

1999

Traditional vs. Non-Traditional Blocks of Time in Relationship to Teaching and Learning: An Independent Professional Project

Susan W. Chilson

School for International Training

Follow this and additional works at: https://digitalcollections.sit.edu/ipp_collection

 Part of the [Curriculum and Instruction Commons](#), and the [Secondary Education and Teaching Commons](#)

Recommended Citation

Chilson, Susan W., "Traditional vs. Non-Traditional Blocks of Time in Relationship to Teaching and Learning: An Independent Professional Project" (1999). *MA TESOL Collection*. 475.

https://digitalcollections.sit.edu/ipp_collection/475

This Thesis is brought to you for free and open access by the SIT Graduate Institute at SIT Digital Collections. It has been accepted for inclusion in MA TESOL Collection by an authorized administrator of SIT Digital Collections. For more information, please contact digitalcollections@sit.edu.

DONALD B. WATT LIBRARY
School For International Training
Kipling Road
Brattleboro, VT 05301

**TRADITIONAL vs. NON-TRADITIONAL BLOCKS OF TIME
IN RELATIONSHIP TO TEACHING AND LEARNING**

An Independent Professional Project

By

Susan W. Chilson
B.A. University of Massachusetts

Submitted in partial fulfillment
of the requirements for the

Master of Arts in Teaching
degree at the
School for International Training
Brattleboro, Vermont

August, 1999

This project by Susan W. Chilson is accepted in its present form.

Date August 20, 1999

Project Advisor Carol R. Rodgers

Project Reader Molly M. West

ACKNOWLEDGEMENTS

First, I would like to thank my husband, Bob, and my two daughters, Amanda and Sara, for their continued support in my endeavor to make this paper a reality. Along with my family, I would like to thank my very good friend and colleague, Molly West, for her willingness to read my paper, her honesty, and her interest in what I have to write. I would also like to thank the teachers and staff in the schools across the country that allowed me to visit them and inquire about the programs that they had to offer. These schools include Mt. Everett High School, Chatham High School, Brattleboro Union High School, Burlington High School, Drury High School, Evansville Day School, Harrison High School, Wood River High School, and Walla Walla High School. I would like to thank Keith Davis for his help with the school survey that was created to assess varying schedules that were experimented with at Drury High School. Finally, I would like to thank my advisor, Carol Rodgers, for her inspiration while I studied at The School for International Training and her continued support as I wrote this paper.

ABSTRACT

This Independent Professional Project reflects a discussion about the use of traditional and non-traditional blocks in their relationship with teaching and learning. It reflects the ways in which teaching and learning might lead to a better outcome if the non-traditional blocks were implemented. It addresses the issues of learning styles and the perceptions that revolve around them.

An overview of visits to several schools across the country is included to offer insight into what the various movements in teaching and learning are in different school. There as many similarities throughout the schools in the country as there are differences.

A summary of a survey done at Drury High School is included. It functions as an example of one schools attempt to experiment with the ideas of change. The survey offers a view of how change might occur, the opinions of the participants, and the decision to keep their system as close to the original one as possible.

**Secondary School Teachers
Instructional Improvement
Teaching Conditions**

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
ABSTRACT	iii
TABLE OF CONTENTS	iv
Chapter	
1. INTRODUCTION	1
Background Statement	
History	
Focus	
2. IMPRESSIONS	10
3. OBSERVATIONS AND INTERVIEWS	18
4. A PRACTICE AND SURVEY PRODUCED AND CONDUCTED AT DRURY HIGH SCHOOL	29
5. CONCLUSION	35
APPENDIX 1	38
APPENDIX 2	39
APPENDIX 3	40
BIBLIOGRAPHY	41

CHAPTER I Introduction

Background Statement:

A typical day in the life of any of my students traveling through a traditional block time schedule is quite hectic. The clock dictates the time that I have to be with my students in each class. An example of that typical day is illustrated here. Imagine the clock, the kind they have in schools, ticking, counting away the minutes of the day. Class has begun. Robert is not in his seat yet. Cole is still talking with his friend and has still not found his pencil. Several students are talking about an encounter they observed in the hall and five minutes have already gone by. There are only forty minutes left and I would like to cover at least forty-five minutes worth of information and activities in the remainder of the class. The activity will have to be scratched for yet another day and the only part of the lesson that will be covered is the usual. Some questions will be answered, the homework for the following day will be assigned, the next grammar point will be discussed but there will be no time to practice. With only minutes left in the class, Robert has already packed his bag, his hand is resting on its strap and he is looking toward the door. Cole has finally found his pencil but ironically, class is almost over. The bell rings, the last words of the lesson are shouted out, and the students begin the three and a half-minute race to the next class. They may or may not make it on time depending on how far they have to travel to get there.

