of identity and	Rural	19	25.63	
belonging.	Suburban	35	30.91	
	Total	58		
Teachers are prepared with the	Urban	4	28.50	.570
collaboration and communication	Rural	18	26.08	
skills needed to be an effective	Suburban	35	30.56	
leader.	Total	57		
	Urban	4	25.50	.242
Teachers would benefit from	Rural	19	25.71	
development on teaming.	Suburban	35	32.01	
	Total	58		
	Urban	4	33.50	.838
Teams have the ability to function	Rural	19	28.61	
in a leadership capacity.	Suburban	35	29.53	
	Total	58		
	Urban	4	40.63	.289
Team facilitators/leaders have the	Rural	19	29.18	
capacity.	Suburban	35	28.40	
	Total	58		

The data 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. In addition, the teams were comprised of mostly four academic teachers, and approximately half of the teams had a designated team facilitator or leader. With regard to teaming history, the data showed that the principals who made changes to their existing teaming structure were not looking to make any additional changes or modifications. This is in part due to the principal being content with the current teaming structure or reductions to staffing and budget. Lastly, regarding teaming beliefs, the majority of principals indicated that teaming can have a positive influence on the culture of learning and student learning, and that teachers would benefit from receiving professional development on teaming.

Research Question 3

Research question 3: To what extent, if any, is common planning time present or absent in New York State middle schools categorized as having an average need/resource capacity?

The third part of the survey collected data on the presence or absence of any common planning that occurred within New York State middle schools that were categorized as having an average need/resource capacity. Similar to both the instructional scheduling and teaming sections of the survey, the common planning section of the survey was divided into two parts. The first part focused on common planning information and the second part asked about common planning beliefs. This section of Chapter IV is divided into the following three groups to analyze the common planning data: types of common planning currently utilized, common planning history, and common planning beliefs.

Before examining the types of common planning, data regarding the overall utilization of common planning is presented. Table 43 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 44 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 45 shows that less than half of the principals were provided with agendas for common planning from teachers and staff, χ^2 (1, *N*=54)=.667, *p*<.414).

Table 43

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 44

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

	Percentage	Frequency	Observed N	Expected N	Residual	Standardized Residual
Yes	88.9%	48	48	27.0	21.0	4.04
No	11.1%	6	6	27.0	-21.0	-4.04

Table 45

Chi-Square Analysis on Principal Provided with Agenda for Common Planning

	Percentage	Frequency	Observed N	Expected N	Residual	Standardized Residual
Yes	44.4%	24	24	27.0	-3.0	-0.58
No	55.6%	30	30	27.0	3.0	0.58

Types of Common Planning

For each type of common planning a series of four questions were asked of principals.

Regarding team common planning, Table 46 shows that the principals reported that it occurs in over 96% of their schools, χ^2 (1, *N*=54)=46.296, *p*<.001). Table 47 shows that, for the majority of the schools, common planning occurred on a daily basis, χ^2 (3, *N*=52)=37.392, *p*<.001), while Table 48 shows that it occurred for, on average, 45 minutes. Table 49 shows that the two

predominant uses of team common planning were coordinating instruction and discussing

students. In addition, there were five principals who selected the Other option, and their

responses focused on planning and parent meetings for additional uses of team common

planning.

Table 46

Chi-Square Analysis on Team Common Planning (N=54)

	Percentage	Frequency	Observed N	Expected N	Residual	Standardized Residual
Yes	96.3%	52	52	27.0	25.0	4.81
No	3.7%	2	2	27.0	-25.0	-4.81

Table 47

Chi-Square Analysis on Frequency of Team Common Planning (N=51)

	Percentage	Frequency	Observed N	Expected N	Residual	Standardized Residual
Daily	60.8%	31	31	12.8	18.3	5.08
Every other day	21.6%	11	11	12.8	-1.8	-0.50
Once a week	11.8%	6	6	12.8	-6.8	-1.90
Once a month	0.0%	0	0	0.0	0.0	0.00
Other (please specify)	5.9%	3	3	12.8	-9.8	-2.74

Table 48

Descriptive Statistics for Length of Team Common Planning (N=52)

	Ν	Minimum	Maximum	Mean	Standard Deviation
Length of Team Common Planning Time	52	39	80	45.73	10.677

Table 49

Percentages and Frequencies for Usage of Team Common Planning (N=52)

	Percentage	Frequency
Teacher preparation	65.4%	34
Coordinating instruction	92.3%	48
Creating assessments	57.7%	30
Revising schedules	23.1%	12
Discussing students	88.5%	46
Conducting conferences	84.6%	44
Planning special events/trips	61.5%	32
IEP/504 meetings	53.8%	28
Other (please specify)	9.6%	5

The next type of common planning for which data were collected was grade level common planning. Table 50 shows that the principals reported that it occurred in approximately 75% of their schools, χ^2 (1, *N*=55)=13.255, *p*<.001). Table 51 shows that the two most popular formats were *Daily* or *Other*, χ^2 (4, *N*=40)=9.000, *p*<.061), while Table 52 shows that it occurred for an average of 47 minutes. Table 53 shows that the three predominant uses of grade level common planning were coordinating instruction, creating assessments, and teacher preparation. In addition, there were six principals who selected the *Other* option and their responses ranged from professional development activities to meetings with administration.

Table 50

Chi-Square Analysis on Grade Level Common Planning (N=55)

	Percentage	Frequency	Observed N	Expected N	Residual	Standardized Residual
Yes	74.5%	41	41	27.5	13.5	2.58
No	25.5%	14	14	27.5	-13.5	-2.58

Table 51

Chi-Square Analysis on Frequency of Grade Level Common Planning (N=40)

	Percentage	Frequency	Observed N	Expected N	Residual	Standardized Residual
Daily	35.0%	14	14	8.0	6.0	2.12
Every other day	12.5%	5	5	8.0	-3.0	-1.06
Once a week	12.5%	5	5	8.0	-3.0	-1.06
Once a month	12.5%	5	5	8.0	-3.0	-1.06
Other (please specify)	27.5%	11	11	8.0	3.0	1.06

Table 52

Descriptive Statistics for Length of Grade Level Common Planning (N=38)

	Ν	Minimum	Maximum	Mean	Standard Deviation
Length of Grade Level					
Common Planning Time	38	30	90	47.05	14.161

	Percentage	Frequency
Teacher preparation	55.0%	22
Coordinating instruction	80.0%	32
Creating assessments	75.0%	30
Revising schedules	17.5%	7
Discussing students	52.5%	21
Conducting conferences	35.0%	14
Planning special events/trips	52.5%	21
IEP/504 meetings	20.0%	8
Other (please specify)	15.0%	6

Percentages and Frequencies for Usage of Grade Level Common Planning (N=40)

The final type of common planning for which data were collected was departmental common planning. Table 54 show that the principals reported that it occurred in approximately 74% of their schools, χ^2 (1, *N*=54)=12.519, *p*<.001). Table 55 shows that the most popular format was monthly, χ^2 (4, *N*=40)=33.000, *p*<.001), while Table 56 shows that it occurred for an average of 49 minutes. Table 57 shows that the three predominant uses of grade level common planning were coordinating instruction, creating assessments, and teacher preparation. In addition, there were six principals who selected the *Other* option and their responses ranged from analyzing and discussing data to writing and revising unit plans.

Table 54

Chi-Square Analysis on Departmental Common Planning (N=54)

	Percentage	Frequency	Observed N	Expected N	Residual	Standardized Residual
Yes	74.1%	40	40	27.0	13.0	2.50
No	25.9%	14	14	27.0	-13.0	-2.50

	Percentage	Frequency	Observed N	Expected N	Residual	Standardized Residual
Daily	10.0%	4	4	8.0	-4.0	-1.41
Every other day	10.0%	4	4	8.0	-4.0	-1.41
Once a week	20.0%	8	8	8.0	.0	0.00
Once a month	55.0%	22	22	8.0	14.0	4.95
Other (please specify)	5.0%	2	2	8.0	-6.0	-2.12

Chi-Square Analysis on Frequency of Departmental Common Planning (N=40)

Table 56

Descriptive Statistics for Length of Departmental Common Planning (N=39)

	Ν	Minimum	Maximum	Mean	Standard Deviation
Length of Departmental Common					
Planning Time	39	30	90	49.36	14.251

Table 57

Percentages and Frequencies for Usage of Departmental Common Planning (N=40)

	Percentage	Frequency
Teacher preparation	57.5%	23
Coordinating instruction	92.5%	37
Creating assessments	92.5%	37
Revising schedules	7.5%	3
Discussing students	25.0%	10
Conducting conferences	10.0%	4
Planning special events/trips	22.5%	9
IEP/504 meetings	10.0%	4
Other (please specify)	15.0%	6

Common Planning History

Within the common planning section of the survey there were three questions that addressed the history of common planning within the respondents' schools. Questions 42 and 43 on the survey asked respondents if the current common planning structure had been changed or altered and if they were looking or not looking to modify it. Tables 58 and 59 show that approximately half of the respondents had made changes to the teaming structure, but the majority of respondents were not looking to make any additional changes. The last question
regarding the history of the principals' common planning structure asked why they were either looking or not looking to modify their current structure for teaming. The majority of the responses for modifying their current common planning structure focused on more time for data analysis and implementing the Common Core State Standards, while the reasons for not modifying focused on contractual issues with the teachers union and the belief that the existing departmental common planning was meeting the needs of students.

Table 58

Percentages and Frequencies for Changes in Common Planning Structure (N=54)

	Percentage	Frequency
Yes	48.1%	26
No	51.9%	28

Table 59

Percentages and Frequencies for Interest in Modifying Common Planning Structure (N=53)

	Percentage	Frequency
Yes	35.8%	19
No	64.2%	34

Common Planning Beliefs

To collect data regarding common planning beliefs, the respondents were asked to indicate their agreement or disagreement with four statements on a Likert-based scale. A chi-square analysis, along with a Friedman test, was utilized to analyze these data. Utilizing a chi-square analysis, all of the following Likert scale items were statistically significant: 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), Common planning time has a positive influence on the culture of learning within the school, χ^2 (1, N=60)=8.067, p<.001), Common planning time has a positive influence on the culture of learning within the school, χ^2 (2, N=60)=42.700, p<.001), and Teachers would benefit from

receiving professional development on how to effectively utilize common planning time, χ^2 (2,

N=60)=57.700, p<.001). Table 60 shows the chi-square frequencies for common planning

beliefs.

Table 60

Chi-Square Analysis 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							
	Observed N Expected N Residual Standardized Res						
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								
	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						
	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								
	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							

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 61 shows the means, mean ranks, and standard deviations. The Likert scale items were sorted in mean rank order. They were not found to be statistically significant, and the

chi-square associated with the Friedman test was χ^2 (3, *N*=60)=2.471, *p*<.481). The mean rank of Teachers would benefit from receiving professional development on how to effectively utilize common planning time (2.60) had the strongest agreement while the strongest disagreement was regarding Common planning time has a positive influence on the culture of learning within the school (2.43).

Table 61

Friedman Test on C	Common Planning	Beliefs	(N=60)
--------------------	-----------------	---------	--------

	Ν	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

Further analysis was conducted to determine if there were any statistically significant differences when comparing survey demographic items to the principals' common planning beliefs. The four demographic items analyzed were grade configuration, student population, school location, and years of principal experience at current school. The analysis was conducted using a Kruskal-Wallis test, and the results indicated a statistically significant difference by the category of school location at the .05 level of significance. The mean rank of Common planning time has a positive influence on the way instruction is carried out and taught, for rural (22.74) and suburban (32.20) were lower than the mean rank for urban (38.00). Table 62 indicates how the principals' common planning beliefs were ranked by school location.

	School Location	Ν	Mean Rank	Asymptotic Significance
	Urban	4	38.00	.019
Common planning time has a positive	Rural	19	22.74	
carried out and taught.	Suburban	35	32.20	
	Total	58		
	Urban	4	39.00	.135
Common planning time has a positive	Rural	19	25.26	
within the school.	Suburban	35	30.71	
	Total	58		
	Urban	4	38.50	.121
Common planning time has a positive	Rural	19	25.00	
influence on student learning.	Suburban	35	30.91	
	Total	58		
Teachers would benefit from receiving	Urban	4	28.88	.151
professional development on how to	Rural	19	25.16	
effectively utilize common planning	Suburban	35	31.93	
time.	Total	58		

Kruskal-Wallis Test on Common Planning Beliefs Ranked by School Location

In addition to indicating their agreement or disagreement with common planning statements, the respondents were asked to rank the three types of common planning in order of importance. A Friedman test was used to analyze how the respondents ranked the three types of common planning. Table 63 shows the means, mean ranks, and standard deviations. The Likert scale items are sorted in mean rank order. All three types of common planning were found to be statistically significant, χ^2 (2, *N*=60)=22.800, *p*<.001). The most popular type of common planning was team (1.50) followed by grade level (2.20) and departmental (2.30).

Table 63

Friedman Test on Common Planning Types (N=60)

	Ν	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

Further analysis was conducted to determine if there were any statistically significant differences when comparing survey demographic items to the principals ranking of types of common planning. The four demographic items analyzed were grade configuration, student population, school location, and years of principal experience at current school. The analysis was conducted using a Kruskal-Wallis test, and the results indicated that there were no statistically significant differences at the .05 level of confidence. The results of this analysis are further discussed in Chapter V.

The data indicate that the sample of principals predominantly utilized team, grade level and departmental common planning for coordinating instruction, creating assessments and teacher preparation. Although the majority of principals who responded to the survey utilized these three forms of common planning, the duration and frequency varied depending on the type of common planning. With regard to common planning history, the data indicate that approximately half of the sample of principals made changes to the existing common planning structure and the majority of principals were not looking to make any additional changes or modifications. Not looking at making changes to the structure of common planning was, in part, due to the principal being content with common planning structure or contractual concerns. Lastly, regarding common planning beliefs, the majority of principals indicated that they agreed with the statements that common planning had a positive influence on the way instruction is carried out and taught, the culture of learning within the school, and with student learning.

Research Question 4

Research question 4: To what extent, if any, are all three school supports (instructional schedules, teaming, and common planning time) found to exist simultaneously in New York State middle schools categorized as having an average need/resource capacity?

The fourth part of the survey gathered data regarding the simultaneous existence of all three school supports by New York State middle schools categorized as having an average need/resource capacity. To examine this fourth research question, the data collected regarding the first three research questions were analyzed. This section of Chapter IV is divided into four sections: instructional scheduling and teaming, instructional scheduling and common planning, teaming and common planning, and beliefs regarding all three middle school supports.

Instructional Scheduling and Teaming

With regard to comparing instructional scheduling and teaming, Table 64 shows that, regardless of the type of instructional schedule in existence, all but three of the respondents indicated that teaming was utilized. Furthermore, Table 65 shows that the traditional departmentalized schedule with interdisciplinary and/or single grade level teaming was the most common combination.

Table 64

		Does your schoo	ol use teaming?
		No	Yes
How would you best describe the type of instructional schedule in existence in your school?	Alternate Day Block Schedule	0 (0%)	3 (4.8%)
	Flexible Interdisciplinary Block Schedule	0 (0%)	1 (1.5%)
	Modular Schedule	0 (0%)	1 (1.5%)
	Other	0 (0%)	7 (11.1%)
	Rotating Dropped Schedule	0 (0%)	5 (7.9%)
	Rotating Schedule	0 (0%)	2 (3.2%)
	Traditional Departmentalized Schedule	3 (4.8%)	41 (65.1%)

Percentages and Frequencies for Instructional Schedule and Teaming (N=63)

		Interdisciplinary	Single Grade Level	Multiple Grade Levels
	Alternate Day Block Schedule	2 (5.7%)	2 (4.5%)	0 (0%)
	Flexible Interdisciplinary Block Schedule	1 (2.8%)	0 (0%)	0 (0%)
How would you best	Modular Schedule	0 (0%)	1 (2.3%)	0 (0%)
instructional schedule in existence in your	Other	3 (8.6%)	4 (9.1%)	3 (37.5%)
school?	Rotating Dropped Schedule	3 (8.6%)	2 (4.5%)	3 (37.5%)
	Rotating Schedule	2 (5.7%)	0 (0%)	0 (0%)
	Traditional Departmentalized Schedule	24 (68.6%)	35 (79.5%)	2 (25.0%)

Percentages and Frequencies for Instructional Schedule and Type of Teaming (N=63)

Instructional Scheduling and Common Planning

With regard to comparing instructional scheduling and common planning, Table 66 shows that regardless of the type of instructional schedule in existence, all but eight of the respondents indicated that common planning was utilized. Furthermore, Table 67 shows that the traditional departmentalized schedule with team common planning was the most common. In addition, the majority of the principals reported having both grade level and departmental teaming within the traditional departmentalized schedule.

		Does your schoo plannin	ol have common g time?
		No	Yes
	Alternate Day Block Schedule	0 (0%)	3 (4.8%)
How would you best describe the type of instructional schedule in existence in your school?	Flexible Interdisciplinary Block Schedule	0 (0%)	1 (1.5%)
	Modular Schedule	0 (0%)	1 (1.5%)
	Other	1 (1.5%)	6 (9.5%)
	Rotating Dropped Schedule	0 (0%)	6 (9.5%)
	Rotating Schedule	0 (0%)	2 (3.2%)
	Traditional Departmentalized Schedule	7 (11.1%)	36 (57.1%)

Percentages and Frequencies for Instructional Schedule and Common Planning (N=63)

Table 67

Percentages and Frequencies for Instructional Schedule and Type of Common Planning

		Team (<i>N</i> =51)	Grade Level (N=40)	Departmental (N=39)
	Alternate Day Block Schedule	3 (5.9%)	1 (2.5%)	1 (2.3%)
How would you best describe the type of instructional schedule	Flexible Interdisciplinary Block Schedule	1 (2.0%)	0 (0%)	1 (2.3%)
	Modular Schedule	1 (2.0%)	1 (2.5%)	0 (0%)
	Other	6 (11.8%)	5 (12.5%)	5 (12.8%)
in existence in your	Rotating Dropped Schedule	4 (7.8%)	5 (12.5%)	4 (10.3%)
school?	Rotating Schedule	2 (4.0%)	2 (5.0%)	2 (5.1%)
	Traditional Departmentalized Schedule	34 (66.7%)	26 (65%)	26 (66.7%)

Teaming and Common Planning

With regard to comparing teaming and common planning, Table 68 shows that the respondents' schools utilized both teaming and common planning. Furthermore, Table 69 shows that team common planning was the most common with interdisciplinary and/or single grade level teaming. In addition, grade level and departmental common planning was also utilized the majority of time with interdisciplinary and/or single grade level teaming.

Percentages and Frequencies for Teaming and Common Planning

		Does your school have common planning time?		
		No	Yes	
	No	1 (1.5%)	2 (3.2%)	
Does your school use teaming?	Yes	7 (11.1%)	53 (84.1%)	

Table 69

Percentages and Frequencies for Type of Teaming and Type of Common Planning

	Team Common Planning	Grade Level Common Planning	Departmental Common Planning
Interdisciplinary Teaming	31 (40.3%)	25 (42.4%)	25 (43.9%)
Single Grade Level Teaming	39 (50.6%)	28 (47.5%)	27 (47.4%)
Multiple Grade Level Teaming	7 (9.1%)	6 (10.2%)	5 (8.8%)

Middle School Supports Beliefs

To collect data regarding beliefs about all three middle school supports, the respondents were asked to indicate on a Likert scale their agreement or disagreement with three statements. A chi-square analysis and a Friedman test were utilized to analyze these data. Utilizing a chi-square analysis, all of the following Likert scale items were statistically significant: The instructional schedule should support the organization of teams, χ^2 (2, *N*=60)=43.900, *p*<.001), The instructional schedule should support the structure for common planning,

 χ^2 (1, *N*=60)=17.067, *p*<.001), and Common planning is an important component of teaming, χ^2 (2, *N*=60)=65.100, *p*<.001). Table 70 shows the chi-square frequencies for middle school support beliefs.

Chi-Square Analysis Middle School Support Beliefs (4-Strongly Agree; 3-Somewhat Agree; 2-

The instructional schedule should support the organization of teams							
	Observed N Expected N Residual Standardized Residu						
2	2	20.0	-18.0	-4.03			
3	15	20.0	-5.0	-1.12			
4	43	20.0	23.0	5.15			
Total	60						

Somewhat Disagree; 1-Strongly Disagree

The instructional schedule should support the structure for common planning							
	Observed N Expected N Residual Standardized Residual						
3	14	30.0	-16.0	-2.92			
4	46	30.0	16.0	2.92			
Total 60							

Common planning is an important component of teaming							
	Observed N Expected N Residual Standardized Residu						
2	1	20.0	-19.0	-4.25			
3	10	20.0	-10.0	-2.24			
4	49	20.0	29.0	6.49			
Total	60						

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 three statements. Table 71 shows the means, mean ranks, and standard deviations. The Likert scale items are sorted in mean rank order. They were not found to be statistically significant and the chi-square associated with this Friedman test was χ^2 (2, *N*=60)=4.478, *p*<.107). The mean rank of Common planning is an important component of teaming (2.08) had the strongest agreement followed by The instructional scheduling should support the organization of teams (1.91).

Friedman Test on Middle School Support Beliefs (N=60)

	N	Mean	Standard Deviation	Mean Rank
The instructional schedule should support				
the organization of teams	60	3.68	.537	1.91
The instructional schedule should support				
the structure for common planning	60	3.77	.427	2.02
Common planning is an important				
component of teaming	60	3.80	.443	2.08

Further analysis was completed to determine if there were any statistically significant differences when comparing survey demographic items to the principals' school support beliefs. The four demographic items analyzed were grade configuration, student population, school location, and years of principal experience at current school. The analysis was conducted using a Kruskal-Wallis test, and the results indicated a statistically significant difference by the category of, Years of principal experience at current school, at the .05 level of significance. The mean rank of, The instructional schedule should support the structure for common planning, for 0 to 1 year of principal experience at current school (32.39) and 2 to 4 years of principal experience at current school (32.70) were higher than the mean rank for 5 to 10 years (20.76) and eleven or more years (32.00) of principal experience at current school. Table 72 shows how the principals' school support beliefs were ranked by years of principal experience at current school.

Kruskal-Wallis	Test on Teaming	Beliefs Ranked b	y Years of Princip	al Experience at	Current
School					

	Years of Principal Experience at Current School	N	Mean Rank	Asymptotic Significance
	0-1 Year	9	33.00	.240
The instructional schedule	2-4 Years	20	28.88	
should support the organization	5-10 Years	19	24.24	
of teams	11 or More Years	8	32.63	
	Total	56		
	0-1 Year	9	32.39	.009
The instructional schedule	2-4 Years	20	32.70	
should support the structure of	5-10 Years	19	20.76	
teaming	11 or More Years	8	32.00	
	Total	56		
	0-1 Year	9	27.89	.465
	2-4 Years	20	28.50	
Common planning is an important component of teaming	5-10 Years	19	26.47	
	11 or More Years	8	34.00	
	Total	56		

In addition to indicating their agreement or disagreement with common planning statements, the respondents were asked to rank the three school supports in order of importance. A Friedman test was used to analyze how the respondents' answers ranked the three types of middle school supports. Table 73 shows the means, mean ranks, and standard deviations. The Likert scale items are sorted in the order listed on the survey. All three types of common planning were not found to be statistically significant, χ^2 (2, *N*=57)=2.000, *p*<.368). The most popular school support was common planning (2.14) followed by teaming (1.98) and instructional scheduling (1.88).

Friedman Test on Middle School Supports (N=57)

	Ν	Mean	Standard Deviation	Mean Rank
Instructional Scheduling	57	1.88	.867	1.88
Teaming	57	1.98	.813	1.98
Common Planning	57	2.14	.766	2.14

Further analysis was conducted to determine if there were any statistically significant differences when comparing survey demographic items to the principals' ranking of school supports. The four demographic items analyzed were grade configuration, student population, school location, and years of principal experience at current school. The analysis was conducted using a Kruskal-Wallis test, and the results indicated that there were no statistical significant differences at the .05 level of confidence. The results of this analysis are further discussed in Chapter V.

Summary

This chapter presented the findings of the four research questions in this study. The first research question asked about the current instructional scheduling practices of NYS middle schools categorized with an average need/resource capacity. The second research question asked to what extent, if any, teaming was present or absent in New York State middle schools categorized with an average need/resource capacity. The third research question asked about the extent, if any, that common planning was present or absent in New York State middle schools categorized with an average need/resource capacity. The third research question asked about the extent, if any, that common planning was present or absent in New York State middle schools categorized with an average need/resource capacity. The final research question asked the extent to which, if any, all three school supports existed simultaneously in New York State middle schools categorized with an average need/resource capacity.

Chapter IV provided an analysis of the data that was obtained through the use of a selfadministered, online survey on instructional scheduling, teaming, and common planning. The results were compiled from a group of New York State middle school principals whose districts were categorized with an average need/resource capacity. The respondents represented both male and female principals between the ages of 32 and 56, with an average of 5 years principal experience. Descriptive and nonparametric statistics were utilized to analyze the data.

It was the intent of this study to be statistically reliable through obtaining a minimum response rate of 35% when examining the absence or presence of these three middle school supports. Although I made a concerted effort (through three different electronic letters of solicitation), a 28% response rate was obtained. I, along with my committee members, believed that this study still provides value to this research field by opening the door to an examination of how middle school principals in New York State utilize these three school supports. Plausible conclusions could be drawn from the analysis of the survey data through the examination of similarities, differences, and contradictions regarding instructional scheduling, teaming, and common planning. These are discussed in Chapter V.

CHAPTER V

SUMMARY, RECOMMENDATIONS, AND CONCLUSIONS

The purpose of this study was to provide a descriptive profile of three school supports (instructional scheduling, teaming, and common planning) that could be used to determine whether they were absent or present in New York State middle schools. Collecting data on these three school supports provides administrators and policymakers with a better understanding regarding the use and function of these specific supports among New York State middle schools. In turn, this collection of data was not available previously, so it can potentially point to policies, practices and/or programs that could be needed or modified for increased support to improve student learning in middle schools within an average need/resource capacity district. This chapter summarizes the purpose, methodology and findings of the study. In addition, conclusions along with implications and recommendations for future research are discussed.

Statement of the Problem

Data regarding the type of instructional schedule 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. I acknowledge the possibilities that some schools might use only one or two of these school supports while others might use multiple supports in combination. Research focusing on the middle school level has found these three school supports together or separately to have a positive impact on student learning. The present descriptive study examined the current instructional scheduling, teaming, and common planning practices of New York State middle schools.

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). It is important to determine

whether these three school supports are present or absent in New York State middle schools in order to provide direction for the continued development of middle school programs and to assist administrators and policymakers in making informed decisions that will positively impact the student learning process.

Purpose of the Study

The purpose of this study was to provide a descriptive profile of three school supports (instructional scheduling, teaming, and common planning) and to determine if they were either absent or present in New York State middle schools. Research has indicated that these three school supports can have a positive impact of student learning. Literature and research that has been conducted, focusing on middle school, has indicated the need for additional research to be conducted (Mertens & Flowers, 2006; National Middle School Association, 2010a; National Middle School Association, 2010b). In particular, Mertens and Flowers (2006) stated that a critical issue facing middle level education is the paucity of good, reliable research studies that have been able to demonstrate the link between components of the middle school philosophy and learning outcomes. This study assists in advancing the research in this field by identifying the presence or absence of one or more of these three school supports and by identifying, when present, any unique features.

In addition, this study was designed to support the research recommendations of the National Middle School Association (2010a). The NMSA identified seven recommendations to expand the middle grades education research base. Three of these seven recommendations were followed in this study. The third recommendation was that middle level education needed additional studies that examined multiple components of the middle school concept and how these components interacted. This study examined three school supports of the middle school concept. The fourth recommendation focused on the need for studies to be replicated. Although

this descriptive study is not an exact replication of a previous study, it does expand upon previous research that examined practices of scheduling and teaming from a statewide perspective. Lastly, the sixth recommendation was the need to establish a national database to address questions related to the middle school concept. The population of middle schools surveyed for this study provided a body of data that can illuminate patterns and trends that further research could confirm.

The population of New York State middle schools sampled included schools that had either a 5-8, 6-8, or 7-8 grade configuration. These three grade configurations were selected because they are the three most common among middle schools in the United States (McEwin & Greene, 2011). The middle schools selected for this study were limited to New York State school districts that were labeled as an average need/resource capacity (N/RC) district by the New York State Education Department for the 2011-2012 school year. This need/resource capacity index is a measure of a district's ability to meet the needs of its student with local resources. More specifically, it is the ratio of the estimated poverty percentage to the combined wealth ratio.

Districts are assigned to one of the following seven categories: High N/RC - New York City, High N/RC - Large City Districts, High N/RC - Urban-Suburban Districts, High N/RC -Rural Districts, Average N/RC Districts, Low N/RC Districts, and Charter Schools (New York State Education Department, 2013). The average need/resource capacity category is defined by the state education department as all school districts between the 20th (0.770) and 70th (1.1835) percentile on the index. The category of average need/resource capacity was selected because, with the exception of the high need/resource capacity - New York City, it contained the largest percentage of middle schools. In addition, this average need/resource capacity category includes middle schools from approximately two thirds of the counties in the state, and this allowed for a statewide sampling to occur.

It was my intent that the data collected provide administrators and policymakers with an additional layer of information regarding the use of specific school supports among New York State middle schools. This data can serve as a reference to further understand the extent to which middle schools in New York State are implementing these school supports.

Research Questions

This study was guided by the following four research questions:

1. What are the current instructional scheduling practices of NYS middle schools categorized as having an average need/resource capacity?

2. To what extent, if any, is teaming present or absent in New York State middle schools categorized as having an average need/resource capacity?

3. To what extent, if any, is common planning time present or absent in New York State middle schools categorized as having an average need/resource capacity?

4. To what extent, if any, are all three school supports (instructional schedules, teaming, and common planning time) found to exist simultaneously in New York State middle schools categorized as having an average need/resource capacity?

Summary of the Procedures

I used a descriptive quantitative survey to identify the presence or absence of three school supports (instructional scheduling, teaming, and common planning) in New York State middle schools whose school districts were categorized as having an average need/resource capacity. Data was collected from middle school principals using closed-ended questions, partially openended questions, or Likert rating scale questions and statements. The population for this study included 232 middle school principals from school districts that were categorized as having an average need/resource capacity during the 2011-2012 school year. For the purposes of this study, the middle schools that were included had grades 5 through 8, 6 through 8, and 7 through 8. These three grade configurations were selected because they accounted for approximately 89% of all separately organized public middle schools in the country (McEwin & Greene, 2011).

After receiving approval from the Seton Hall University IRB to conduct the study, a letter of solicitation was sent electronically through my Seton Hall University email account to 232 potential participants. This letter explained the study and asked for their participation by responding to an online survey. In addition, this electronic communication explained my affiliation with Seton Hall University, the purpose of the research, the anticipated time required to complete the survey, a description of procedures for completing the survey, that participation was completely voluntary, and how anonymity would be preserved and data securely stored. An overall 28% response rate was obtained.

The survey was administered through an online survey company called SurveyMonkey.com and this company stored the data as well. The data were collected and analyzed using the Statistical Package for Social Science (SPSS). The analysis began by calculating descriptive statistics for the survey items. Based on either the research questions or a specific survey item, additional analyses were conducted. These additional nonparametric statistical analyses included: chi-square tests, Friedman tests, and Kruskal-Wallis tests.

Demographic Data

The survey questions in this study collected demographic data regarding the principals and their schools. The principal demographic data that was gathered included: gender, age, years of principal experience in current school, years of administrative experience, and education level. School demographic data that was gathered included: enrollment, location, racial/ethnicity populations, free or reduced lunch percentages, attendance rates, suspension rates, and adequate yearly progress (AYP) status.

The demographic data revealed a sample of predominantly male respondents, in their mid-40's with masters degrees, who had been principals of their respective schools for an average of 5 years. The demographic data regarding the respondents' schools revealed a sample of predominantly suburban middle schools, with grades 6, 7, and 8 that had an average population of 700 students, with a majority of the students being White in terms of race/ethnicity. In addition, these middle schools had high attendance rates, low suspension rates, low free/reduced lunch percentages, and regularly maintained AYP in ELA and math.

Summary of the Findings in Relationship to the Research Questions

This section of Chapter V provides a summary of the findings as it pertains to each of the four research questions. Each research question is examined in a separate section. An overview of the data collected is discussed first by discussing the current practices of the specific school support followed by a summary of the principals' beliefs regarding that support. Following the overview of the data collected, conclusions that were drawn from the examination of similarities, differences, and contradictions are discussed.

Research Question 1

The first research question asked, what are the current instructional scheduling practices of NYS middle schools categorized as having an average need/resource capacity? Regarding instructional scheduling practices, the data indicated that the sample of principals predominantly utilized a traditional departmentalized instructional schedule that offered a contingency of encore/exploratory courses including: physical education, music, technology, art, health, and home and careers. In addition, the scheduling structure for remedial, special education, and ELL students took the form of smaller student/teacher ratio classes, inclusion in mainstream classes, and pullout programs.

With regard to instructional scheduling history, the data indicated that the sample of principals predominately utilized an instructional schedule that was in existence for an average of 10 years. The majority of principals indicated that they had either changed or were looking to modify the current instructional schedule. When examining instructional scheduling models, the majority of respondents believed that the flexible interdisciplinary block schedule best fit the needs of their students, followed by the traditional departmentalized schedule and the alternating day schedule. Last, regarding instructional scheduling beliefs, the majority of principals indicated that an instructional schedule could have a positive influence on student learning along with longer class periods.

Three conclusions were drawn regarding the first research question. The first conclusion developed from the differences that emerged from the data regarding the type of instructional schedule in existence, as compared to the type of instructional scheduling model that principals believe would best fit the needs of the students. Using a chi-square analysis [χ^2 (6, N=65)=164.277, p<.001)], approximately 70% of the principals who responded utilized a traditional departmentalized instructional schedule. While previous survey research by McEwin and Greene (2011) confirmed that the majority of middle schools utilize a traditional departmentalized instructional schedule, the results of my study showed that this type of instructional schedule was not the ideal type for the majority of the respondents. Using a Friedman Test [χ^2 (6, N=65)=219.105, p<.001], the data indicated that responding principals believe the flexible interdisciplinary block schedule best fit the need of their students. The belief that instructional scheduling models other than traditional departmentalized could better meet the needs of students is consistent with the findings from other studies (Mattox et al., 2005 and Gill,

2012). Additionally, in this study almost half of the responding principals (43.8%) were not interested in modifying or changing their current instructional scheduling model. This apparent disconnect between the type of instructional schedule in practice, prior research findings, and principal beliefs is discussed later in this chapter during the presentation of recommendations for future research.

Upon further examination of the data concerning which scheduling model principals believed best met the needs of their students, a second conclusion was drawn regarding the difference in the principals' ranking of instructional scheduling models when compared to the grade configuration of their middle schools. The analysis was conducted using a Kruskal-Wallis test and the results indicated a statistical significant difference by the category of Grade Configuration at the .05 level of significance. The mean rank of rotating dropped schedule for grades 5-8 (38.04) and grades 6-8 (34.48) were higher than the mean rank for grades 7-8 (20.00). This higher ranking of the rotating dropped schedule by principals whose middle school was composed of solely seventh and eighth grade students is important because it indicates that principals' beliefs regarding instructional scheduling can be influenced by the grade configuration of their middle schools. Furthermore, I was unable to locate any research that indicated a potential difference in principals' beliefs in instructional scheduling models based upon the grade configuration of their school.

The third conclusion drawn was in regard to the similarities in the beliefs of principals and the research regarding the influence an instructional schedule can have on student learning. Using a Friedman test [χ^2 (6, *N*=65)=219.105, *p*<.001], the data indicated that responding principals believed that an instructional schedule could have a positive influence on student learning. This indicates to me that although the sample size and demographic population was different than those in previous studies (McEwin & Greene, 2011), there appears to be a consistent belief among middle school principals that an instructional schedule can have a positive influence on student learning. This is important because it not only supports conclusions drawn from previous research, but it provides administrators and policymakers with an additional layer of information regarding the instructional scheduling beliefs of middle school principals in New York State whose districts are categorized as having an average need/resource capacity. I performed additional analyses to further understand the principals' instructional scheduling beliefs, but these analyses yielded no statistically significant differences. This attempt to further analyze the data is discussed later in this chapter in the discussion of recommendations for future research.

Research Question 2

The second research question examined to what extent, if any, teaming is present or absent in New York State middle schools categorized as having an average need/resource capacity. Regarding teaming practices, the data 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. In addition, the teams were comprised of mostly four academic teachers, and approximately half of the teams had a designated team facilitator or leader. With regard to teaming history, the data indicated that the sample of principals who made changes to the existing teaming structure were not looking to make any additional changes or modifications at this time. This is due in part to the principals being content with the current teaming structure or due to reductions in staffing and budget. Lastly, regarding teaming beliefs, the majority of principals indicated that teaming can have a positive influence on the culture of learning and student learning, as well as on teachers who benefit from receiving professional development regarding teaming. Three conclusions were drawn relative to the second research question. The first conclusion drawn regards the similarities in the beliefs of principals and the research regarding the positive influence teaming can have on both the culture of learning within the school and student learning. Using a Friedman test [χ^2 (8, *N*=62)=92.472, *p*<.001], it was found that the mean ranks of, Teaming has a positive influence on the culture of the learning within the school and Teaming has a positive influence on student learning, had the strongest agreement among the responding principals. This indicates to me that although the sample size and demographic population differed from those in previous studies (Boyer & Bishop, 2004; Kiefer & Ellerbrock, 2007; Wallace, 2007), there appears to be a consistent belief among middle school principals that teaming can have a positive influence on the culture of learning within a school and on student learning. This is important because it not only supports conclusions drawn from previous research but it also provides administrators and policymakers with an additional layer of information regarding the teaming beliefs of middle school principals in New York State whose districts are categorized as having an average need/resource capacity.

Upon further examination of the teaming beliefs of these middle school principals, a second conclusion was in regard to the differences in the principals' teaming beliefs when compared to the locations of their middle schools. The analysis was conducted using a Kruskal-Wallis test and the results indicated a statistically significant difference by the category of school location at the .05 level of significance. The mean rank of, Teaming has a positive influence on student learning for rural (23.17) and suburban (30.86) were lower than the mean rank for urban (39.00). This higher ranking of teaming by principals who classified their school location as urban suggests that principals' beliefs regarding teaming could be influenced by their school location and the diversity of their student body. Although this analysis indicated a statistically significant difference at the .05 level of significance by the category of school location, the

sample for the category of urban (N=4) was lower than rural (N=19) and suburban (N=35). This difference in the urban sample is most likely due to the sample population being principals of middle schools within an average need/resource capacity district.

The third conclusion focuses on the differences that emerged with regard to teachers and teams having the ability to function in leadership capacities when comparing teaming beliefs of middle school principals and previous research in this field. Using a Friedman test [χ^2 (8, N=62)=92.472, p<.001], the mean ranks for Team facilitators/leaders have the ability to function in a leadership capacity and Teams have the ability to function in a leadership capacity, had the strongest disagreement among the responding principals. Previous research (Grenda & Hackmann, 2014; Wahlstrom et al., 2010) has examined the concept of collective leadership and concluded that higher-performing schools give greater influence to teacher teams, and that professional communities (teams) are a strong indicator of successful instructional practices. In addition, the findings of this study were that half of the responding principals' schools had a team facilitator/leader. This apparent disconnect between the value of teams being able to function in a leadership capacity and principal beliefs is discussed in the recommendations for future research.

Research Question 3

The third research question asked to what extent, if any, common planning was present or absent in New York State middle schools categorized as having an average need/resource capacity. Regarding common planning practices, the data indicated that the sample of principals predominantly utilized team, grade level, and departmental common planning for coordinating instruction, creating assessments and teacher preparation. Although the majority of principals who responded utilized these three forms of common planning, the duration and frequency varied depending on the type of common planning. With regard to common planning history, the data indicated that approximately half of the principals made changes to the existing common planning structure and the majority of principals were not looking to make any additional changes or modifications. This finding, that the principals were not looking to make changes to the structure of common planning was due, in part, to their being content with common planning structure or contractual concerns. Lastly regarding common planning beliefs, the majority of principals indicated that they agreed with the statements that common planning has a positive influence on the way instruction is carried out and taught, the culture of learning within the school, and with student learning.

Two conclusions were drawn regarding the third research question. The first conclusion is with regard to the similarities in the beliefs of the principals and the research regarding the positive influence common planning has on instruction, student learning, and the culture of learning within the school. Using a Friedman test [χ^2 (8, *N*=60)=2.471, *p*<.481], the four mean ranks for common planning beliefs were all within .17 of each other. Although the four Likert scale items about common planning were found not to be statistically significant, it is important to note that there was a trend toward the middle school principals having similar beliefs regarding common planning. This is important because it not only supports conclusions drawn from previous research (Cook & Faulkner, 2010; Mertens, 2013), but it also provides administrators and policymakers with an additional layer of information regarding the common planning beliefs of middle school principals in New York State whose districts are categorized as having an average need/resource capacity. The suggestion that additional research needs to be conducted to support this trend is further discussed in the recommendations for future research.