The routine starts all over again. Classes will change six times during the day and in some schools seven times. Each time that the change occurs, the students and teachers have to switch gears adapting to a new subject and different environment. The students have to change location, classmates, teachers, and subjects every forty-five minutes. The teachers have to change courses, students, and often location as well. They may have to exercise some other duty that demands another behavior strength or different encounter with students.

I am a Spanish teacher at Drury High School in the city of North Adams, an industrial community located in the northwest corner of Massachusetts. The city has a population of 14,889 and it dominates the Northern Berkshire area commercially, financially, and industrially. The high school is a four-year comprehensive high school with an enrollment of about 600 students. Students from the neighboring communities of Clarksburg and Florida, Massachusetts as well as Readsboro and Stamford, Vermont attend Drury on a tuition basis. The curriculum includes over seventy required and elective courses. Courses are based on a full year system with a few offered by semester. The students are encouraged to select their courses based on their individual needs and interests. They often pursue programs designed around college preparatory classes as well as business, technology and vocational or applied arts. Honors courses are provided in areas of English, mathematics, science and social studies. In addition, it is possible for outstanding and highly motivated seniors to take courses at nearby

Massachusetts College of Liberal Arts and Williams College during their senior year. Advanced placement courses are offered in English, math and U. S. History.

The school is a multi-level, sprawling building with varying changes of climate and room style. It is based on an open classroom philosophy, therefore presenting several non-conventional problems. There are three principle wings on the main floor of the building. The first floor, otherwise known as the basement, includes the cafeteria, special needs area, and my room. Each of the three wings incorporates different disciplines such as math, science, business, computers, and foreign languages, yet there are no real walls between each area. There are permanent dividers surrounding the areas that make up the classrooms that are about seven feet tall, leaving about eighteen inches open at the top. Cupboards divide several areas, and sound, good and bad, travels well throughout these. I have a closed-in classroom that has no windows. There are two doors, one opens into the hall, and the other opens into the teacher's mailroom which remains closed during class time. The students come to my classroom from one of the other areas that I described having been in a much more open space where air quality and circulation is better. There is a different noise factor elsewhere as well as a sense of openness that is not apparent in my area. The room is quite stifling, to say the least. Along with the continuous changes from class to class, the students are also expected to adapt to the changes in environment.

At one point in recent years, there was a discrepancy of almost ten

minutes from one class to another. The block at the end of the day was allotted less time than all the other blocks. To top it off the bell rang even earlier than scheduled to allow the students ample time to reach their buses. I realized this having had a Spanish level one class during block seven as well as Spanish level one during block three of the day. I could not understand why I was not able to accomplish the same tasks in both classes. I examined the schedule and realized the difference. That year I lost more than twenty hours of teaching and my students lost more than twenty hours of learning during the last block of the day. Forty-five minutes is not sufficient time to engage in learning, thirty-five minutes is close to impossible. I felt that it was time to look at what was happening. How might students learn best? What is the best schedule? Might I make a difference in what a typical day might be for my students? How might I accomplish this task?

The following year I asked for a Sabbatical from teaching in order to spend time visiting schools around the country. Since my parents have a motor coach, I knew that my transportation and housing problems would not be a problem. I asked permission from my two young daughter's grammar school to take them out of classes for our two months of travel. We arranged to have their work sent to certain areas in the country and we promised to send work home as they completed it. Although I did not realize it before we embarked on our journey, I would also come to understand what it was like to home school my children. My father became the principal and my mother was the third grade teacher. I was the investigator of schedules, seventh grade

teacher and overseer of all curriculums. It was under these circumstances that I completed my observations and interviews.

History:

Almost five years have passed since I began to take a closer look at traditional blocks of time and their relationship with teaching and learning in secondary school classrooms. I know that it makes sense not to fix something if it is not broken, but it seemed that maybe a look at the history might shed some light on schools, as they are known today. This country was born in 1776 and so too was the American education system. The first classrooms were in the home; children learned from their parents and extended family. They did not go to a designated place and meet with a group of children who were the same age. They stayed with their families and all learned together. The Bible was often the book of choice and maybe the only book in the household, while the trade of the parents was the subject studied. Early classrooms were in the church and finally, as education evolved, they were moved to a school building that offered many subjects.