Upon further examination of the common planning beliefs of these middle school principals, a second conclusion drawn was regarding the difference in the principals' common planning beliefs when compared to the location of their middle school. This analysis was conducted using a Kruskal-Wallis test and the results indicated a statistically significant difference by the category of school location at the .05 level of significance. The mean rank of, Common planning time has a positive influence on the way instruction is carried out and taught, for rural (22.74) and suburban (32.20) were lower than the mean rank for urban (38.00). This higher ranking of Common planning has a positive influence on the way instruction is carried out and taught, by principals who classified their school location as urban is important because it indicates that principals' beliefs regarding common planning can be influenced by their school location. Although this analysis indicated a statistically significant difference by the category of school location at the .05 level of significance, the sample for the category of urban (N=4) was lower than rural (N=19) and suburban (N=35). This difference in the urban sample is most likely due in part to the sample population being principals of middle schools within an average need/resource capacity district. To further understand what this study has indicated with regard to the influence school location has on principals' common planning beliefs will be discussed later in this chapter when examining recommendations for future research.

Research Question 4

The fourth research question asked to what extent, if any, all three school supports were present or absent in New York State middle schools categorized as having an average need/resource capacity. Regarding all three school supports, the data indicates that the sample of principals predominantly utilized a traditional departmentalized instructional schedule and either interdisciplinary and/or single grade level teaming with team, grade level, and departmental common planning. When examining school support beliefs, the majority of principals indicated the importance of having instructional scheduling, teaming, and common planning simultaneously in existence at their middle school. Two conclusions were drawn regarding the fourth research question. The first conclusion is that the principals believe that all three school supports are important in middle schools. Using a Friedman test [χ^2 (2, *N*=60)=4.478, *p*<.107], the three mean ranks of middle school support beliefs were all within .17 of each other. In addition, using another Friedman test [χ^2 (2, *N*=57)=2.000, *p*<.368], the mean ranks of middle school supports were all within .26 of each other. Although these two findings were not statistically significant, it is important to note the trend in the middle school principals' beliefs that all three supports are critical and should exist simultaneously. The findings of this study support the literature regarding the importance of these three schools supports. 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 et al., 2000) the authors examined the scheduling of instructional periods to maximize learning, the creation of small communities for learning, and the provision of time for teachers to plan and prepare together.

Upon further examination of the middle school support beliefs of these principals, a second conclusion was drawn regarding the differences in the principals' middle school support beliefs when compared to years of principal experience at current school. This analysis was conducted using a Kruskal-Wallis test and the results indicated a statistically significant difference by the category of years of principal experience at current school at the .05 level of significance. The mean rank of, The instructional schedule should support the structure for common planning, for 0 to 1 year of principal experience at current school (32.39) and 2 to 4 years of principal experience at current school (32.70) were higher than the mean rank for 5 to 10 years (20.76) and 11 or more years (32.00) of principal experience at current school. Additional research is needed to understand why there is a difference of 12 in the mean rank for principals

with 5 to 10 years of experience at current school. This is discussed later in the recommendations for future research.

Implications for Practice

While the previous section summarized the findings in relationship to the research questions, this section examines the implications of this study for practice. The results of this study have important implications for stakeholders that include teachers, school administrators, school districts, and boards of education who are interested in further understanding the practices and beliefs of middle school principals in New York State with an average need/resource capacity district regarding these three supports. For the purposes of this study, three implications for practice are discussed.

The first implication for practice focuses on the beliefs of principals regarding teaming; particularly on the principals' 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 higherperforming 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. Therefore, an implication for practice could be to examine principal preparation programs. In particular, such an analysis could include the program curriculum to determine how and to what extent the notion of school support of teaming is taught and discussed in their preparation program. A second implication for practice focuses on the beliefs of principals regarding teacher preparation; particularly, the principals' beliefs regarding teachers being prepared to work effectively in a team environment. The Likert-scale item to which principals demonstrated the strongest disagreement was that which stated that teachers were prepared with the collaboration and communications skills needed to be members of an effective team. Previous research (Wilson, 2007) examined teaming from a preservice training perspective and concluded that by simulating interdisciplinary teaming for a semester, preservice teachers can develop the skills (collaboration, compromise, and interpersonal communication) necessary for working on effective teams. These conclusions are not in alignment with the beliefs of the sample in this study. Therefore, an implication for practice could be to examine teacher preparation programs; in particular, to examine the program's curriculum to determine how and to what extent the notion of school support of teaming is taught and discussed in their preparation program.

A third implication for 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. Furthermore, additional analysis of the data indicated a statistical significant difference by the category of grade configuration within

the rotating dropped scheduling model. Therefore, an implication for practice is to examine middle level schooling by specific grade configuration. In particular, an examination of middle level school configurations could include the analysis of how middle level schools are grouped, reported, and recognized at the state and national level.

Recommendations for Future Research

The next section focuses on recommendations for future research. One of the intents of this study was to collect and provide data that was not previously available regarding the utilization of three middle school supports (instructional scheduling, teaming, and common planning). While this study added an additional layer of information to this field of study, it is important that additional research be conducted to further understand both how and why these school supports are utilized.

One recommendation for future research is to conduct similar studies with a larger sample size to yield more statistically significant results. It was the intent of this study to be statistically reliable through obtaining a minimum response rate of 35% when examining the absence or presence of these three middle school supports. Although this study provided value to this research field by opening the door to examine how middle school principals in New York State utilized these three school supports, it would be of interest to compare these results with a similar study with a larger sample. While this study did yield some statistically significant findings, the majority of them were regarding the entire sample. Replicating my study with a larger sample size could provide additional statistically significant findings among the variables utilized (grade configuration, population, school location, and years of principal experience in current school). Furthermore, additional research should be conducted on the impact of school structures – such as variations in school schedules, teams of teachers teaching groups of students,

and teachers' use of common planning time – on student achievement on both state assessments and various types of local assessments.

An additional recommendation for future research is to replicate this study using a different need/resource capacity category of districts in New York State. There are currently seven different need/resource categories within New York State. It would be interesting to examine both the differences and similarities in practices and beliefs of instructional scheduling, teaming, and common planning among principals from different need/resource capacity district equally valued the importance of having an instructional schedule with teaming and common planning. It would add to the field of research if this study was replicated using a sample that contained high need/resource category, large city districts.

An additional area of future research is the exploration of the reasons for some of the discrepancies in the findings. Another area could examine the apparent disconnect between the type of instructional schedule in practice, compared to research findings and principal beliefs. Although this area was discussed with regard to an implication for practice by examining principal preparation programs, further examination of why this apparent disconnect surfaced within the findings of this study would also be important and add value. Possible individual or group follow-up interviews could be conducted with a smaller sampling of principals to further understand this finding.

The previous suggestions for future research examine middle school supports from the perspective of principals. Additional value could be added to the field of research by examining the practices and beliefs regarding these three school supports of other stakeholders. For example, instead of surveying principals, a future study could use a sample that included teachers, district administrators, or students. More specifically, a study that surveys teachers

might focus on examining their levels of satisfaction with different school supports. Expanding research to include different perspectives would provide a more comprehensive depiction of the practices and beliefs of instructional scheduling, teaming, and common planning in middle schools.

While all of the previous suggestions for future research focused on either increasing or changing the sample size, a final recommendation for future research is changing the design of the study. For example, conducting a qualitative or mixed-method design study would add an additional layer of information regarding the practices and beliefs of these three school supports. Conducting a case study would provide an in-depth description and analysis of how and why these middle school supports are implemented. In particular, a case study could be conducted utilizing a cross-section of principals from different need/resource capacity districts to allow for a more encompassing perspective on school support practices and principals' beliefs.

Recommendations for Policy and Practice

This study was intended to collect and provide data that was not previously available regarding instructional scheduling, teaming, and common planning. It was also the intent of this study, through collecting and analyzing the data, to examine policies and practices that could be either needed or modified for increased support to improve student learning in all middle schools in an average need/resource capacity district. For the purposes of this study, three recommendations for policy and practice will be discussed.

The first recommendation for policy and practice is that the data regarding the utilization of these middle school supports be collected annually on a statewide level. One of the reasons for conducting this study was the fact that data regarding the type of instructional scheduling utilized, along with the use of teaming and common planning at the middle school level, had not been collected nor reported on the New York State School Report Card. Therefore, it was not known whether and how middle schools were implementing these three school supports. The structure for collecting district and school data on a yearly basis in New York State is already in existence. Each year New York State districts and schools file with the state a Basic Educational Data System (BEDS) report. Three of the categories of data included in this report are profile, assessment, and accountability data. Regarding the profile data, the specific areas include: enrollment, average class size, free and reduced-price lunch, attendance and suspensions, teacher qualifications, teacher turnover rate, and staff counts.

The recommendation for policy is for additional profile data to be requested regarding instructional scheduling, teaming, and common planning at the middle school level. Since the New York State School Report Card is published annually and publicly available online, the structure for obtaining this information is already in existence. Having a dataset available from New York State middle schools that includes information regarding these three middle school supports would allow additional research to be conducted to determine the extent to which they are in practice. Furthermore, obtaining the data on these three school supports could be part of a research study that seeks to identify statistically significant influences on student achievement when these supports are in place for multiple years while controlling for socio-economic status and other potentially influential variables.

The second recommendation focuses on literature disseminated by the New York State Department of Education (NYSED) and the New York State Board of Regents regarding middle school supports. The need for this descriptive study was supported by the document developed by both these groups and titled "Essential Elements of Standards-Focused Middle-Level Schools and Programs" (University of the State of New York, 1999). One of the six essential elements focuses on organization and structure, and in particular, discusses teacher teams sharing responsibility for educating a common group of students, common planning for teachers sharing responsibility for a common group of students, and schedules with flexible time assignments.

A recommendation for policy and practice would be for both the NYSED and the New York State Board of Regents to regularly update and refine this document. From what I could determine this particular document was last updated approximately 10 years ago. Having an updated document regarding the essential elements of middle school programs that is produced by state education stakeholders will provide valuable insight and knowledge to principals who are interested in what middle school supports and practices are best for student learning. Combining this recommendation for policy and practice with the previous one would allow for a comprehensive collection and dissemination of data regarding the extent to which these three school supports are in existence and what practices and programs maximize student learning. Additionally, the type of research suggested in the previous recommendation could strengthen and update of this type of document.

This final recommendation is for a local practice to occur either within the middle school or school district. Given the current financial and political climate regarding public school education in New York State, it is becoming more common for resources that are not of the utmost value to student learning to be removed from school budgets. Therefore, it is important for principals to maximize their utilization of school supports. A recommendation for practice would be for principals to regularly examine and reevaluate their utilization of these three middle school supports to ensure that they are configured in a format that maximizes learning for all students. By using current research and literature, principals can determine if their instructional schedule, teaming organization or common planning format needs adjustments or modifications.

Conclusion

This chapter provided a summary of the purpose, methodology, and findings of the study. Plausible conclusions along with implications and recommendations for future research were discussed. 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 continued to increase 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. 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 New York State middle schools categorized with an average need/resource capacity. In addition, principals' beliefs regarding these three school supports were examined.

The importance of these three school supports at the middle level has been discussed and examined by scholars and advocacy organizations. 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 et al., 2000) the authors examined scheduling instructional periods to maximize learning, creating small communities for learning, and providing time for teachers to plan and prepare together. In addition, my study was designed to support the research recommendation of the National Middle School Association (2010a).

The intent 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 my hope that the analysis of the
data collected points to policies, practices, and/or programs that could increase support to improve student learning. Although the sample of participants did not meet the intended reliability assumption, the sample was considered large enough to justify the exploration of the patterns and trends that emerged from the data collected to provide plausible conclusions that future, statistically reliable studies might confirm.

Lastly, there was much personal learning that occurred for me from conducting this study. It has reaffirmed my belief about the importance of conducting research to further understand how best to improve student learning. This study added one brick to the wall of educational research, as it provided an opportunity to further examine three middle school supports. The complex challenge that researchers have and will continue to face is how to identify and isolate the plethora of variables that impact the student learning process. This study provided an additional layer of information regarding the use of three specific school supports among New York State middle schools. As a middle school educational leader, I have learned the value of developing and implementing a philosophy regarding the utilization of school supports. The learning that has occurred from conducting this study will influence all of my future leadership roles.

REFERENCES

- Alexander, W. M. (1963, July). *The junior high school: A changing view*. Tenth annual conference for school administrators: A national conference on the junior high school. Nashville, TN.
- Alexander, W. M. (1969). The emergent middle school. New York: Holt, Rinehart and Winston.
- American Psychological Association. (2010). *Publication manual of the American Psychological Association*. Washington, DC: American Psychological Association.

Andres, L. (2012). Designing & doing survey research. London: SAGE.

- Boyer, S. J., & Bishop, P. A. (2004). Young adolescent voices: Students' perceptions of interdisciplinary teaming. *RMLE Online: Research in Middle Level Education*, 28(1), 1-19.
- Brown, D. F. (2001). Middle level teachers' perceptions of the impact of block scheduling on instruction and learning. *Research in Middle Level Education Annual*, *24*, 121-141.
- Bush, H. D. (2003). The effect of alternate-day block scheduling on reading comprehension of middle school students. (Doctoral dissertation). Retrieved from Proquest Dissertations and Theses (305327894)
- Caplinger, R. T. (2013). *The impact of flexible interdisciplinary block scheduling on reading achievement.* (Doctoral dissertation). Retrieved from Proquest Dissertations and Theses (1430909685)
- Carnegie Council on Adolescent Development: Task Force on Education of Young Adolescents. (1989). *Turning points: Preparing American youth for the 21st century : The report of the task force on education of young adolescents*. Washington, DC: Carnegie Council on Adolescent Development.

- Cook, C. M., & Faulkner, S. A. (2010). The use of common planning time: A case study of two Kentucky schools to watch. *RMLE Online: Research in Middle Level Education*, 34(2), 1-12.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed method approaches*. Thousand Oaks, CA: Sage Publications.
- Dunham, R. (2009). Teacher perceptions regarding the influence block scheduling has on student learning as compared to traditional scheduling in middle schools. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses (905604027)
- Flynn, L., Lawrenz, F., & Schultz, M. J. (2005). Block scheduling and mathematics: Enhancing standards-based instruction? *NASSP Bulletin*, 89(642), 14-23.
- Gill, W. (2011). Middle school A/B block and traditional scheduling: An analysis of math and reading performance by race. *National Association of Secondary School Principals*. NASSP Bulletin, 95(4), 281-301.
- Grenda, J. P., & Hackmann, D. G. (2014). Advantages and challenges of distributing leadership in middle-level schools. *NASSP Bulletin*, *98*(1), 53.
- Hackmann, D. (2002). Block scheduling for the middle level: A cautionary tale about the best features of secondary school models. *Middle School Journal*, *33*(4), 22.
- Hackmann, D. G., & Valentine, J. W. (1998). Designing an effective middle level schedule. *Middle School Journal*, 29(5).
- Hinkle, D.E., Wiersma, W., & Jurs, S.G. (2003). *Applied statistics for the behavioral sciences* (5th ed.). Belmont, CA: Wadsworth, Cengage Learning.
- Jackson, A., Davis, G. A., Abeel, M., & Bordonaro, A. Carnegie Council on Adolescent Development Task Force on Education of Young Adolescents. (2000). *Turning points 2000: Educating adolescents in the 21st century*. New York: Teachers College Press.

- Kellough, R. D., & Kellough, N. G. (2008). Teaching young adolescents: Methods and resources for middle grades teaching (5th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.
- Kiefer, S. M., & Ellerbrock, C. R. (2012). Caring and fun: Fostering an adolescent-centered community within an interdisciplinary team. *Middle Grades Research Journal*, 7(3), 1-17.
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2008). *SPSS for intermediate statistics*. New York: Lawrence Erlbaum Associates.
- Martinez, P. (2010). *The impact of a ninety-minute math block schedule on the academic achievement of middle school students*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses (808568848)
- Mattox, K. I. (2001). *The relationship of block scheduling and sixth grade achievement in reading and mathematics*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses (304759778)
- Mattox, K., Hancock, D. R., & Queen, J. A. (2005). The effect of block scheduling on middle school students' mathematics achievement. *NASSP Bulletin*, 89(642), 3-13.
- McEwin, C. K., & Greene, M. W. (2010). Results and recommendations from the 2009 national surveys of randomly selected and highly successful middle level schools. *Middle School Journal*, 42(1), 49-63.
- McEwin, K., & Greene, M. (2011). The status of programs and practices in America's middle schools: Results from two national studies. Westerville, OH: Association for Middle Level Education.
- Mertens, S.B. (2013). *Common planning time in middle level schools: Research studies from the MLER SIG's national project*. Charlotte, NC: Information Age Publishing.
- Mertens, S. B., & Flowers, N. (2006). "Middle start's" impact on comprehensive middle school reform. *Middle Grades Research Journal, 1*(1), 1-26.

- National Middle School Association. (2010a). *This we believe: Keys to educating young adolescents*. Westerville, OH: Association for Middle Level Education.
- National Middle School Association. (2010b). *Research and resources in support of this we believe*. Westerville, OH: Association for Middle Level Education.
- A national research project revitalizes and strengthens a SIG's membership, leadership, and the quality of research in the field. (2011). *Educational Researcher*, 40(6), 295-298.
- New York State Education Department (2013). *Need/Resource Capacity Categories*. Retrieved 11/2/2013, from http://www.nysed.gov

Queen, J. A. (2009). The block scheduling handbook. Thousand Oaks, CA: Corwin Press.

- Rettig, M. D., & Canady, R. L. (2000). Scheduling strategies for middle schools. Larchmont, NY: Eye on Education.
- Smith, L. O. (2010). A longitudinal study of block scheduling versus traditional scheduling in Mississippi schools: Utilizing the Mississippi student assessment system and administrators' perceptions. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses (742477437)
- Todd, W. (2008). An examination of block scheduling: Teacher perceptions and relationship to student achievement. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses (304682559)
- University of the State of New York. (1999). Essential elements of standards-focused middlelevel schools and programs. Albany, NY
- Wahlstrom, K. L., Louis, K. S., Leithwood, K., Anderson, S. E., & Educational, R. S. (2010). Learning from leadership: Investigating the links to improved student learning. The informed educator series. St. Paul, MN: Educational Research Service.

- Wallace, J. J. (2007). Effects of interdisciplinary teaching team configuration upon the social bonding of middle school students. *RMLE Online: Research in Middle Level Education*, 30(5), 1-18.
- Wilson, J. L. (2007). Virtual teaming: Placing preservice middle level teachers on interdisciplinary teams. *RMLE Online: Research in Middle Level Education*, *31*(3), 1-15.

Witte, R. S., & Witte, J. S. (2010). Statistics. Hoboken, NJ: J. Wiley & Sons.

APPENDIX A

SURVEY SAMPLE

Grades School Name County 5-8 A A KINGSTON MIDDLE SCHOOL SAINT LAWRENCE 6-8 A D OLIVER MIDDLE SCHOOL MONROE 6-8 A M COSGROVE MIDDLE SCHOOL MONROE 6-8 A CADIA MIDDLE SCHOOL SARATOGA 6-8 ALBERT LEONARD MIDDLE SCHOOL SARATOGA 6-8 ALBERT LEONARD MIDDLE SCHOOL RENESTELAER 6-8 ALBERT LEONARD MIDDLE SCHOOL CATTARAUGUS 6-8 ALLEGANY-LIMESTONE MIDDLE SCHOOL CATTARAUGUS 6-8 ANNE M DORNER MIDDLE SCHOOL ERIE 6-8 ARNE M DORNER MIDDLE SCHOOL WESTCHESTER 6-8 ARINGTON MIDDLE SCHOOL MONROE 6-8 ARTICA JUNIOR HIGH SCHOOL MONROE 6-8 ATTICA JUNIOR HIGH SCHOOL MONROE 5-8 ATTICA JUNIOR HIGH SCHOOL LIVINGSTON 5-8 AVON MIDDLE SCHOOL LIVINGSTON 6-8 BALLSTON SPA MIDDLE SCHOOL SUFFOLK 6-8 BALLSTON SPA MIDDLE SCHOOL SUFFOLK 6-8 BELPORT MIDDLE SCHOOL <td< th=""><th></th><th>Average Need/Resource Capacity Schools</th><th></th></td<>		Average Need/Resource Capacity Schools	
5:8 A A KINGSTON MIDLIE SCHOOL SAINT LAWRENCE 6:8 A D OLIVER MIDDLE SCHOOL MONROE 6:8 A COSGROYE MIDDLE SCHOOL MONROE 6:8 ACADIA MIDDLE SCHOOL SARATOGA 6:8 ALBERT LEONARD MIDDLE SCHOOL ERISE 6:8 ALBERT LEONARD MIDDLE SCHOOL RENSSELAER 6:8 ALBERT LEONARD MIDDLE SCHOOL RENSSELAER 6:8 ALBERT KINDDLE SCHOOL RENSSELAER 6:8 ALBERT KINDDLE SCHOOL RENSSELAER 6:8 ANNE M DORNER MIDDLE SCHOOL WESTCHESTER 6:8 APOLIO MIDDLE SCHOOL WORNEOE 6:8 APOLIO MIDDLE SCHOOL MONROE 6:8 ARLINGTON MIDDLE SCHOOL MONROE 6:8 ATHENA MIDDLE SCHOOL MONROE 5:8 ATTICA JUNIOR HIGH SCHOOL CLINTON 7:8 AUSABLE VALLEY MIDDLE SCHOOL CLINTON 5:8 BALLSTON SPA MIDDLE SCHOOL SANFOGA 6:8 BAY TRAIL MIDDLE SCHOOL SANFOGA 6:8 BEKIANATOWN MIDDLE SCHOOL CLINTON 6:8 BEKIANATOWN MIDDLE SCHOOL CLINTON <	Grados	School Namo	County
5-8 A A DOLIVER MIDDLE SCHOOL SAINT LAWRENCE 6-8 A COSGROVE MIDDLE SCHOOL MONROE 6-8 ACADIA MIDDLE SCHOOL SARATOGA 6-8 ALBERT LEONARD MIDDLE SCHOOL ERIE 6-8 ALBERT LEONARD MIDDLE SCHOOL RENSSELAER 6-8 ALLEGANY-LIMESTONE MIDDLE SCHOOL CATTARAUGUS 6-8 ALLEGANY-LIMESTONE MIDDLE SCHOOL CATTARAUGUS 6-8 ANNE M DORNER MIDDLE SCHOOL CATTARAUGUS 6-8 ANNE M DORNER MIDDLE SCHOOL CATTARAUGUS 6-8 ARCADIA MIDDLE SCHOOL WESTCHESTER 6-8 ARCADIA MIDDLE SCHOOL WESTCHESTER 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ARTICA JUNIOR HIGH SCHOOL WYOMING 7-8 AUSABLE VALLEY MIDDLE SCHOOL CLINTON 5-8 ATTICA JUNIOR HIGH SCHOOL LIVINGSTON 6-8 BALLSTON SPA MIDDLE SCHOOL SUFFOLK 6-8 BALLSTON SPA MIDDLE SCHOOL SUFFOLK 6-8 BAY TRAIL MIDDLE SCHOOL SUFFOLK 6-8 BEN FRANKLIN MIDDLE S	Glades		
0-3 A M COSGROVE MIDDLE SCHOOL MONROE 6-8 ACADIA MIDDLE SCHOOL SARATOGA 6-8 ACADIA MIDDLE SCHOOL SARATOGA 6-8 ALBERT LEONARD MIDDLE SCHOOL RENSELAER 6-8 ALBERT LEONARD MIDDLE SCHOOL RENSESLAER 6-8 ALBERT LEONARD MIDDLE SCHOOL RENSESLAER 6-8 ALBERNT-LIMESTONE MIDDLE SCHOOL CATTARAUGUS 6-8 ANNE M DORNER MIDDLE SCHOOL WESTCHESTER 6-8 ARUNGTON MIDDLE SCHOOL WESTCHESTER 6-8 ARUNGTON MIDDLE SCHOOL MONROE 6-8 ARLINGTON MIDDLE SCHOOL MONROE 6-8 ARUNGTON MIDDLE SCHOOL MONROE 5-8 ATHENA MIDDLE SCHOOL MONROE 5-8 AUSABLE VALLEY MIDDLE SCHOOL LIVINGSTON 5-8 BAY SHORE MIDDLE SCHOOL SUFFOLK 6-8 BALLSTON SPA MIDDLE SCHOOL CLINTON 6-8 BEKMANTOWN MIDDLE SCHOOL CLINTON 6-8 BEKMANTOWN MIDDLE SCHOOL CLINTON 6-8 BEN FRANKLIN MIDDLE SCHOOL CL	5-0		
b-8 A M COSGROVE MIDDLE SCHOOL MONROGA 6-8 ACADIA MIDDLE SCHOOL SARATOGA 6-8 ALBERT LEONARD MIDDLE SCHOOL ERIE 6-8 ALBERT LEONARD MIDDLE SCHOOL RENSSELAER 6-8 ALLEGANY-LIMESTONE MIDDLE SCHOOL RENSSELAER 6-8 ALLEGANY-LIMESTONE MIDDLE SCHOOL CATTARAUGUS 6-8 ANNE M DORNER MIDDLE SCHOOL ERIE 6-8 ANNE M DORNER MIDDLE SCHOOL WESTCHESTER 6-8 APOLLO MIDDLE SCHOOL WONROE 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ARTICA JUNIOR HIGH SCHOOL MONROE 6-8 ATHENA MIDDLE SCHOOL MONROE 5-8 ATTICA JUNIOR HIGH SCHOOL CLINTON 5-8 ATTICA JUNIOR HIGH SCHOOL SUPONING 7-8 AUSABLE VALLEY MIDDLE SCHOOL SUFFOLK 6-8 BALLSTON SPA MIDDLE SCHOOL SUFFOLK 6-8 BAY SHORE MIDDLE SCHOOL SUFFOLK 6-8 BELPORT MIDDLE SCHOOL SUFFOLK 6-8 BEN FRANKLIN MIDDLE SCHOOL SUFF	6-8		MONROE
6-8 ACADIA MIDDLE SCHOOL SARATOGA 6-8 ALBERT LEONARD MIDDLE SCHOOL RENE 6-8 ALGONQUIN MIDDLE SCHOOL RENSSELAER 6-8 ALLEGANY-LIMESTONE MIDDLE SCHOOL RENSELAER 6-8 ALLEGANY-LIMESTONE MIDDLE SCHOOL CATTARAUGUS 6-8 ANNE M DORNER MIDDLE SCHOOL CATTARAUGUS 6-8 APOLLO MIDDLE SCHOOL - ARCADIA MS MONROE 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ARINOSA MONROE 5-8 ATTICA JUNIOR HIGH SCHOOL MONROE 5-8 ATTICA JUNIOR HIGH SCHOOL CLINTON 5-8 BALLSTON SPA MIDDLE SCHOOL SUFFOLK 6-8 BAY TRAIL MIDDLE SCHOOL SUFFOLK 6-8 BAY TRAIL MIDDLE SCHOOL CLINTON 6-8 BEELIPORT MIDDLE SCHOOL CLINTON 6-8 BERLIPORT MIDDLE SCHOOL FINE 6-8 BONTON MIDDLE SCHOOL FUITON 6-8	0-8		
0-8 AARON MIDDLE SCHOOL ENIE 6-8 ALBERT LEONARD MIDDLE SCHOOL RENSSELAER 6-8 ALLEGANY-LIMESTONE MIDDLE SCHOOL RENSSELAER 6-8 AAMHERST MIDDLE SCHOOL CATTARAUGUS 6-8 ANNE M DORNER MIDDLE SCHOOL ERIE 6-8 ANNE M DORNER MIDDLE SCHOOL WESTCHESTER 6-8 APOLLO MIDDLE SCHOOL MONROE 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ATHENA MIDDLE SCHOOL MONROE 5-8 ATTICA JUNIOR HIGH SCHOOL WYOMING 7-8 AUSABLE VALLEY MIDDLE SCHOOL SARATOGA 6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BAY SHORE MIDDLE SCHOOL SUFFOLK 6-8 BAY SHORE MIDDLE SCHOOL SUFFOLK 6-8 BELISTON MIDDLE SCHOOL SUFFOLK 6-8 BELIN MIDDLE SCHOOL SUFFOLK 6-8 BELIN MIDDLE SCHOOL CUINTON 6-8 BERLIN MIDDLE SCHOOL RENSSELAER 6-8 BOYNON MIDDLE SCHOOL CUINTON 6-8 BORONADERGEN MIDDLE SCHOOL GENESEE 6-8 BORONABERGEN MIDDLE S	0-8		SARATUGA
6-8 ALBERT LEDNARD MIDDLE SCHOOL WESTCHESTER 6-8 ALLEGANY-LIMESTONE MIDDLE SCHOOL CATTARAUGUS 6-8 ANNE M DORNER MIDDLE SCHOOL CATTARAUGUS 6-8 ANNE M DORNER MIDDLE SCHOOL WESTCHESTER 6-8 ANNE M DORNER MIDDLE SCHOOL MONROE 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ARLINGTON MIDDLE SCHOOL DUTCHESS 6-8 ARTICA JUNIOR HIGH SCHOOL WYOMING 7-8 AUSABLE VALLEY MIDDLE SCHOOL CLINTON 5-8 ATTICA JUNIOR HIGH SCHOOL LIVINGSTON 6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BALLSTON SPA MIDDLE SCHOOL SUFFOLK 6-8 BEKMANTOWN MIDDLE SCHOOL CLINTON 6-8 BELLPORT MIDDLE SCHOOL SUFFOLK 6-8 BELLIN MIDDLE SCHOOL CLINTON 6-8 BELLIN MIDDLE SCHOOL FUILTON 6-8 BELLIN MIDDLE SCHOOL CLINTON 6-8 BERMANTOWN MIDDLE SCHOOL FUILTON 6-8 BOADALBIN-PERTH MIDDLE SCHOOL FUIL	0-8		
b-8 ALGONQUIN MIDDLE SCHOOL REISSLARE 6-8 ALLEGANY-LIMESTONE MIDDLE SCHOOL CATTARAUGUS 6-8 ANNE M DORNER MIDDLE SCHOOL WESTCHESTER 6-8 APOLLO MIDDLE SCHOOL WESTCHESTER 6-8 APOLLO MIDDLE SCHOOL MONROE 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ATHENA MIDDLE SCHOOL MONROE 5-8 ATTICA JUNIOR HIGH SCHOOL WYOMING 5-8 ATTICA JUNIOR HIGH SCHOOL WYOMING 6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BAY SHORE MIDDLE SCHOOL SUFFOLK 6-8 BELIPORT MIDDLE SCHOOL SUFFOLK 6-8 BELIPORT MIDDLE SCHOOL CLINTON 6-8 BELIPORT MIDDLE SCHOOL RENSSELARE 6-8 BOYNTON MIDDLE SCHOOL RENSSELARE 6-8 BOYNTON MIDDLE SCHOOL FRIE 6-8 BOYNTON MIDDLE SCHOOL GRENSE	6-8		WESICHESTER
6-8 ALLEGANY-LIMEST MIDDLE SCHOOL CH 1ARA0GUS 6-8 AMNE M DORNER MIDDLE SCHOOL ERIE 6-8 APOLLO MIDDLE SCHOOL WESTCHESTER 6-8 APOLLO MIDDLE SCHOOL WESTCHESTER 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ARLINGTON MIDDLE SCHOOL MONROE 6-8 ATHENA MIDDLE SCHOOL MONROE 5-8 ATTICA JUNIOR HIGH SCHOOL WYOMING 7-8 AUSABLE VALLEY MIDDLE SCHOOL CUNTON 5-8 ATTICA JUNIOR HIGH SCHOOL SARATOGA 6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BALSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BAY TARIL MIDDLE SCHOOL MONROE 6-8 BEKIMANTOWN MIDDLE SCHOOL CLINTON 6-8 BEN FRANKLIN MIDDLE SCHOOL ERIE 6-8 BEN FRANKLIN MIDDLE SCHOOL FRIE 6-8 BEN FRANKLIN MIDDLE SCHOOL FUITON 5-8 BOYDON MIDDLE SCHOOL FUITON 5-8 BOYDON-BERGEN MIDDLE SCHOOL FUITON 5-8 BOYDON-BERGEN MIDDLE SCHOOL GAREENE <tr< td=""><td>6-8</td><td></td><td>REINSSELAER</td></tr<>	6-8		REINSSELAER
0-8 AMMERST MIDDLE SCHOOL ERIE 6-8 ANNE M DORNER MIDDLE SCHOOL WESTCHESTER 6-8 APOLLO MIDDLE SCHOOL - ARCADIA MS MONROE 6-8 ARLINGTON MIDDLE SCHOOL DUTCHESS 6-8 ARLINGTON MIDDLE SCHOOL DUTCHESS 6-8 ATTICA JUNIOR HIGH SCHOOL WYOMING 5-8 ATTICA JUNIOR HIGH SCHOOL CLINTON 5-8 AVON MIDDLE SCHOOL CLINTON 5-8 AVON MIDDLE SCHOOL CLINTON 5-8 AVON MIDDLE SCHOOL SUFFOLK 6-8 BAY SHORE MIDDLE SCHOOL SUFFOLK 6-8 BAY TRAIL MIDDLE SCHOOL SUFFOLK 6-8 BELLPORT MIDDLE SCHOOL SUFFOLK 6-8 BEN FRANKLIN MIDDLE SCHOOL SUFFOLK 6-8 BEN FRANKLIN MIDDLE SCHOOL FULTON 5-8 BERIN MIDDLE SCHOOL TOMPKINS 6-8 BEN FRANKLIN MIDDLE SCHOOL FULTON 5-8 BERIN MIDDLE SCHOOL TOMPKINS 6-8 BOYDTON MIDDLE SCHOOL FULTON 5-8 CAIRO-DURHAM MIDDLE SCHOOL GREESE 6-8	6-8	ALLEGANY-LIMESTONE MIDDLE SCHOOL	CATTARAUGUS
6-8 APOLLO MIDDLE SCHOOL - ARCADIA MS MONROE 6-8 APCADIA MIDDLE SCHOOL - ARCADIA MS MONROE 6-8 ARLINGTON MIDDLE SCHOOL MONROE 6-8 ATHICA JUNIOR HIGH SCHOOL MONROE 5-8 ATTICA JUNIOR HIGH SCHOOL MONROE 5-8 ATTICA JUNIOR HIGH SCHOOL WYOMING 7-8 AUSABLE VALLEY MIDDLE SCHOOL LIVINGSTON 5-8 AVON MIDDLE SCHOOL SARATOGA 6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BAY SHORE MIDDLE SCHOOL SARATOGA 6-8 BAY TARIL MIDDLE SCHOOL MONROE 6-8 BEKMANTOWN MIDDLE SCHOOL CLINTON 6-8 BEN FRANKLIN MIDDLE SCHOOL ERIE 6-8 BEN FRANKLIN MIDDLE SCHOOL FRIE 6-8 BERLIN MIDDLE SCHOOL RENSSELAER 6-8 BOYNTON MIDDLE SCHOOL FOMPKINS 6-8 BYRON-BERGEN MIDDLE SCHOOL FULTON 5-8 BYRON-BERGEN MIDDLE SCHOOL GENESEE 6-8 CAIRO-DURHAM MIDDLE SCHOOL GREENE 6-8 CAIRO-DURHAM MIDDLE SCHOOL ONNAGE <	6-8		EKIE
6-8 APOLLO MIDDLE SCHOOL MONROE 6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ATHENA MIDDLE SCHOOL DUTCHESS 6-8 ATHENA MIDDLE SCHOOL WYOMING 5-8 ATTICA JUNIOR HIGH SCHOOL LUNINGSTON 7-8 AUSABLE VALLEY MIDDLE SCHOOL LUNINGSTON 6-8 BALLSTON SPA MIDDLE SCHOOL SUFFOLK 6-8 BALSTON SPA MIDDLE SCHOOL SUFFOLK 6-8 BAY SHORE MIDDLE SCHOOL SUFFOLK 6-8 BELLPORT MIDDLE SCHOOL CLINTON 6-8 BELLPORT MIDDLE SCHOOL CLINTON 6-8 BELLPORT MIDDLE SCHOOL CLINTON 6-8 BERLINORT MIDDLE SCHOOL RENSSELAER 6-8 BOYNTON MIDDLE SCHOOL RENSSELAER 6-8 BOYNTON MIDDLE SCHOOL FRIE 6-8 BYRON-BERGEN MIDDLE SCHOOL GENESEE 6-8 CARO-DURHAM MIDDLE SCHOOL ONANGE 6-8 CALEONIA-MUMFORD MIDDLE SCHOOL ONNONAGA 6-8 CALRO-DURHAM MIDDLE SCHOOL ONNANGE 6-8 CALRO-DURHAM MIDDLE SCHOOL ONNANGE	6-8		WESICHESIER
6-8 ARCADIA MIDDLE SCHOOL MONROE 6-8 ARTINGTON MIDDLE SCHOOL DUTCHESS 6-8 ATTICA JUNIOR HIGH SCHOOL WYOMING 7-8 AUSABLE VALLEY MIDDLE SCHOOL CLINTON 5-8 AVON MIDDLE SCHOOL LIVINGSTON 6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BAY TRAIL MIDDLE SCHOOL SARATOGA 6-8 BAY TRAIL MIDDLE SCHOOL MONROE 6-8 BELPORT MIDDLE SCHOOL SUFFOLK 6-8 BENE FRANKLIN MIDDLE SCHOOL CLINTON 6-8 BEN FRANKLIN MIDDLE SCHOOL ERIE 6-8 BEN FRANKLIN MIDDLE SCHOOL FRIE 6-8 BERLIN MIDDLE SCHOOL FRINSSELAER 6-8 BOADALBIN-PERTH MIDDLE SCHOOL FUITON 5-8 BYRON-BERGEN MIDDLE SCHOOL FUITON 5-8 BYRON-BERGEN MIDDLE SCHOOL GREENE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL GREENE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL IVINGSTON 6-8 CANANDAIGUA MIDDLE SCHOOL ONONDAGA 6-8 CANANOAIGUA MIDDLE SCHOOL GREENE	6-8	APOLLO MIDDLE SCHOOL - ARCADIA MS	MONROE
6-8 ARLINGTON MIDDLE SCHOOL DUTCHESS 6-8 ATTICA JUNIOR HIGH SCHOOL MONROE 5-8 ATTICA JUNIOR HIGH SCHOOL CLINTON 5-8 AVON MIDDLE SCHOOL LIVINGSTON 6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BAY TRARE MIDDLE SCHOOL SUFFOLK 6-8 BEKMANTOWN MIDDLE SCHOOL CLINTON 6-8 BELPORT MIDDLE SCHOOL CUITON 6-8 BELPORT MIDDLE SCHOOL CLINTON 6-8 BERLIN MIDDLE SCHOOL CLINTON 6-8 BERLIN MIDDLE SCHOOL RENSSELAER 6-8 BOYNTON MIDDLE SCHOOL TOMPKINS 6-8 BOYNTON MIDDLE SCHOOL FULTON 5-8 BYRON-BERGEN MIDDLE SCHOOL GENESEE 6-8 C AIRO-DURHAM MIDDLE SCHOOL ONNAGE 6-8 CAIRO-DURHAM MIDDLE SCHOOL ONNAGE 6-8 CANNDAIGUA MIDDLE SCHOOL ONNTARIO 5-8 CATO-MERIDIAN MIDDLE SCHOOL ONNTARIO 5-8 CATO-MERIDIAN MIDDLE SCHOOL CATUGA <t< td=""><td>6-8</td><td></td><td>MONROE</td></t<>	6-8		MONROE
6-8 ATHENA MIDDLE SCHOOL MONROE 5-8 ATTICA JUNIOR HIGH SCHOOL UVINGSTON 5-8 AVON MIDDLE SCHOOL LIVINGSTON 6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BAY SHORE MIDDLE SCHOOL SUFFOLK 6-8 BAY SHORE MIDDLE SCHOOL SUFFOLK 6-8 BAY TRAIL MIDDLE SCHOOL SUFFOLK 6-8 BELLPORT MIDDLE SCHOOL CLINTON 6-8 BELLPORT MIDDLE SCHOOL SUFFOLK 6-8 BEN FRANKLIN MIDDLE SCHOOL CLINTON 6-8 BERLIN MIDDLE SCHOOL FERIE 6-8 BOANTON MIDDLE SCHOOL TOMPKINS 6-8 BOADALBIN-PERTH MIDDLE SCHOOL FULTON 5-8 BYON-BERGEN MIDDLE SCHOOL FULTON 5-8 CAIRO-DURHAM MIDDLE SCHOOL GREENE 6-8 CAIRO-DURHAM MIDDLE SCHOOL ONONDAGA 6-8 CANNDAIGUA MIDDLE SCHOOL ONNDAGA 6-8 CANNALGUA MIDDLE SCHOOL ONNDAGA 6-8 CANNALGUA MIDDLE SCHOOL CATUGA 6-8 CANNALAGUA MIDDLE SCHOOL CATUGA 6-8 <td>6-8</td> <td>ARLINGTON MIDDLE SCHOOL</td> <td>DUTCHESS</td>	6-8	ARLINGTON MIDDLE SCHOOL	DUTCHESS
5-8 ATTICA JUNIOR HIGH SCHOOL WYOMING 7-8 AUSABLE VALLEY MIDDLE SCHOOL CLINTON 5-8 AVON MIDDLE SCHOOL LIVINGSTON 6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BAY SHORE MIDDLE SCHOOL SARATOGA 6-8 BAY TRAIL MIDDLE SCHOOL SUFFOLK 6-8 BELLPORT MIDDLE SCHOOL CLINTON 6-8 BELLPORT MIDDLE SCHOOL SUFFOLK 6-8 BEN FRANKLIN MIDDLE SCHOOL ERIE 6-8 BEN FRANKLIN MIDDLE SCHOOL RENSSELAER 6-8 BOYNTON MIDDLE SCHOOL TOMPKINS 6-8 BOYNTON MIDDLE SCHOOL FULTON 5-8 BYRON-BERGEN MIDDLE SCHOOL GREENEE 6-8 C J HOOKER MIDDLE SCHOOL ORANGE 6-8 C AIRO-DURHAM MIDDLE SCHOOL ONONDAGA 6-8 CAIRO-DURHAM MIDDLE SCHOOL UNINGSTON 6-8 CAIRO-DURHAM MIDDLE SCHOOL UNINGSTON 6-8 CAIRO-DURHAM MIDDLE SCHOOL UNINGSTON 6-8 CAIRO-DURHAM MIDDLE SCHOOL ONONDAGA 6-8 CAIRO-DURHAM MIDDLE SCHOOL ONONDAGA	6-8	ATHENA MIDDLE SCHOOL	MONROE
7-8 AUSABLE VALLEY MIDDLE SCHOOL CLINTION 5-8 AVON MIDDLE SCHOOL LIVINGSTON 6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BAY SHORE MIDDLE SCHOOL SUFFOLK 6-8 BAY TRAIL MIDDLE SCHOOL MONROE 6-8 BEEKMANTOWN MIDDLE SCHOOL CLINTON 6-8 BEELPORT MIDDLE SCHOOL CLINTON 6-8 BEN FRANKLIN MIDDLE SCHOOL ERIE 6-8 BONTON MIDDLE SCHOOL RENSSELAER 6-8 BONTON MIDDLE SCHOOL TOMPKINS 6-8 BONDABERGEN MIDDLE SCHOOL FULTON 5-8 BYRON-BERGEN MIDDLE SCHOOL GENESEE 6-8 CAIRO-DURHAM MIDDLE SCHOOL ONONDAGA 6-8 CAIRO-DURHAM MIDDLE SCHOOL ONONDAGA 6-8 CAIRO-DURHAM MIDDLE SCHOOL ONONDAGA 6-8 CANANDAIGUA MIDDLE SCHOOL ONONDAGA 6-8 CATO-MERIDIAN MIDDLE SCHOOL ONONDAGA 6-8 CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOL CATUGA 5-8 CATO-MERIDIAN MIDDLE SCHOOL CATUGA 6-8 CENTRAL SQUARE MIDDLE SCHOOL CATU	5-8		WYOMING
5-8 AVOIN MIDDLE SCHOOL LIVINGSTON 6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BAY SHORE MIDDLE SCHOOL SUFFOLK 6-8 BAY TRAIL MIDDLE SCHOOL MONROE 6-8 BEEKMANTOWN MIDDLE SCHOOL CLINTON 6-8 BEELPORT MIDDLE SCHOOL SUFFOLK 6-8 BEN FRANKLIN MIDDLE SCHOOL ERIE 6-8 BERLIN MIDDLE SCHOOL RENSSELAER 6-8 BOYNTON MIDDLE SCHOOL TOMPKINS 6-8 BOYNTON MIDDLE SCHOOL FULTON 5-8 BYRON-BERGEN MIDDLE SCHOOL GENESEE 6-8 CAIRO-DURHAM MIDDLE SCHOOL ORANGE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ORANGE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONONDAGA 6-8 CANANDAIGUA MIDDLE SCHOOL ONNAAGA 6-8 CATO-MERIDIAN MIDDLE SCHOOL ONTARIO 5-8 CATO-MERIDIAN MIDDLE SCHOOL ONTARIO 5-8 CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOL CATURAAUGAGA 6-8 CENTER MORICHES MIDDLE SCHOOL CATTARAUGUS 6-8 CENTER MORICHES MIDDLE SCHOOL	/-8		
6-8 BALLSTON SPA MIDDLE SCHOOL SARATOGA 6-8 BAY TRAIL MIDDLE SCHOOL MONROE 6-8 BEEKMANTOWN MIDDLE SCHOOL MONROE 6-8 BEELLPORT MIDDLE SCHOOL CLINTON 6-8 BENLIN MIDDLE SCHOOL SUFFOLK 6-8 BENLIN MIDDLE SCHOOL FRIE 6-8 BENLIN MIDDLE SCHOOL RENSSELAER 6-8 BENON MIDDLE SCHOOL FRISELAER 6-8 BOYNTON MIDDLE SCHOOL FUTON 5-8 BYRON-BERGEN MIDDLE SCHOOL FUTON 5-8 BYRON-BERGEN MIDDLE SCHOOL ORANGE 6-8 C J HOOKER MIDDLE SCHOOL ORANGE 6-8 CAIRO-DURHAM MIDDLE SCHOOL ONNAGE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONNARIO 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONNARIO 5-8 CAANANDAIGUA MIDDLE SCHOOL ONTARIO 5-8 CATO-MERIDIAN MIDDLE SCHOOL CATUGA 6-8 CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOL CATUGA 6-8 CENTRAL SQUARE MIDDLE SCHOOL CATUARAUGUS 6-8 CHARLES H ROTH MIDDLE SCHOOL ONNROE	5-8		
6-8 BAY SHORE MIDDLE SCHOOL SUFFOLK 6-8 BEEKMANTOWN MIDDLE SCHOOL CLINTON 6-8 BEELLPORT MIDDLE SCHOOL SUFFOLK 6-8 BEN FRANKLIN MIDDLE SCHOOL ERIE 6-8 BEN FRANKLIN MIDDLE SCHOOL RENSSELAER 6-8 BOYNTON MIDDLE SCHOOL TOMPKINS 6-8 BOYNTON MIDDLE SCHOOL TOMPKINS 6-8 BROADALBIN-PERTH MIDDLE SCHOOL FULTON 5-8 BYRON-BERGEN MIDDLE SCHOOL GENESEE 6-8 C J HOOKER MIDDLE SCHOOL GENESEE 6-8 CAIRO-DURHAM MIDDLE SCHOOL GREENE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL UIVINGSTON 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONONDAGA 6-8 CANANDAIGUA MIDDLE SCHOOL ONONDAGA 6-8 CANANDAIGUA MIDDLE SCHOOL ONONDAGA 6-8 CATSKILL MIDDLE SCHOOL ONTARIO 5-8 CATO-MERIDIAN MIDDLE SCHOOL CAYUGA 6-8 CATSKILL MIDDLE SCHOOL CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOL CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOL 6-8 CENTER MORICHES MIDDLE SCHOOL OSWEGO <	6-8	BALLSTON SPA MIDDLE SCHOOL	SARATOGA
6-8 BAY TRAIL MIDDLE SCHOOL MONROE 6-8 BEEKMANTOWN MIDDLE SCHOOL CLINTON 6-8 BELLPORT MIDDLE SCHOOL SUFFOLK 6-8 BEN FRANKLIN MIDDLE SCHOOL RENSSELAER 6-8 BOYNTON MIDDLE SCHOOL RENSSELAER 6-8 BROADALBIN-PERTH MIDDLE SCHOOL TOMPKINS 6-8 BOYNON MIDDLE SCHOOL FULTON 5-8 BYRON-BERGEN MIDDLE SCHOOL GENESEE 6-8 CAJRO-DURHAM MIDDLE SCHOOL GREENE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ORANGE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL UIVINGSTON 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONONDAGA 6-8 CANANDAIGUA MIDDLE SCHOOL ONONDAGA 6-8 CANANDAIGUA MIDDLE SCHOOL ONTARIO 5-8 CATO-MERIDIAN MIDDLE SCHOOL CATUGA 6-8 CATO-MERIDIAN MIDDLE SCHOOL CATUGA 6-8 CATO-MERIDIAN MIDDLE SCHOOL CATUGA 6-8 CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOL CATTARAUGUS 6-8 CENTRAL SQUARE MIDDLE SCHOOL SWEGO 6-8 CHARLES H ROTH M	6-8	BAY SHORE MIDDLE SCHOOL	SUFFULK
6-8 BEELMANTOWN MIDDLE SCHOOL CLINTON 6-8 BELLPORT MIDDLE SCHOOL SUFFOLK 6-8 BEN FRANKLIN MIDDLE SCHOOL ERIE 6-8 BERLIN MIDDLE SCHOOL RENSSELAER 6-8 BOYNTON MIDDLE SCHOOL TOMPKINS 6-8 BROADALBIN-PERTH MIDDLE SCHOOL FULTON 5-8 BYRON-BERGEN MIDDLE SCHOOL GENESEE 6-8 C J HOOKER MIDDLE SCHOOL ORANGE 6-8 CAIRO-DURHAM MIDDLE SCHOOL ORANGE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ORANGE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONONDAGA 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONTARIO 5-8 CATO-MERIDIAN MIDDLE SCHOOL ONTARIO 5-8 CATO-MERIDIAN MIDDLE SCHOOL ERIE 5-8 CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOL CATUGA 6-8 CENTRAL SQUARE MIDDLE SCHOOL CATTARAUGUS 6-8 CENTRAL SQUARE MIDDLE SCHOOL SUFFOLK 6-8 CHARLES H ROTH MIDDLE SCHOOL ONNOROE 5-8 CHARLES H ROTH MIDDLE SCHOOL MONROE 6-8 CHEENTOWAGA MIDDLE	6-8	BAY TRAIL MIDDLE SCHOOL	MONROE