Schools performed many functions. They gave people the opportunity to become literate in standard American English and elementary familiarity with simple arithmetic, literature, history, geography, and some rules of life. At school youngsters were introduced to an organized subsociety other than the household and church that observed such norms as punctuality, achievement,

competitiveness, fair play, merit, and the respect for adult authority. The young people also developed processes of reasoning, argument, and criticism, and processes of learning to learn. Even though the times were different the schools of the 18th, 19th and early 20th centuries seemed no different from the schools of the Middle Ages, they were still based on what adults thought children were or should be, not on what they really were (Cremin 1977).

As education moved away from the home, time and how teaching and learning took place became factors in the educational process. "The good teacher had a strong right arm and an unshakable determination to cram information into his pupils," (Compton's Interactive Encyclopedia 1966) seems to sum up how the public viewed what a good teacher should be and also implied how learning should take place. Children were grouped according to age to make it easier and faster for one teacher to instruct many students. The seats were arranged in formal rows to discourage physical activity that might disrupt discipline and interrupt the teaching process. It was also thought that keeping them arranged in such a fashion might also encourage close attention to the teacher, absorption of the teacher's words, and increase eye contact. For good measure, desks were frequently bolted to the floor. Subjects were graded according to difficulty, assigned to certain years and taught by a rigid timetable (Compton's Interactive Encyclopedia 1996).

John Dewey, a noted philosopher of the 20th century who lived from 1859 to 1952, had ideas about educational theory and methods that were considered liberal or progressive. He represented the philosophical interest of

developing the whole child. The emphasis was on meaningful school living in the present and subject matter as a resource for total human development rather than as a goal in itself. Dewey, like many progressives, looked upon content as a means of fostering thought and inquiry not just for the sake of acquiring information. As much as Dewey was a progressive, his counterparts, known as the conservatives or essentialists, maintained their traditional beliefs that the child's mind should be trained and that s/he be prepared for an adult life in some remote future. Both groups believed in the goal of developing skill in the three "R's": reading, writing, and arithmetic. They did not necessarily agree upon any issues beyond that. The terms traditional and non-traditional seem to fit these two schools of thought. The "traditionalist" represented conservatism. The "non-traditionalist" represented a progressivism or a liberal view. If one focuses on the traditional view, or in this case the traditional use of class time in forty- five minute blocks then s/he continues along the path of conservative essentialism. If one focuses on a non-traditional block of ninety-minutes then s/he might be said to be continuing along the path of progressivism or liberalism. Because progressives see learning as a process; it is cumulative and cannot be forced or rushed. For more than one hundred years, the child-centered classroom offered hope for social change, a liberal's point of view, on the other hand, uniform curriculum content offered the hope for social stability, a conservatism's point of view (Cremin 1977).

It seems that little has changed. There are still classes that meet at

prescribed times, and set time intervals govern their length. Still teachers teach to their students as if they were seated in desks bolted to the floor. It does not matter whether they have forty-five or ninety-five minutes in which to teach they will continue to do as they have always done. By the same token, there are still those who fall into the progressive, liberal, or non-traditional category as well as those who fall into the essential, conservative, or traditional category. Dewey would have appreciated what Theodore R.Sizer said in 1992 about learning in today's schools. "Telling is cost effective, far more so than coaching. That is why it is so popular in school" (Horace's Compromise 1992). Sizer implies that time and money are factors in learning. He refers to a theme similar to that of Dewey in that "doing" helps "knowing" and that in order to do things in school one needs time. Sizer would be classified along with Dewey in that he, like Dewey, might be considered a progressive. Sizer is indeed in favor of using non-traditional blocks of time.