6-8 BELLPORT MIDDLE SCHOOL SUFFOLK 6-8 BEN FRANKLIN MIDDLE SCHOOL ERIE 6-8 BERLIN MIDDLE SCHOOL RENSSELAER 6-8 BOYNTON MIDDLE SCHOOL TOMPKINS 6-8 BROADALBIN-PERTH MIDDLE SCHOOL FULTON 5-8 BYRON-BERGEN MIDDLE SCHOOL GENESEE 6-8 C J HOOKER MIDDLE SCHOOL GREENE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL GREENE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONNONDAGA 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONNONDAGA 6-8 CANANDAIGUA MIDDLE SCHOOL ONNARIO 5-8 CATO-MERIDIAN MIDDLE SCHOOL ONTARIO 5-8 CATO-MERIDIAN MIDDLE SCHOOL CAYUGA 6-8 CATO-MERIDIAN MIDDLE SCHOOL CATUGA 6-8 CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOL CATTARAUGUS 6-8 CENTRAL SQUARE MIDDLE SCHOOL SUFFOLK 6-8 CENTRAL SQUARE MIDDLE SCHOOL SUFFOLK 6-8 CHARLES H ROTH MIDDLE SCHOOL OSWEGO 6-8 CHARLES H ROTH MIDDLE SCHOOL COLUMBIA 5-8 CHEENTOWAG	6-8	BEEKMANTOWN MIDDLE SCHOOL	CLINTON
6-8 BEN FRANKLIN MIDDLE SCHOOL ERIE 6-8 BERLIN MIDDLE SCHOOL RENSSELAER 6-8 BOYNTON MIDDLE SCHOOL TOMPKINS 6-8 BROADALBIN-PERTH MIDDLE SCHOOL FULTON 5-8 BYRON-BERGEN MIDDLE SCHOOL GENESEE 6-8 C J HOOKER MIDDLE SCHOOL ORANGE 6-8 CAIRO-DURHAM MIDDLE SCHOOL ORANGE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONONDAGA 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONONDAGA 6-8 CANANDAIGUA MIDDLE SCHOOL ONONDAGA 6-8 CANANDAIGUA MIDDLE SCHOOL ONTARIO 5-8 CATO-MERIDIAN MIDDLE SCHOOL CAYUGA 6-8 CATO-MERIDIAN MIDDLE SCHOOL CAYUGA 6-8 CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOL CATTARAUGUS 6-8 CENTER MORICHES MIDDLE SCHOOL CATTARAUGUS 6-8 CENTRAL SQUARE MIDDLE SCHOOL OSWEGO 6-8 CENTRAL SQUARE MIDDLE SCHOOL MONROE 5-8 CHARLES H ROTH MIDDLE SCHOOL MONROE 6-8 CHARLES H ROTH MIDDLE SCHOOL ERIE 6-8 CHEKTOWAGA MI	6-8	BELLPORT MIDDLE SCHOOL	SUFFOLK
6-8 BERLIN MIDDLE SCHOOL TOMPKINS 6-8 BOYNTON MIDDLE SCHOOL TOMPKINS 6-8 BROADALBIN-PERTH MIDDLE SCHOOL FULTON 5-8 BYRON-BERGEN MIDDLE SCHOOL GENESEE 6-8 C J HOOKER MIDDLE SCHOOL ORANGE 6-8 CAIRO-DURHAM MIDDLE SCHOOL ORANGE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ININGSTON 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONONDAGA 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONONDAGA 6-8 CANANDAIGUA MIDDLE SCHOOL ONONDAGA 6-8 CATO-MERIDIAN MIDDLE SCHOOL ONONDAGA 6-8 CATO-MERIDIAN MIDDLE SCHOOL CAYUGA 6-8 CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOL CATTARAUGUS 6-8 CENTRAL SQUARE MIDDLE SCHOOL SWEGO 6-8 CHATHAM MIDDLE SCHOOL OSWEGO 6-8 CHATRAL SQUARE MIDDLE SCHOOL MONROE 5-8 CHATHAM MIDDLE SCHOOL MONROE 5-8 CHATHAM MIDDLE SCHOOL MONROE 5-8 CHATHAM MIDDLE SCHOOL MONROE 5-8 CHEKTOWAGA MIDDLE SCHOOL	6-8	BEN FRANKLIN MIDDLE SCHOOL	ERIE
6-8 BOYNTON MIDDLE SCHOOL ItomPkins 6-8 BROADALBIN-PERTH MIDDLE SCHOOL FULTON 5-8 BYRON-BERGEN MIDDLE SCHOOL GENESEE 6-8 C J HOOKER MIDDLE SCHOOL ORANGE 6-8 CAIRO-DURHAM MIDDLE SCHOOL ORANGE 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL IVINGSTON 6-8 CALEDONIA-MUMFORD MIDDLE SCHOOL ONONDAGA 6-8 CANANDAIGUA MIDDLE SCHOOL ONTARIO 5-8 CATO-MERIDIAN MIDDLE SCHOOL ERIE 5-8 CATO-MERIDIAN MIDDLE SCHOOL ERIE 5-8 CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOL CATTARAUGUS 6-8 CENTER MORICHES MIDDLE SCHOOL GREENE 5-8 CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOL CATTARAUGUS 6-8 CENTRA SQUARE MIDDLE SCHOOL SUFFOLK 6-8 CENTRAL SQUARE MIDDLE SCHOOL OSWEGO 6-8 CHARLES H ROTH MIDDLE SCHOOL MONROE 5-8 CHARLES H ROTH MIDDLE SCHOOL COLUMBIA 5-8 CHEKTOWAGA MIDDLE SCHOOL BROOME 7-8 CHENANGO FORKS MIDDLE SCHOOL ONONDAGA 6-8	6-8	BERLIN MIDDLE SCHOOL	RENSSELAER
6-8BROADALBIN-PERTH MIDDLE SCHOOLFULTON5-8BYRON-BERGEN MIDDLE SCHOOLGENESEE6-8C J HOOKER MIDDLE SCHOOLORANGE6-8CAIRO-DURHAM MIDDLE SCHOOLGREENE6-8CALEDONIA-MUMFORD MIDDLE SCHOOLLIVINGSTON6-8CALEDONIA-MUMFORD MIDDLE SCHOOLONONDAGA6-8CANANDAIGUA MIDDLE SCHOOLONTARIO5-8CANANDAIGUA MIDDLE SCHOOLERIE5-8CATO-MERIDIAN MIDDLE SCHOOLCAYUGA6-8CATO-MERIDIAN MIDDLE SCHOOLGREENE5-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLGREENE5-8CENTER MORICHES MIDDLE SCHOOLSUFFOLK6-8CENTRAL SQUARE MIDDLE SCHOOLOSWEGO6-8CHARLES H ROTH MIDDLE SCHOOLMONROE5-8CHARLES H ROTH MIDDLE SCHOOLCOLUMBIA5-8CHEEKTOWAGA MIDDLE SCHOOLERIE6-8CHENTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHENTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHENTNUT HILL MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CLIRCHVILLE-CHILI MIDDLE SCHOOLORANGE6-8CLIRCHVILLE-CHILI MIDDLE SCHOOLORANGE6-8CLEVELAND HILL MIDDLE SCHOOLORANGE6-8CLINTON MIDDLE SCHOOLERIE6-8CLINTON MIDDLE SCHOOLONEIDA6-8CLEVELAND HILL MIDDLE SCHOOLONEIDA6-8CLEVELAND HILL MIDDLE SCHOOLCHEMUNG6-8CORNING EREE ACADEMY MIDDLE SCHOOLCHE	6-8	BOYNTON MIDDLE SCHOOL	
5-8BYRON-BERGEN MIDDLE SCHOOLGENESEE6-8C J HOOKER MIDDLE SCHOOLORANGE6-8CAIRO-DURHAM MIDDLE SCHOOLGREENE6-8CALEDONIA-MUMFORD MIDDLE SCHOOLLIVINGSTON6-8CAMILLUS MIDDLE SCHOOLONONDAGA6-8CANANDAIGUA MIDDLE SCHOOLONTARIO5-8CASEY MIDDLE SCHOOLERIE5-8CATO-MERIDIAN MIDDLE SCHOOLCAYUGA6-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLGREENE5-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLSUFFOLK6-8CENTRAL SQUARE MIDDLE SCHOOLSUFFOLK6-8CENTRAL SQUARE MIDDLE SCHOOLOSWEGO6-8CHARLES H ROTH MIDDLE SCHOOLMONROE5-8CHARLES H ROTH MIDDLE SCHOOLCOLUMBIA5-8CHEEKTOWAGA MIDDLE SCHOOLERIE6-8CHENANGO FORKS MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHITTENANGO MIDDLE SCHOOLONONDAGA6-8CHITTENANGO MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLEVILLE MIDDLE SCHOOLORANGE6-8CLEVILLE MIDDLE SCHOOLORANGE6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLEVELAND HILL MIDDLE SCHOOLORANGE6-8CLEVELAND HILL MIDDLE SCHOOLORANGE6-8CLEVELAND HILL MIDDLE SCHOOLONEIDA6-8CORNING EREE ACADENCY MIDDLE SCHOOLCHEMUNG6-8CORNINH MIDDLE SCHOOLCHEMUNG6-8 <td>6-8</td> <td>BROADALBIN-PERTH MIDDLE SCHOOL</td> <td>FULTON</td>	6-8	BROADALBIN-PERTH MIDDLE SCHOOL	FULTON
6-8C J HOOKER MIDDLE SCHOOLORANGE6-8CAIRO-DURHAM MIDDLE SCHOOLGREENE6-8CALEDONIA-MUMFORD MIDDLE SCHOOLLIVINGSTON6-8CAMILLUS MIDDLE SCHOOLONONDAGA6-8CANANDAIGUA MIDDLE SCHOOLONTARIO5-8CASEY MIDDLE SCHOOLERIE5-8CATO-MERIDIAN MIDDLE SCHOOLCAYUGA6-8CATO-MERIDIAN MIDDLE SCHOOLGREENE5-8CATO-MERIDIAN MIDDLE SCHOOLCAYUGA6-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLGREENE5-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLSUFFOLK6-8CENTRAL SQUARE MIDDLE SCHOOLOSWEGO6-8CHATHAM MIDDLE SCHOOLCOLUMBIA5-8CHATHAM MIDDLE SCHOOLCOLUMBIA5-8CHEEKTOWAGA MIDDLE SCHOOLBROOME7-8CHEEKTOWAGA MIDDLE SCHOOLONONDAGA6-8CIRCLEVILLE MIDDLE SCHOOLMADISON5-8CHECHNIT HILL MIDDLE SCHOOLONONDAGA6-8CIRCLEVILLE MIDDLE SCHOOLORANGE6-8CIRCLEVILLE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLERIE6-8CLARKE MIDDLE SCHOOLONEIDA6-8CLARKE MIDDLE SCHOOLONEIDA6-8CLARKE MIDDLE SCHOOLCHEMUNG6-8CLINTON MIDDLE SCHOOLCHEMUNG6-8CORNING EREE ACADEMY MIDDLE SCHOOLCHEMUNG6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MI	5-8	BYRON-BERGEN MIDDLE SCHOOL	GENESEE
6-8CAIRO-DURHAM MIDDLE SCHOOLGREENE6-8CALEDONIA-MUMFORD MIDDLE SCHOOLLIVINGSTON6-8CAMILLUS MIDDLE SCHOOLONONDAGA6-8CANANDAIGUA MIDDLE SCHOOLONTARIO5-8CATO-MERIDIAN MIDDLE SCHOOLERIE5-8CATO-MERIDIAN MIDDLE SCHOOLCAYUGA6-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLGREENE5-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLCATTARAUGUS6-8CENTER MORICHES MIDDLE SCHOOLSUFFOLK6-8CENTRAL SQUARE MIDDLE SCHOOLOSWEGO6-8CHARLES H ROTH MIDDLE SCHOOLMONROE5-8CHEEKTOWAGA MIDDLE SCHOOLCOLUMBIA5-8CHEEKTOWAGA MIDDLE SCHOOLERIE6-8CHENANGO FORKS MIDDLE SCHOOLBROOME7-8CHEESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CIRCLEVILLE MIDDLE SCHOOLMADISON5-8CHECKTOWAGA MIDDLE SCHOOLONANGE6-8CIRCLEVILLE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLONEIDA6-8CLARKE MIDDLE SCHOOLERIE6-8CLARKE MIDDLE SCHOOLCHEMUNG6-8CLARKE MIDDLE SCHOOLONEIDA6-8CLARKE MIDDLE SCHOOLONEIDA6-8CLARKE MIDDLE SCHOOLCHEMUNG6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA6-8CORNING ER	6-8		ORANGE
6-8CALEDONIA-MUMFORD MIDDLE SCHOOLLIVINGSTON6-8CAMILLUS MIDDLE SCHOOLONONDAGA6-8CANANDAIGUA MIDDLE SCHOOLONTARIO5-8CASEY MIDDLE SCHOOLERIE5-8CATO-MERIDIAN MIDDLE SCHOOLCAYUGA6-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLGREENE5-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLCATTARAUGUS6-8CENTER MORICHES MIDDLE SCHOOLSUFFOLK6-8CENTRAL SQUARE MIDDLE SCHOOLOSWEGO6-8CHARLES H ROTH MIDDLE SCHOOLMONROE5-8CHARLES H ROTH MIDDLE SCHOOLCOLUMBIA5-8CHEEKTOWAGA MIDDLE SCHOOLERIE6-8CHENANGO FORKS MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHITTENANGO MIDDLE SCHOOLMADISON5-8CHURCHVILLE-CHILI MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLONEIDA6-8CLINTON MIDDLE SCHOOLERIE6-8CLINTON MIDDLE SCHOOLONEIDA6-8CORINTH MIDDLE SCHOOLCHEMUNG5-8CORINTH MIDDLE SCHOOLCHEMUNG6-8CORINTH MIDDLE SCHOOLCHEMUNG6-8CORINTH MIDDLE SCHOOLCHEMUNG6-8CORINTH MIDDLE SCHOOLCHEMUNG6-8CORINTH MIDDLE SCHOOLSARATOGA6-8CORINTH MIDDLE SCHOOLSARATOGA6-8CORINTH MIDDLE SCHOOLSARATOG	6-8	CAIRO-DURHAM MIDDLE SCHOOL	GREENE
6-8CAMILLUS MIDDLE SCHOOLONONDAGA6-8CANANDAIGUA MIDDLE SCHOOLONTARIO5-8CATO-MERIDIAN MIDDLE SCHOOLERIE5-8CATO-MERIDIAN MIDDLE SCHOOLCAYUGA6-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLGREENE5-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLCATTARAUGUS6-8CENTER MORICHES MIDDLE SCHOOLOSWEGO6-8CENTRAL SQUARE MIDDLE SCHOOLOSWEGO6-8CHARLES H ROTH MIDDLE SCHOOLMONROE5-8CHATHAM MIDDLE SCHOOLCOLUMBIA5-8CHEKTOWAGA MIDDLE SCHOOLERIE6-8CHENANGO FORKS MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHITTENANGO MIDDLE SCHOOLMADISON5-8CHURCHVILLE-CHILI MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLARKE MIDDLE SCHOOLONEIDA6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLEVELAND HILL MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLCHEMUNG5-8CONINTH MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA	6-8	CALEDONIA-MUMFORD MIDDLE SCHOOL	
6-8CANANDAIGUA MIDDLE SCHOOLONTARIO5-8CASEY MIDDLE SCHOOLERIE5-8CATO-MERIDIAN MIDDLE SCHOOLCAYUGA6-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLGREENE5-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLCATTARAUGUS6-8CENTER MORICHES MIDDLE SCHOOLSUFFOLK6-8CENTRAL SQUARE MIDDLE SCHOOLOSWEGO6-8CHARLES H ROTH MIDDLE SCHOOLMONROE5-8CHATHAM MIDDLE SCHOOLCOLUMBIA5-8CHEKTOWAGA MIDDLE SCHOOLERIE6-8CHENANGO FORKS MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHURCHVILLE-CHILI MIDDLE SCHOOLMADISON5-8CHURCHVILLE-CHILI MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLERIE6-8CLEVELAND HILL MIDDLE SCHOOLORANGE6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLINTON MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLCHEMUNG5-8CORINTH MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA	0-8		
5-8CASEY MIDDLE SCHOOLERIE5-8CATO-MERIDIAN MIDDLE SCHOOLCAYUGA6-8CATSKILL MIDDLE SCHOOLGREENE5-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLCATTARAUGUS6-8CENTER MORICHES MIDDLE SCHOOLSUFFOLK6-8CENTRAL SQUARE MIDDLE SCHOOLOSWEGO6-8CHARLES H ROTH MIDDLE SCHOOLMONROE5-8CHATHAM MIDDLE SCHOOLCOLUMBIA5-8CHEKTOWAGA MIDDLE SCHOOLERIE6-8CHENANGO FORKS MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHURCHVILLE-CHILI MIDDLE SCHOOLMADISON5-8CHURCHVILLE-CHILI MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLERIE6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLEVELAND HILL MIDDLE SCHOOLORANGE6-8CLINTON MIDDLE SCHOOLERIE6-8COHEN MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLCHEMUNG5-8CORINTH MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA	0-8		
5-8CATO-MERIDIAN MIDDLE SCHOOLCATOGA6-8CATSKILL MIDDLE SCHOOLGREENE5-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLCATTARAUGUS6-8CENTER MORICHES MIDDLE SCHOOLSUFFOLK6-8CENTRAL SQUARE MIDDLE SCHOOLOSWEGO6-8CHARLES H ROTH MIDDLE SCHOOLMONROE5-8CHATHAM MIDDLE SCHOOLCOLUMBIA5-8CHEEKTOWAGA MIDDLE SCHOOLERIE6-8CHENANGO FORKS MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHURCHVILLE-CHILI MIDDLE SCHOOLMADISON5-8CHURCHVILLE-CHILI MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLERIE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLINTON MIDDLE SCHOOLERIE6-8COHEN MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLCHEMUNG5-8CORINTH MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA	5-8		ERIE
6-8CATSKILL MIDDLE SCHOOLGREENE5-8CATTARAUGUS-LITTLE VALLEY MIDDLE SCHOOLCATTARAUGUS6-8CENTRAL SQUARE MIDDLE SCHOOLSUFFOLK6-8CENTRAL SQUARE MIDDLE SCHOOLOSWEGO6-8CHARLES H ROTH MIDDLE SCHOOLMONROE5-8CHARLES H ROTH MIDDLE SCHOOLCOLUMBIA5-8CHATHAM MIDDLE SCHOOLERIE6-8CHEKTOWAGA MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHURCHVILLE-CHILI MIDDLE SCHOOLMADISON5-8CHURCHVILLE-CHILI MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLORN MIDDLE SCHOOLONEIDA6-8CLEVELAND HILL MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLCHEMUNG5-8CORINTH MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA	5-8		CAYUGA
5-8CATTARAOGOS-LITTLE VALLEY MIDDLE SCHOOLCATTARAOGOS6-8CENTRAL SQUARE MIDDLE SCHOOLSUFFOLK6-8CENTRAL SQUARE MIDDLE SCHOOLOSWEGO6-8CHARLES H ROTH MIDDLE SCHOOLMONROE5-8CHATHAM MIDDLE SCHOOLCOLUMBIA5-8CHEKTOWAGA MIDDLE SCHOOLERIE6-8CHENANGO FORKS MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHURCHVILLE-CHILI MIDDLE SCHOOLMADISON5-8CLARKE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLORANGE6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLORCHVILLE-CHILI MIDDLE SCHOOLORANGE6-8CLORCHVILLE MIDDLE SCHOOLERIE6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8COHEN MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLCHEMUNG5-8CORINTH MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA	6-8		GREENE
6-8CENTER MORICHES MIDDLE SCHOOLSUPPOLK6-8CENTRAL SQUARE MIDDLE SCHOOLOSWEGO6-8CHARLES H ROTH MIDDLE SCHOOLMONROE5-8CHATHAM MIDDLE SCHOOLCOLUMBIA5-8CHEKTOWAGA MIDDLE SCHOOLERIE6-8CHENANGO FORKS MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHITTENANGO MIDDLE SCHOOLMADISON5-8CHURCHVILLE-CHILI MIDDLE SCHOOLORANGE6-8CIRCLEVILLE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLJEFFERSON6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLINTON MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLCHEMUNG5-8CORINTH MIDDLE SCHOOLCHEMUNG5-8CORINTH MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSTELIDEN	5-8		
6-8CENTRAL SQUARE MIDDLE SCHOOLOSWEGO6-8CHARLES H ROTH MIDDLE SCHOOLMONROE5-8CHATHAM MIDDLE SCHOOLCOLUMBIA5-8CHEEKTOWAGA MIDDLE SCHOOLERIE6-8CHENANGO FORKS MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHITTENANGO MIDDLE SCHOOLMADISON5-8CHURCHVILLE-CHILI MIDDLE SCHOOLMADISON6-8CIRCLEVILLE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLJEFFERSON6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLINTON MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLCHEMUNG5-8CORINTH MIDDLE SCHOOLCHEMUNG6-8CORINTH MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA	0-8		SUFFULK
6-8CHARLES H KOTH MIDDLE SCHOOLMONROE5-8CHATHAM MIDDLE SCHOOLCOLUMBIA5-8CHEEKTOWAGA MIDDLE SCHOOLERIE6-8CHENANGO FORKS MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHITTENANGO MIDDLE SCHOOLMADISON5-8CHURCHVILLE-CHILI MIDDLE SCHOOLMADISON6-8CIRCLEVILLE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLJEFFERSON6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLINTON MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLCHEMUNG5-8CORINTH MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA	0-8		USWEGU
5-8CHATHAM MIDDLE SCHOOLCOLOMBIA5-8CHEEKTOWAGA MIDDLE SCHOOLERIE6-8CHENANGO FORKS MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHITTENANGO MIDDLE SCHOOLMADISON5-8CHURCHVILLE-CHILI MIDDLE SCHOOLORANGE6-8CIRCLEVILLE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLJEFFERSON6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLINTON MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLCHEMUNG5-8CORNITH MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA	0-8		
5-8CHEEKTOWAGA MIDDLE SCHOOLERIE6-8CHENANGO FORKS MIDDLE SCHOOLBROOME7-8CHESTNUT HILL MIDDLE SCHOOLONONDAGA6-8CHITTENANGO MIDDLE SCHOOLMADISON5-8CHURCHVILLE-CHILI MIDDLE SCHOOL 5-8MONROE6-8CIRCLEVILLE MIDDLE SCHOOLORANGE6-8CLARKE MIDDLE SCHOOLJEFFERSON6-8CLEVELAND HILL MIDDLE SCHOOLERIE6-8CLINTON MIDDLE SCHOOLONEIDA6-8COHEN MIDDLE SCHOOLCHEMUNG5-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA6-8CORNING EREE ACADEMY MIDDLE SCHOOLSARATOGA	5-8		
6-8 CHENANGO FORKS MIDDLE SCHOOL BROOME 7-8 CHESTNUT HILL MIDDLE SCHOOL ONONDAGA 6-8 CHITTENANGO MIDDLE SCHOOL MADISON 5-8 CHURCHVILLE-CHILI MIDDLE SCHOOL 5-8 MONROE 6-8 CIRCLEVILLE MIDDLE SCHOOL 5-8 MONROE 6-8 CIRCLEVILLE MIDDLE SCHOOL ORANGE 6-8 CLARKE MIDDLE SCHOOL JEFFERSON 6-8 CLEVELAND HILL MIDDLE SCHOOL ERIE 6-8 CLINTON MIDDLE SCHOOL ONEIDA 6-8 COHEN MIDDLE SCHOOL CHEMUNG 5-8 CORNITH MIDDLE SCHOOL SARATOGA 6-8 CORNING EREE ACADEMY MIDDLE SCHOOL SARATOGA	5-8		
7-8 CHESTNOT HILL MIDDLE SCHOOL ONONDAGA 6-8 CHITTENANGO MIDDLE SCHOOL MADISON 5-8 CHURCHVILLE-CHILI MIDDLE SCHOOL MADISON 6-8 CIRCLEVILLE MIDDLE SCHOOL ORANGE 6-8 CLARKE MIDDLE SCHOOL JEFFERSON 6-8 CLEVELAND HILL MIDDLE SCHOOL ERIE 6-8 CLINTON MIDDLE SCHOOL ONEIDA 6-8 COHEN MIDDLE SCHOOL ONEIDA 5-8 CORNING EREE ACADEMY MIDDLE SCHOOL SARATOGA 6-8 CORNING EREE ACADEMY MIDDLE SCHOOL STELIDEN	0-8		BROOME
6-8 CHITTENANGO MIDDLE SCHOOL MADISON 5-8 CHURCHVILLE-CHILI MIDDLE SCHOOL 5-8 MONROE 6-8 CIRCLEVILLE MIDDLE SCHOOL ORANGE 6-8 CLARKE MIDDLE SCHOOL JEFFERSON 6-8 CLEVELAND HILL MIDDLE SCHOOL ERIE 6-8 CLINTON MIDDLE SCHOOL ONEIDA 6-8 COHEN MIDDLE SCHOOL ONEIDA 5-8 CORNING EREE ACADEMY MIDDLE SCHOOL SARATOGA 6-8 CORNING EREE ACADEMY MIDDLE SCHOOL STELIDEN	7-8		
5-0 CHURCHVILLE-CHILI MIDDLE SCHOOL 5-8 MONROE 6-8 CIRCLEVILLE MIDDLE SCHOOL ORANGE 6-8 CLARKE MIDDLE SCHOOL JEFFERSON 6-8 CLEVELAND HILL MIDDLE SCHOOL ERIE 6-8 CLINTON MIDDLE SCHOOL ONEIDA 6-8 COHEN MIDDLE SCHOOL ONEIDA 5-8 CORNING EREE ACADEMY MIDDLE SCHOOL SARATOGA 6-8 CORNING EREE ACADEMY MIDDLE SCHOOL STELIDEN	0-ð		MONDO
6-8 CLARKE MIDDLE SCHOOL ORANGE 6-8 CLARKE MIDDLE SCHOOL JEFFERSON 6-8 CLEVELAND HILL MIDDLE SCHOOL ERIE 6-8 CLINTON MIDDLE SCHOOL ONEIDA 6-8 COHEN MIDDLE SCHOOL CHEMUNG 5-8 CORNING EREE ACADEMY MIDDLE SCHOOL SARATOGA 6-8 CORNING EREE ACADEMY MIDDLE SCHOOL STELIDEN	5-8		MUNKUE
6-8 CLEVELAND HILL MIDDLE SCHOOL JEFFERSON 6-8 CLEVELAND HILL MIDDLE SCHOOL ERIE 6-8 CLINTON MIDDLE SCHOOL ONEIDA 6-8 COHEN MIDDLE SCHOOL CHEMUNG 5-8 CORNING EREE ACADEMY MIDDLE SCHOOL SARATOGA 6-8 CORNING EREE ACADEMY MIDDLE SCHOOL STELIDEN	0-ð		
6-8 CLEVELAND HILL MIDDLE SCHOOL ERIE 6-8 CLINTON MIDDLE SCHOOL ONEIDA 6-8 COHEN MIDDLE SCHOOL CHEMUNG 5-8 CORNING EREE ACADEMY MIDDLE SCHOOL SARATOGA 6-8 CORNING EREE ACADEMY MIDDLE SCHOOL STELIDEN	0-ð		
6-8 CORNING EREE ACADEMY MIDDLE SCHOOL ONEIDA 6-8 CORNING EREE ACADEMY MIDDLE SCHOOL SARATOGA 6-8 CORNING EREE ACADEMY MIDDLE SCHOOL SARATOGA	0-0 6 0		
0-0 CORENT MIDDLE SCHOOL CHEMUNG 5-8 CORINTH MIDDLE SCHOOL SARATOGA 6-8 CORNING FREE ACADEMY MIDDLE SCHOOL STELLEN	0-0		
	0-ð		
	69		

5-8	CORNWALL MIDDLE SCHOOL	ORANGE
5-8	COXSACKIE-ATHENS MIDDLE SCHOOL	GREENE
6-8		
7 0		MONDOE
7-0		
0-0		
0-8		SUFFULK
6-8	DELHI MIDDLE SCHOOL	DELAWARE
6-8	DEPEW MIDDLE SCHOOL	ERIE
6-8	DEWITT MIDDLE SCHOOL	TOMPKINS
6-8	DOVER MIDDLE SCHOOL	DUTCHESS
6-8	DRAPER MIDDLE SCHOOL	SCHENECTADY
6-8	DRYDEN MIDDLE SCHOOL	TOMPKINS
6-8	DUANESBURG MIDDLE SCHOOL	SCHENECTADY
6-8	EAST IRONDEQUOIT MIDDLE SCHOOL	MONROE
6-8	EAST ISLIP MIDDLE SCHOOL	SUFFOLK
7-8	EAST MIDDLE SCHOOL	ERIE
6-8	EDWARD TOWN MIDDLE SCHOOL	NIAGARA
6-8	FLWOOD MIDDLE SCHOOL	SUFFOLK
5-8		OSWEGO
6-8	ERANKEORT-SCHUYLER MIDDLE SCHOOL	HERKIMER
5-8		
5-0		EDIE
6.9		
0-0		WATNE
6-8	GATES-CHILI MIDDLE SCHOOL	MONROE
5-8	GEORGE FISCHER MIDDLE SCHOOL	PUTNAM
5-8	GEORGE FISCHER MIDDLE SCHOOL	PUINAM
6-8	GOWANA MIDDLE SCHOOL	SARATOGA
6-8	GREENVILLE MIDDLE SCHOOL	GREENE
6-8	GRIFFITH INSTITUTE MIDDLE SCHOOL	ERIE
6-8	GROTON MIDDLE SCHOOL	TOMPKINS
6-8	HAMBURG MIDDLE SCHOOL	ERIE
5-8	HAMPTON BAYS MIDDLE SCHOOL	SUFFOLK
6-8	HAVILAND MIDDLE SCHOOL	DUTCHESS
5-8	HEIM MIDDLE SCHOOL	ERIE
7-8	HENRY L STIMSON MIDDLE SCHOOL	SUFFOLK
6-8	HENRY V BURGER MIDDLE SCHOOL	MONROE
6-8	HERBERT HOOVER MIDDLE SCHOOL	ERIE
6-8		NASSAU
6-8	HIGHLAND MIDDLE SCHOOL	ULSTER
5-8		FRIE
6-8		
7-8		
6.8		MONDOF
0-0		
5-0		
5-8 7 0		RENSSELAER
/-8		
6-8		RENSSELAER
5-8	HOWARD I HERBER MIDDLE SCHOOL	NASSAU
6-8	ICHABOD CRANE MIDDLE SCHOOL	COLUMBIA
6-8	IROQUOIS MIDDLE SCHOOL	ERIE
6-8	ISAAC E YOUNG MIDDLE SCHOOL	WESTCHESTER
5-8	ISLAND PARK LINCOLN ORENS MIDDLE SCHOOL	NASSAU
5-8	ISLAND TREES MIDDLE SCHOOL	NASSAU
6-8	ISLIP MIDDLE SCHOOL	SUFFOLK
7-8	J TAYLOR FINLEY MIDDLE SCHOOL	SUFFOLK
6-8	J WATSON BAILEY MIDDLE SCHOOL	ULSTER

5-8	IAMESVILLE-DEWITT MIDDLE SCHOOL	ONONDAGA
6-8	JENNIE F SNAPP MIDDLE SCHOOL	BROOME
6-8	IOHANNA PERRIN MIDDLE SCHOOL	MONROE
6-8	IOHN E KENNEDY MIDDLE SCHOOL	SUFFOLK
7-8		LUSTER
6-8		NASSALL
6.8		
6.8		
6.9		
0-0		
0-0		
0-8		DUICHESS
6-8		EKIE
6-8	LAKELAND-COPPER BEECH MIDDLE SCHOOL	WESICHESIER
/-8	LANCASTER MIDDLE SCHOOL	ERIE
5-8	LANSING MIDDLE SCHOOL	TOMPKINS
5-8	LAWRENCE MIDDLE SCHOOL	NASSAU
5-8	LETCHWORTH MIDDLE SCHOOL	WYOMING
6-8	LEWISTON PORTER MIDDLE SCHOOL	NIAGARA
6-8	LINDEN AVENUE MIDDLE SCHOOL	DUTCHESS
6-8	LINDENHURST MIDDLE SCHOOL	SUFFOLK
5-8	LISHA KILL MIDDLE SCHOOL	ALBANY
7-8	LIVERPOOL MIDDLE SCHOOL	ONONDAGA
6-8	LIVONIA MIDDLE SCHOOL	LIVINGSTON
6-8	LONG BEACH MIDDLE SCHOOL	NASSAU
7-8	LONGWOOD IUNIOR HIGH SCHOOL	SUFFOLK
6-8	M CLIFFORD MILLER MIDDLE SCHOOL	ULSTER
6-8	MAINE-ENDWELL MIDDLE SCHOOL	BROOME
6-8	MAPLE AVENUE MIDDLE SCHOOL	SARATOGA
6-8	MAPLE HILL MIDDLE SCHOOL	RENSSELAER
6-8	MARCUS WHITMAN MIDDLE SCHOOL	ONTARIO
6-8	MARI BORO MIDDI E SCHOOL	ULSTER
6-8		MONBOE
6-8		FRIE
7.8		MONDOE
5.9		
<u> </u>		
0-0		
/-0		
5-8		ERIE
6-8		ORANGE
6-8	MONROE WOODBURY MIDDLE SCHOOL	ORANGE
6-8	NEW PALIZ MIDDLE SCHOOL	ULSTER
5-8	NEWFANE MIDDLE SCHOOL	NIAGARA
6-8	NORTH PARK JUNIOR HIGH SCHOOL	NIAGARA
7-8	NORTH TONAWANDA MIDDLE SCHOOL	NIAGARA
6-8	NORTHEASTERN CLINTON MIDDLE SCHOOL	CLINTON
6-8	NORTHSIDE BLODGETT MIDDLE SCHOOL	STEUBEN
6-8	NYACK MIDDLE SCHOOL	ROCKLAND
6-8	OAKDALE-BOHEMIA MIDDLE SCHOOL	SUFFOLK
6-8	OLIVER W WINCH MIDDLE SCHOOL	SARATOGA
7-8	ONEONTA MIDDLE SCHOOL	OTSEGO
5-8	ONONDAGA HILL MIDDLE SCHOOL	ONONDAGA
7-8	ONTEORA MIDDLE SCHOOL	ULSTER
6-8	OREGON MIDDLE SCHOOL	SUFFOLK
6-8	ORVILLE A TODD MIDDLE SCHOOL	DUTCHESS
7-8	OSWEGO MIDDLE SCHOOL	OSWEGO
6-8	OTTO L SHORTELL MIDDLE SCHOOL	MADISON

6-8	OWEGO-APALACHIN MIDDLE SCHOOL	TIOGA
5-8	PERRY MIDDLE SCHOOL	WYOMING
6-8	PERU MIDDLE SCHOOL	CLINTON
6-8		
6-8		WARREN
6-8	BAVENA-COEYMANS-SELKIBK MIDDLE SCHOOL	ALBANY
6-8		ONTABIO
6-8		BROOME
7-8		
6.8		
6.8		
6.8		
6.9		
0-0		
0-0		
5-6		
0-8		SUFFULK
5-8	RUTALION-HARILAND MIDDLE SCHOOL	
5-8	RUSSELL I DOIG MIDDLE SCHOOL	
6-8	SAGAMORE MIDDLE SCHOOL	SUFFOLK
6-8	SAMOSET MIDDLE SCHOOL	SUFFOLK
5-8	SAND CREEK MIDDLE SCHOOL	ALBANY
6-8	SARANAC LAKE MIDDLE SCHOOL	FRANKLIN
6-8	SARANAC MIDDLE SCHOOL	CLINTON
7-8	SAUGERTIES JUNIOR HIGH SCHOOL	ULSTER
5-8	SAUQUOIT VALLEY MIDDLE SCHOOL	ONEIDA
6-8	SAXTON MIDDLE SCHOOL	SUFFOLK
5-8	SCHALMONT MIDDLE SCHOOL	SCHENECTADY
6-8	SCOTIA-GLENVILLE MIDDLE SCHOOL	SCHENECTADY
6-8	SELDEN MIDDLE SCHOOL	SUFFOLK
6-8	SENECA FALLS MIDDLE SCHOOL	SENECA
6-8	SENECA MIDDLE SCHOOL	SUFFOLK
6-8	SEQUOYA MIDDLE SCHOOL	SUFFOLK
6-8	SLEEPY HOLLOW MIDDLE SCHOOL	WESTCHESTER
7-8	SOULE ROAD MIDDLE SCHOOL	ONONDAGA
6-8	SOUTH OCEAN MIDDLE SCHOOL	SUFFOLK
5-8	SOUTHERN CAYUGA MIDDLE SCHOOL	CAYUGA
6-8	SOUTHWESTERN MIDDLE SCHOOL	CHAUTAUQUA
6-8	SPRY MIDDLE SCHOOL	MONROE
6-8	STARPOINT MIDDLE SCHOOL	NIAGARA
6-8	STISSING MOUNTAIN MIDDLE SCHOOL	DUTCHESS
6-8	SWEET HOME MIDDLE SCHOOL	ERIE
6-8	TACONIC HILLS MIDDLE SCHOOL	COLUMBIA
6-8	THOUSAND ISLANDS MIDDLE SCHOOL	JEFFERSON
5-8	TRANSIT MIDDLE SCHOOL	ERIE
6-8	UNION VALE MIDDLE SCHOOL	DUTCHESS
6-8	VALLEY CENTRAL MIDDLE SCHOOL	ORANGE
6-8	VAN WYCK IUNIOR HIGH SCHOOL	DUTCHESS
7-8	VERNON-VERONA-SHERRILL MIDDLE SCHOOL	ONEIDA
6-8	VERONICA E CONNOR MIDDLE SCHOOL	ERIE
6-8	VESTAL MIDDLE SCHOOL	BROOME
7-8		ONTARIO
7-8	WAPPINGERS IUNIOR HIGH SCHOOL	DUTCHESS
6-8	WASHINGTONVILLE MIDDLE SCHOOL	ORANGE
5-8	WATKINS GLEN MIDDLE SCHOOL	SCHUYI FR
6-8	WAYNE CENTRAL MIDDLE SCHOOL	WAYNE

6-8	WEST GENESEE MIDDLE SCHOOL	ONONDAGA
6-8	WEST HEMPSTEAD MIDDLE SCHOOL	NASSAU
6-8	WEST MIDDLE SCHOOL	ERIE
5-8	WESTMORELAND MIDDLE SCHOOL	ONEIDA
6-8	WHITE PLAINS MIDDLE SCHOOL	WESTCHESTER
6-8	WHITESBORO MIDDLE SCHOOL	ONEIDA
6-8	WILLIAM FLOYD MIDDLE SCHOOL	SUFFOLK
6-8	WILLIAM H GOLDING MIDDLE SCHOOL	SCHOHARIE
6-8	WILLIAM PACA MIDDLE SCHOOL	SUFFOLK
5-8	WILLIAMSON MIDDLE SCHOOL	WAYNE
6-8	WILLINK MIDDLE SCHOOL	MONROE
6-8	WISDOM LANE MIDDLE SCHOOL	NASSAU
7-8	WOODLANDS MIDDLE SCHOOL	WESTCHESTER

APPENDIX B

IRB PERMISSIONS

REQUEST FOR APPROVAL OF RESEARCH, DEMONSTRATION OR RELATED ACTIVITIES INVOLVING HUMAN SUBJECTS

All material must be typed.

CERTIFICATION STATEMENT:

PROJECT TITLE:

A study of Instructional Scheduling, Teaming and Common Planning in New York State Middle Schools

PILOT STUDY

In making this application, I(we) certify that I(we) have read and understand the University's policies and procedures governing research, development, and related activities involving human subjects. I (wc) shall comply with the letter and spirit of those policies. I(we) further acknowledge my(our) obligation to (1) obtain written approval of significant deviations from the originally-approved protocol BEFORE making those deviations, and (2) report immediately all adverse effects of the study on the subjects to the Director of the Institutional Review Board, Seton Hall University, South Orange, NJ 07079.

Chad M lover

Chad M Corey RESEARCHER(S) OR PROJECT DIRECTOR(S)

Please print or type out names of **all researchers below signature. Use separate sheet of paper, if necessary.**

My signature indicates that I have reviewed the attached materials and consider them to meet IRB standards.

Roberd Starratt Robert J. Stave att

04-08-2014 DATE

Please print or type out name below signature

The request for approval submitted by the above researcher(s) was considered by the IRB for Research Involving Human Subjects Research at the μ May = 200 f meeting.

The application was approved <u>here</u> hot approved <u>here</u> by the Committee. Special conditions were <u>here</u> were not <u>here</u> set by the IRB. (Any special conditions are described on the reverse side.)

DIRECTOR,

RESEARCHER'S ADVISOR OR DEPARTMENTAL SUPERVISOR

SETON HALL UNIVERSITY INSTITUTIONAL REVIEW BOARD FOR HUMAN SUBJECTS RESEARCH

Seton Hall University 3/2005 144

REQUEST FOR APPROVAL OF RESEARCH. DEMONSTRATION OR **RELATED ACTIVITIES INVOLVING HUMAN SUBJECTS**

All material must be typed.

PROJECT TITLE:

A study of Instructional Scheduling, Teaming and Common Planning in New York State Middle Schools

CERTIFICATION STATEMENT:

In making this application, I(we) certify that I(we) have read and understand the University's policies and procedures governing research, development, and related activities involving human subjects. I (we) shall comply with the letter and spirit of those policies. I(we) further acknowledge my(our) obligation to (1) obtain written approval of significant deviations from the originally-approved protocol BEFORE making those deviations, and (2) report immediately all adverse effects of the study on the subjects to the Director of the Institutional Review Board, Seton Hall University, South Orange, NJ 07079.

Chad M. Corey

RESEARCHER(S) OR PROJECT DIRECTOR(S)

5/29/14

Please print or type out names of all researchers below signature. Use separate sheet of paper, if necessary.

My signature indicates that I have reviewed the attached materials and consider them to meet IRB standards.

arratt ARCHER'S ADVISOR OR DEPARTMENTAL SUPERVISOR Robert Starratt

5/29/14

Please print or type out name below signature

The request for approval submitted by the above researcher(s) was considered by the IRB for Research Involving Human Subjects Research at the $_______$

The application was approved _____ not approved _____ by the Committee. Special conditions were not ______ set by the IRB. (Any special conditions are described on the reverse side.) ____ by the Committee. Special conditions were

DIRECTOR,

SETON HALL UNIVERSITY INSTITUTIONAL REVIEW BOARD FOR HUMAN SUBJECTS RESEARCH

Seton Hall University 3/2005 **APPENDIX C**

PILOT GROUP

Lo	Low Need/Resource Capacity Schools		
Grades	School Name		
5.8			
6-8			
6-8			
5-8			
6.8			
6-8			
6-8	BEACH STREET MIDDLE SCHOOL		
7-8	BERNER MIDDLE SCHOOL		
6-8	BETHLEHEM CENTRAL MIDDLE SCHOOL		
6-8	BLIND BROOK-BYE MIDDLE SCHOOL		
6-8			
6-8	BRIARCI IEE MIDDLE SCHOOL		
6-8	BRONXVILLE MIDDLE SCHOOL		
6-8	BULKELEY MIDDLE SCHOOL		
6-8	CALKINS BOAD MIDDLE SCHOOL		
6-8			
6-8			
6-8			
6-8			
6-8			
6-8	DOBBS FERRY MIDDLE SCHOOL		
5-8	EAGLE HILL MIDDLE SCHOOL		
5-8	EAST AURORA MIDDLE SCHOOL		
6-8	EAST HAMPTON MIDDLE SCHOOL		
5-8	EAST MORICHES SCHOOL		
6-8	EAST NORTHPORT MIDDLE SCHOOL		
6-8	EASTCHESTER MIDDLE SCHOOL		
6-8	FARNSWORTH MIDDLE SCHOOL		
5-8	FARRAGUT MIDDLE SCHOOL		
7-8	FELIX FESTA CHARACTER MIDDLE SCHOOL		
7-8	FELIX FESTA DETERMINATION MIDDLE SCHOOL		
6-8	FOX LANE MIDDLE SCHOOL		
6-8	GARDEN CITY MIDDLE SCHOOL		
7-8	GRAND AVENUE MIDDLE SCHOOL		
6-8	GREAT HOLLOW MIDDLE SCHOOL		
6-8	GREAT NECK NORTH MIDDLE SCHOOL		
6-8	GREAT NECK SOUTH MIDDLE SCHOOL		
5-8	H B MATTLIN MIDDLE SCHOOL		
6-8	H B THOMPSON MIDDLE SCHOOL		
6-8	H C CRITTENDEN MIDDLE SCHOOL		
6-8	HAUPPAUGE MIDDLE SCHOOL		
6-8	HENRY H WELLS MIDDLE SCHOOL		
6-8	HOMMOCKS SCHOOL		
6-8	IROQUOIS MIDDLE SCHOOL		
6-8	IRVINGTON MIDDLE SCHOOL		
6-8	JAMES WILSON YOUNG MIDDLE SCHOOL		
6-8	JERICHO MIDDLE SCHOOL		
6-8	JOHN F KENNEDY MIDDLE SCHOOL		
6-8	JOHN JAY MIDDLE SCHOOL		
6-8	LOCUST VALLEY MIDDLE SCHOOL		
6-8	LOUIS M KLEIN MIDDLE SCHOOL		
6-8	LYNBROOK NORTH MIDDLE SCHOOL		

6-8	LYNBROOK SOUTH MIDDLE SCHOOL
6-8	MAHOPAC MIDDLE SCHOOL
7-8	MANHASSET MIDDLE SCHOOL
7-8	MERRICK AVENUE MIDDLE SCHOOL
6-8	MILDRED E STRANG MIDDLE SCHOOL
6-8	MILLBROOK MIDDLE SCHOOL
5-8	MOUNT SINAI MIDDLE SCHOOL
6-8	NESAQUAKE MIDDLE SCHOOL
6-8	NORTH COUNTRY ROAD SCHOOL
6-8	NORTH SHORE MIDDLE SCHOOL
6-8	NORTHPORT MIDDLE SCHOOL
6-8	OLDFIELD MIDDLE SCHOOL
6-8	ORCHARD PARK MIDDLE SCHOOL
6-8	PELHAM MIDDLE SCHOOL
5-8	PIERRE VAN CORTLANDT SCHOOL
6-8	PLAINEDGE MIDDLE SCHOOL
5-8	PLAINVIEW-OLD BETHPAGE MIDDLE SCHOOL
5-8	PLEASANTVILLE MIDDLE SCHOOL
6-8	PORT JEFFERSON MIDDLE SCHOOL
5-8	PUTNAM VALLEY MIDDLE SCHOOL
6-8	RICHARD H O'ROURKE MIDDLE SCHOOL
5-8	ROBERT E BELL SCHOOL
6-8	RYE MIDDLE SCHOOL
6-8	RYE NECK MIDDLE SCHOOL
6-8	SAYVILLE MIDDLE SCHOOL
6-8	SCARSDALE MIDDLE SCHOOL
7-8	SCHOOL 9M-OCEANSIDE MIDDLE SCHOOL
6-8	SEAFORD MIDDLE SCHOOL
5-8	SEVEN BRIDGES MIDDLE SCHOOL
7-8	SHAKER IUNIOR HIGH SCHOOL
6-8	SKANEATELES MIDDLE SCHOOL
6-8	SOMERS MIDDLE SCHOOL
6-8	SOUTH ORANGETOWN MIDDLE SCHOOL
6-8	SOUTH SIDE MIDDLE SCHOOL
6-8	SOUTH WOODS MIDDLE SCHOOL
5-8	SOUTHAMPTON INTERMEDIATE SCHOOL
6-8	SUFFERN MIDDLE SCHOOL
6-8	
6-8	TWELVE CORNERS MIDDLE SCHOOL
6-8	
6-8	VALHALLA MIDDLE SCHOOL
6-8	VAN ANTWERP MIDDLE SCHOOL
6-8	
6-8	WANTAGH MIDDLE SCHOOL
6-8	
5-8	WELLWOOD MIDDLE SCHOOL
6-8	
0-0 8 A	
6.8	
0-0 6 0	
0-0 6 9	
0-0	
6-9	WOODMERE MIDDLE SCHOOL

APPENDIX D

SURVEY

Instructional Scheduling, Teaming, and Common Planning
Part I-A: Instructional Scheduling Information
Directions: For each item, please type or select the answer that most accurately describes the current instructional schedule in your middle school.
1. What grades are included in your middle school?
5, 6, 7, 8
O 6, 7, 8
0 7, 8
Other (please specify)
2. What is the population of your middle school?
3. How would you best describe the type of instructional schedule in existence in your school?
O Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental classifications)
Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year)
Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes)
Modular Schedule (Allows for the school day to be divided into several modules permitting for classes to occur in varying time allotments)
O Rotating Schedule (Consists of classes rotating through different times of the school day)
O Dropped Schedule (Dropping of one class period daily)
Rotating Dropped Schedule (Combination of the rotating and dropped schedules)
Other (please specify)
4. How long has the current type of instructional schedule been in existence in your
school?
5. Has the instructional schedule structure been changed or altered during your time as
principal?

	6. Are you looking to modify or change the current instructional schedule structure at your school? Yes No 7. Why are you either looking or not looking to modify or change the current instructional schedule structure at your school? 8. Please rank the top three instructional scheduling models that would best describe your ideal schedule. 8. Please rank the top three instructional scheduling models that would best describe your ideal schedule. 8. Please rank the top three instructional scheduling models that would best describe your ideal schedule. 9. Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental desafications) 9. Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) 9. Flexible interdisciplinary Block Schedule (Consists of blocks of time for toeching teams and provides individual teams the flexibility to desermine how to be ultike this time for the core academic dasses) 9. Modular Schedule (Consists of classes rotating through different times of the school day) 9. Dropped Schedule (Consists of classes rotating through different times of the school day) 9. Dropped Schedule (Combination of the rotating and dropped schedules) 9. What exploratory/encore subjects are offered during the instructional day? Please select all that apply. 9. Physical Education 9. Heatth 9. Heatth	struct	ional Scheduling, Teaming, and Common Planning
School? Yes No Y. Why are you either looking or not looking to modify or change the current instructional chedule structure at your school? Y. Why are you either looking or not looking to modify or change the current instructional chedule structure at your school? Y. Please rank the top three instructional scheduling models that would best describe your teal schedule. Yraditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental classifications) Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily)	school? No 7. Why are you either looking or not looking to modify or change the current instructional schedule structure at your school? Image: Schedule structure at your school? Image: Schedule structure at your school? Image: Schedule Schedule (Pixed number of daily periods that are uniform in length with instruction being given within departmentalized Schedule (Pixed number of daily periods that are uniform in length with instruction being given within departmentalized Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Rotating Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Meddar Schedule (Consists of classes rotating through different times of the school day) Propped Schedule (Combination of the rotating and dropped schedules) P. What exploratory/encore subjects are offered during the instructional day? Please select all that apply. Physical Education Music Health Health Health Home and Careers Other (please specify)	6. Are y	ou looking to modify or change the current instructional schedule structure at your
 Yes No Why are you either looking or not looking to modify or change the current instructional chedule structure at your school? Please rank the top three instructional scheduling models that would best describe your deal schedule. Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental classifications) Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time altorments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily) 	Yes No 7. Why are you either looking or not looking to modify or change the current instructional schedule structure at your school? Image: Structure at your school at your and the school day? Image: Structure at your school at your and the school day? Image: Structure at your school at your and the school day? Image: Structure at your school at your and the school at your at your at your your at your your at your	school	?
 No Why are you either looking or not looking to modify or change the current instructional chedule structure at your school? Please rank the top three instructional scheduling models that would best describe your deal schedule. Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental classifications) Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily) 	No	O Yes	
X Why are you either looking or not looking to modify or change the current instructional chedule structure at your school? X Please rank the top three instructional scheduling models that would best describe your deal schedule. X Please rank the top three instructional scheduling models that would best describe your deal schedule. X Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental classifications) Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily)		O №	
Chedule structure at your school? Please rank the top three instructional scheduling models that would best describe your deal schedule. Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental classifications) Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily)	Schedule structure at your school? 8. Please rank the top three instructional scheduling models that would best describe your ideal schedule. Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental classifications) Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Plexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Compling of one class period daily) Rotating Dropped Schedule (Combination of the rotating and dropped schedules) 9. What exploratory/encore subjects are offered during the instructional day? Please select all that apply. Physical Education Health Health Health Health	7. Why a	are you either looking or not looking to modify or change the current instructional
Please rank the top three instructional scheduling models that would best describe your deal schedule. Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental classifications) Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day)		schedu	le structure at your school?
Please rank the top three instructional scheduling models that would best describe your deal schedule. Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental classifications) Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day)			
Be Please rank the top three instructional scheduling models that would best describe your deal schedule. Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental classifications) Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily)	B. Please rank the top three instructional scheduling models that would best describe your ideal schedule. Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental dassifications) Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Dropping of one class period daily) Rotating Dropped Schedule (Combination of the rotating and dropped schedules) S. What exploratory/encore subjects are offered during the instructional day? Please select all that apply. Physical Education Music Art Health Home and Careers Other (please specify)		
Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental classifications) Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily)	Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental dassifications) Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Modular Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily) Rotating Dropped Schedule (Combination of the rotating and dropped schedules) 9. What exploratory/encore subjects are offered during the instructional day? Please select all that apply. Physical Education Music Technology Art Health Home and Careers Other (please specify)	8. Pleas	se rank the top three instructional scheduling models that would best describe your
Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily)	Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year) Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Doropping of one class period daily) Rotating Dropped Schedule (Combination of the rotating and dropped schedules) What exploratory/encore subjects are offered during the instructional day? Please select all that apply. Physical Education Music Health Health Home and Careers Other (please specify)		Traditional Departmentalized Schedule (Fixed number of daily periods that are uniform in length with instruction being given within departmental classifications)
Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily)	Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes) Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily) Rotating Dropped Schedule (Combination of the rotating and dropped schedules) What exploratory/encore subjects are offered during the instructional day? Please select all that apply. Physical Education Music Health Home and Careers Other (please specify)		Alternate Day Block Schedule (Periods of approximately 90 minutes in length and meet every other day for the entire school year)
Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily)	Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments) Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily) Rotating Dropped Schedule (Combination of the rotating and dropped schedules) What exploratory/encore subjects are offered during the instructional day? Please select all that apply. Physical Education Music Technology Art Health Home and Careers Other (please specify)		Flexible Interdisciplinary Block Schedule (Consists of blocks of time for teaching teams and provides individual teams the flexibility to determine how to best utilize this time for the core academic classes)
Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily)	Rotating Schedule (Consists of classes rotating through different times of the school day) Dropped Schedule (Dropping of one class period daily) Rotating Dropped Schedule (Combination of the rotating and dropped schedules) What exploratory/encore subjects are offered during the instructional day? Please Belect all that apply. Physical Education Music Technology Art Health Home and Careers Other (please specify)		Modular Schedule (Allows for the school day to be divided into several modules, permitting for classes to occur in varying time allotments)
Dropped Schedule (Dropping of one class period daily)	Dropped Schedule (Dropping of one class period daily) Rotating Dropped Schedule (Combination of the rotating and dropped schedules) A what exploratory/encore subjects are offered during the instructional day? Please select all that apply. Physical Education Music Technology Art Health Home and Careers Other (please specify)		Rotating Schedule (Consists of classes rotating through different times of the school day)
	Rotating Dropped Schedule (Combination of the rotating and dropped schedules) A the alth Health Home and Careers Other (please specify)		Dropped Schedule (Dropping of one class period daily)
Rotating Dropped Schedule (Combination of the rotating and dropped schedules)	D. What exploratory/encore subjects are offered during the instructional day? Please Select all that apply. Physical Education Music Technology Art Health Home and Careers Other (please specify)		Rotating Dropped Schedule (Combination of the rotating and dropped schedules)
	 Physical Education Music Technology Art Health Home and Careers Other (please specify)). What select a	exploratory/encore subjects are offered during the instructional day? Please Il that apply.
• What exploratory/encore subjects are offered during the instructional day? Please elect all that apply.	 Myotal Education Music Technology Art Health Home and Careers Other (please specify) 	Physi	
What exploratory/encore subjects are offered during the instructional day? Please elect all that apply. Provide Education	 Mode Technology Art Health Home and Careers Other (please specify) 		
 What exploratory/encore subjects are offered during the instructional day? Please elect all that apply. Physical Education Music 	 Formology Art Health Home and Careers Other (please specify) 		
D. What exploratory/encore subjects are offered during the instructional day? Please elect all that apply. Physical Education Music Tophoeleey	Att Health Home and Careers Other (please specify)		loogy
What exploratory/encore subjects are offered during the instructional day? Please elect all that apply. Physical Education Music Technology	Health Home and Careers Other (please specify)		
What exploratory/encore subjects are offered during the instructional day? Please elect all that apply. Physical Education Music Technology Art	Other (please specify)		
What exploratory/encore subjects are offered during the instructional day? Please elect all that apply. Physical Education Music Technology Art Health	Other (please specify)		and Lareers
 What exploratory/encore subjects are offered during the instructional day? Please elect all that apply. Physical Education Music Technology Art Health Home and Careers 		Other	(please specify)
 What exploratory/encore subjects are offered during the instructional day? Please elect all that apply. Physical Education Music Technology Art Health Home and Careers Other (please specify) 			

How is remedial instruction struct	red at your school?	Please select all that apply	
Smaller student/teacher ratio classes	-		
Inclusion in mainstream classes			
Pull outs			
Additional support period			
Extended school day programs			
Summer programs			
Other (please specify)			
. How is special education instructi	n structured at you	r school? Please select all t	ha
ply.			
Smaller student/teacher ratio classes			
Inclusion in mainstream classes			
Pull outs			
Additional support period			
Extended school day programs			
Summer programs			
Other (please specify)			
. How is English Language Learner lect all that apply.	ELL) instruction st	ructured at your school? Pl	ea
Extended school day programs			
Summer programs			

Page 4

Part I-B: Instructional Scheduling Beliefs

Directions: For each item below, select the circle that best reflects your beliefs regarding instructional scheduling. Please use the following rating scale: 4–Strongly Agree, 3–Somewhat Agree, 2–Somewhat Disagree, or 1–Strongly Disagree.

13. Please evaluate the following statements.

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
The instructional schedule should allow teachers an opportunity to see the students at different times during the school day.	0	0	0	0
The instructional schedule should support flexibility for periods to be of different lengths.	0	0	0	0
An instructional schedule can have a positive influence on student learning.	0	0	0	0
Longer class periods can have a positive influence on student learning.	0	0	0	0
Longer class periods can have a positive influence on student behavior.	0	0	0	0
Longer class periods can have a positive influence on the relationship between teacher and student.	0	0	0	0
The current instructional schedule in my school meets the needs of all students.	0	0	0	0
The current instructional schedule in my school meets the needs of all remedial students.	0	0	0	0
The current instructional schedule in my school meets the needs of all special education students.	0	0	0	0
The current instructional schedule in my school meets the needs of all English Lanugage Learner (ELL) students.	0	0	0	0

Part II-A: Teaming Information

Directions: For each item below, please type or select the answer that most accurately describes the current teaming structure in your middle school. For the purposes of this survey, teaming is defined as a way to organize 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.

14. Does your school use teaming?

Ο	Yes
\sim	

 $\bigcirc N_0$

Instructional Scheduling, Teaming, and Common Planning
Part II-A: Teaming Information
15. What type(s) of teaming? Please select all that apply.
Interdisciplinary
Single Grade Level
Multiple Grade Levels
Other (please specify)
The in what grade level(s) does teaming occur? Please select all that apply.
6th Grade
7th Grade
8th Grade
17. Are students randomly assigned to teams?
⊖ Yes
N₀ N₀
18. Do students remain teamed with the same group of students throughout middle
school?
O Yes
19. Has the type of teaming structure utilized been changed or altered during your time as
principal?
20. Are you looking to modify or change the current teaming structure at your school?
O Yes

-	e you either looking or not looking to modify or change the current teaming
tructure a	nt your school?
2. Which s	staff members are assigned to a team? Please select all that apply.
Academic 1	Teachers
Exploratory	/Encore Teachers
Remedial T	Feachers
Special Edu	ucation Teachers
English Lar	nguage Learner (ELL) Teachers
Teaching As	ssistants or Paraprofessionals
Principal or	Assistant Principal
Department	t Chair
School Cou	Inselor
Other (plea	se specify)
. On avei	rage, how many academic (English, math, science, and social studies) teacher
 3. On avei re assigned 2 Teachers 3 Teachers 4 Teachers 5 Teachers 	rage, how many academic (English, math, science, and social studies) teacher ed to a team?
 3. On avei re assigned 2 Teachers 3 Teachers 4 Teachers 5 Teachers Greater that 	rage, how many academic (English, math, science, and social studies) teacher ed to a team?
3. On aver re assigned 2 Teachers 3 Teachers 4 Teachers 5 Teachers Greater tha 4. On aver chool?	rage, how many academic (English, math, science, and social studies) teacher ed to a team? ^{In 5 Teachers} rage, what percentage of students would be considered fully teamed in your
3. On aver re assigned 2 Teachers 3 Teachers 4 Teachers 5 Teachers Greater tha 4. On aver chool? 5. Does ea	rage, how many academic (English, math, science, and social studies) teacher ed to a team? ^{In 5 Teachers} rage, what percentage of students would be considered fully teamed in your
3. On aver re assigned 2 Teachers 3 Teachers 4 Teachers 5 Teachers Greater tha 4. On aver chool? 5. Does ea Yes	rage, how many academic (English, math, science, and social studies) teacher ed to a team? ^{In 5 Teachers} rage, what percentage of students would be considered fully teamed in your ach team have a team facilitator or team leader?
3. On avei re assigne 2 Teachers 3 Teachers 4 Teachers 5 Teachers Greater tha 4. On avei chool? 5. Does ea Yes No	rage, how many academic (English, math, science, and social studies) teacher ed to a team? In 5 Teachers rage, what percentage of students would be considered fully teamed in your ach team have a team facilitator or team leader?
3. On aver re assigne 2 Teachers 3 Teachers 4 Teachers 5 Teachers Greater tha 4. On aver chool? 5. Does ea Yes No	rage, how many academic (English, math, science, and social studies) teacher ed to a team? In 5 Teachers rage, what percentage of students would be considered fully teamed in your ach team have a team facilitator or team leader?

Part 2-B: Teaming Beliefs

Directions: For each item below, select the circle that best reflects your beliefs regarding teaming. Please use the following rating scale: 4–Strongly Agree, 3–Somewhat Agree, 2–Somewhat Disagree, or 1–Strongly Disagree.

26. Please evaluate the following statements.

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
Teaming has a positive influence on the way classroom instruction is carried out and taught.	0	0	0	0
Teaming has a positive influence on the culture of learning within the school.	0	0	0	0
Teaming has a positive influence on student learning.	0	0	0	0
Teaming has a positive influence on student behavior.	0	0	0	0
Teaming provides students with a greater sense of identity and belonging.	0	0	0	0
Teachers are prepared with the collaboration and communication skills needed to be an effective team.	0	0	0	0
Teachers would benefit from receiving professional development on teaming.	0	0	0	0
Teams have the ability to function in a leadership capacity.	0	0	0	0
Team facilitators/leaders have the ability to function in a leadership capacity.	0	0	0	0

Part III-A: Common Planning Information

Directions: For each item below, please type or select the answer that most accurately describes the current common planning structure in your middle school. For the purposes of this survey, common planning is defined as a regularly scheduled time during the school day when staff members who teach the same students, subjects, or grades meet for planning, parent conferences, material preparation, and student evaluation.

27. Does your school have common planning time?

Ο	Yes
\sim	

 \bigcirc No

Instructional Scheduling, Teaming, and Common Planning			
Part III-A: Common Planning Information			
28. Does time for common planning occur in all grade levels?			
29 Does team common planning occur?			
◯ No			

159

Instructional Scheduling, Teaming, and Common Planning			
Part III-A: Common Planning Information			
30. How often does team common planning occur?			
Daily			
Every other day			
Once a week			
Once a month			
Other (please specify)			
31. On average, for what length of time does team common planning occur?			
32. What is team common planning used for? Please select all that apply.			
Teacher preparation			
Coordinating instruction			
Creating assessments			
Revising schedules			
Discussing students			
Conducting conferences			
Planning special events/trips			
IEP/504 meetings			
Other (please specify)			

Page 12

art III-A: Comm	on Planning Information		
33. Does grade le	el common planning occu	r?	
Yes			
O №			

Page 13

Instructional Scheduling, Teaming, and Common Planning
Part III-A: Common Planning Information
34. How often does grade level common planning occur?
Daily
Every other day
Once a week
Once a month
Other (please specify)
35. On average, for what length of time does grade level common planning occur?
36. What is grade level common planning used for? Please select all that apply.
Planning special events/trips
IEP/504 meetings

art III-A: Common Planning Information	
37. Does departmental common planning occur?	
Yes	
○ No	

structional Schedu	ling, Teaming, and Common Planning	
art III-A: Common Pla	anning Information	
38. How often does dep	partmental common planning occur?	
O Daily		
Every other day		
Once a week		
Once a month		
Other (please specify)		
39. On average, for wha	at length of time does departmental common planning occur	r?
U <i>i</i>		
40. What is departmenta	al common planning used for? Please select all that apply.	
Teacher preparation		
Coordinating instruction		
Creating assessments		
Revising schedules		
Discussing students		
Conducting conferences		
Planning special events/trips		
IEP/504 meetings		
Other (please specify)		

164

Instructional Scheduling, Teaming, and Common Planning
Part III-A: Common Planning Information
41. As principal, are you provided with an agenda and/or minutes from common planning meetings?
42. Has the common planning structure been changed or altered during your time as principal?
43. Are you looking to modify or change the current common planning structure? \bigcirc Yes
44. Why are you either looking or not looking to modify or change the current common

Part III-B: Common Planning Beliefs

Directions: For each item below, select the circle that best reflects your beliefs regarding common planning time. Please use the following rating scale: 4–Strongly Agree, 3–Somewhat Agree, 2–Somewhat Disagree, or 1–Strongly Disagree.

45. Please evaluate the following statements.

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
Common planning time has a posiitve influence on the way instruction is carried out and taught.	0	0	0	0
Common planning time has a positive influence on the culture of learning within the school.	0	0	0	0
Common planning time has a posiitve influence on student learning.	0	0	0	0
Teachers woud benefit from receiving professional development on how to effectively utilize common planning time.	0	0	0	0

46. Please rank these three types of common planning in order of importance with #1 being the most important.


Instructional Scheduling, Teaming, and Common Planning

Part IV: General Reflections

Directions: For each item below, please select the box or circle that best reflects your beliefs regarding common planning time. Please use the following rating scale: 4–Strongly Agree, 3–Somewhat Agree, 2–Somewhat Disagree, or 1–Strongly Disagree.

47. Please rank these three school supports in order of importance with #1 being the most important.

Teaming Common planning B. Please evaluate the following statements. Strongly Agree Somewhat Agree Somewhat Disagree Strongly Disagree he instructional schedule rould support the rganization of teams. O O O O he instructional schedule r common planning. O O O O O ommon planning is an uportant component of amino. O O O O O	Instructional sch	eduling			
Common planning B. Please evaluate the following statements. Strongly Agree Somewhat Agree Somewhat Disagree be instructional schedule nould support the rganization of teams. Image: Common planning is an roommon planning is an rportant component of amino. Image: Common planning is an rportant component of amino. Image: Common planning is an rportant component of amino. Image: Common planning is an rportant component of amino.	Teaming				
B. Please evaluate the following statements. Strongly Agree Somewhat Agree Somewhat Disagree Strongly Disagree he instructional schedule ould support the rganization of teams. he instructureal schedule ould support the structure rr common planning. ommon planning is an portant component of amino.	Common planni	ng			
Strongly Agree Somewhat Agree Somewhat Disagree Strongly Disagree he instructional schedule nould support the rganization of teams. Image: Constructional schedule nould support the structure Image: Constructional schedule nould schedule noul	8. Please evaluate	the following sta	itements.		
he instructional schedule O O O O O O O O O O O O O O O O O O O	he instructional schedule hould support the rganization of teams.	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
ommon planning is an O O O	he instructional schedule hould support the structure or common planning.	0	0	0	0
	ommon planning is an nportant component of eaming.	0	0	0	0

Page 19

Instructional Scheduling, Teaming, and Common Planning
Part V: School and Demographic Information
Directions: For each item below, please type or select the answer that most accurately reflects your school and demographic information.
49. What is the location of your school considered?
Urban
Rural
O Suburban
50. What are the three largest populations of racial/ethnic origins in your school?
American Indian or Alaska Native
Asian or Native Hawaiian/Other Pacific Islander
Black or African American
Hispanic or Latino
Multiracial
White
51. What was your middle school's approximate attendance percentage for the 2011-2012 school year?
52. What was your middle school's approximate student suspension percentage for the
2011-2012 school year?
53. What was the approximate percentage of students on either free or reduced lunch for
the 2011-2012 school year?
54. In the previous three school years, has your middle school made adequate yearly
progress (ATP) in English Language Arts (ELA)?

	cheduling, Teaming, and Common Planning	
55. Please indic	ate the approximate percentage of student performance in your school b Language Arts (ELA) accessment	0
ovel 2 (Partially Brafiaia		
evel 3 (Proficient)		
_evel 4 (Exceeding		
Proficient)		
56. In the previo	ous three school years, has your middle school made adequate yearly	
progress (AYP) i	in Mathematics?	
O Yes		
57. Please indic	ate the approximate percentage of student performance in your school	0
the 2013 Mather	natics assessment.	•
-evel 2 (Partially Proficie	nt)	
_evel 3 (Proficient)		
₋evel 4 (Exceeding Proficient)		
58. How long ha	ve vou been principal in vour current middle school?	
j		
59. How long ha	ve vou been a practicing administrator?	
60 What is your	highest degree earned?	
	ingnest degree earned:	
61. What is you	gender?	
Male		
Female		
62 What is your	current ana?	
ozi wilat is your		

Page 21

APPENDIX E

LETTER OF SOLICITATION

Instructional Scheduling, Teaming, and Common Planning

Survey

Dear Colleague:

I am currently enrolled as a doctoral student at Seton Hall University, South Orange, New Jersey in the Ed. D. program, College of Education and Human Services, Department of Education Leadership, Management and Policy. I am writing to invite you to participate in a survey that is being conducted for my dissertation study examining three middle school supports-instructional scheduling, teaming, and common planning time.

The study is titled, "A Study of Instructional Scheduling, Teaming, and Common Planning Time in New York State Middle Schools". The purpose of the research is to explore: 1) what are the current instructional scheduling practices of NYS middle schools categorized with an average need/resource capacity;; 2) to what extent, if any, is teaming present or absent in New York State middle schools categorized with an average need/resource capacity;; 3) to what extent, if any, is common planning present or absent in New York State middle schools categorized with an average need/resource capacity;; and 4) to what extent, if any, are all three school supports (instructional schedules, teaming, and common planning) found to exist simultaneously in New York State middle school categorized with an average need/resource capacity.

The collection of data will be conducted by sending a self-administered online web survey to middle school principals in New York State school districts that have been categorized as an average need/resource capacity district by the New York State Education Department for the 2011-2012 school year. The estimated time to complete the survey is less than 15 minutes.

The survey that you are invited to participate in via this electronic letter will be identical in format for all principals who participate in the study. The survey has five sections. The first section of the survey focuses on the instructional schedule utilized by middle schools while the second section focuses on collecting data regarding the presence or absence of any teaming that is occurring within the middle school. The third section of the survey focuses on collecting data on the presence or absence of any common planning that is occurring within the middle school while the fourth section will provide an opportunity for general reflections by the participants. The final part of the survey will ask for demographic information that will provide data about the principals participating and the school in which they work. For best results, please try and complete all sections of the survey.

Your participation in completing this survey is voluntary and by completing it you are consenting to being a participant in a research study. The inability or refusal to participate or to discontinue your participation at any time will not result in any penalty or loss of benefits that you are entitled. You may choose to discontinue your participation at any time. Your responses to the survey will contribute to the data collected from other middle school principals to be analyzed and reported.

The researcher will maintain complete confidentiality regarding your participation. You will be identified only through a participant number. Your identity and your responses will at no time be revealed.

Data will not be stored electronically on computer desktop or laptop hard drives. The only means of being stored through electronic devices will be on ex 13. B mmery ke and secuely sloke in a cable . The rsearcher an tehe osearcher's cermit tee mmb ers will bar a ones t o take out a. N other individuals will have access to it.

If byou have any questions pertaining t t e use of human subjects in a survey, please combinant I B@shu.edu. of ank your f r your cooperation.

Sincerely,

Chad Corey Ed.D. Program, Seton Hall University 400 South Orange Avenue Jubilee Hall - Fourth Floor South Orange, NJ 07079 Chad.Corey@student.shu.edu