Good teaching needs time. Good teaching is not allowed enough time in traditional blocks. Longer blocks empower good teachers to offer students a more comprehensive learning environment that allows them to "do" to help them "know". This means that the students coached by the teacher have more time to engage in the learning process by applying what they have learned. It enables the teacher to offer the student several ways from which to approach the material being covered. Thomas Armstrong in his book, Multiple Intelligences in the Classroom, offers a guide for teachers on how to apply the theory of multiple intelligences in the classroom. If a teacher has more than

forty-five minutes per class, s/he would have a greater opportunity to implement the suggestions offered by Armstrong. S/he would be able to offer a variety of ways for students to approach the subject matter allowing for deeper investigation and more practice and reflection. Longer blocks of time will not automatically determine that the best learning takes place, but with good teaching in non-traditional blocks, the best formula for an ideal learning environment might be created.

Focus:

In this study, I would like to illustrate variations on the use of time in secondary public schools. I will present this information gathered through reading, observations, and interviews which were obtained by visiting schools across the country, and a survey which Keith Davis, a colleague and I created, executed, and evaluated at Drury High School.

I strongly believe that in order for students to leave high school knowing what they are taught, that they must have time to engage in learning. They must have the opportunity to learn in an environment that meets each of their individual needs. They must have time to practice and reflect upon what they are learning and to make a connection with the life that they are presently living. The role of non-traditional blocks of time in accomplishing these goals is the focus of this study.

Chapter II Impressions

Teaching and learning, although different, go hand in hand. If the teacher presents information well, makes time for practice and reflection in class, then a student has a very good chance to learn. Time plays a significant role in allowing a teacher the opportunity to provide what is needed for the best learning environment. There is not enough time in each class period to teach well if one is working within a traditional setting. In Massachusetts for example, many of the issues of how much time should be used have been resolved by the state. The Department of Education has established a minimum number of hours per year that students must be in class. [The information pertaining to these regulations may be found through the Department of Education in the section referred to as Student Learning Time Regulations (603 CMR 27.00).] The regulation on the amount of time on learning that must take place reflects the concern that there is not enough if the traditional, forty-five minute time frame were to continue. The difficulty is that each school is responsible for how the time is distributed. Deciding which courses will be taught and how much time each will receive is another problem altogether, but as long as the minimum requirement is met, the schools choose the schedule that they feel is best. In addition to a minimum time requirement, students in Massachusetts are faced with a

standardized test known as the Massachusetts Comprehensive Assessment System (MCAS) that they have to pass in the tenth grade in order to graduate from high school. The test is presented in the core subject areas of math, social studies, English, and science. The plan is to include testing in the area of foreign languages sometime in the future. With added regulations, how time is divided and used during the school day becomes an even greater problem. Massachusetts is not alone in this situation of time on learning. Many teachers and students are faced with similar regulations across the country.

Teachers, students, and parents are concerned about each of the changes imposed by the state of Massachusetts and how everyone will prevail in the midst of all that is happening around them. Teachers want to be sure that all of the material is covered, students want to know that they have been offered every opportunity, and parents want to feel confident about the program in which their child is learning. Time becomes more of an issue because so many of the core requirements must be met by the last quarter of the students' sophomore year.

Thomas Armstrong (*Multiple Intelligences in the Classroom* 1994), Howard Gardner (*Frames of Mind* 1983), and Eric Jensen (*The Learning Brain*) have all dedicated themselves to researching the brain, multiple intelligence, and how to best tap into the resources of the brain for optimal learning and growth. Each has his ideas about the human brain and its many facets and levels. Jensen refers to many different learning styles. Gardner has

developed his theory on multiple intelligences and Armstrong has offered a way for teachers and administrators to adapt Gardner's theory in the classroom. If one is to best address different learning styles and multiple intelligences then the issue of time and how it is used becomes a factor. Expression needs to be provided in a variety of ways using sound, songs, role play, journals, movement, pictures, and special projects to mention a few. "At heart, the theory of multiple intelligences calls for nothing short of fundamental change in the way schools are structured." (Armstrong 1994, p. 107)

Experiences that allow for the most learning come from rich, multi-modal influences such as field trips, simulations, excursions, discussions, real-life projects and personal life activities (Jensen 1995 p.5)

A forty-five minute class does not allow for what Jensen and Armstrong suggest take place in the learning environment of the average student. In a ninety-minute block, there is the possibility for incorporating many different ways to address different learning styles and multiple intelligences such as taking a short field trip to a place of business, a museum nearby or to create a simulation of a real-life situation. Discussions can occur and still there would be time available to sum up the outcome after having offered everyone an opportunity to participate. Projects are much easier to carry out while at the same time maintaining continuity.

Caine (1991, 29) reported that "optimal state of mind for meaningful learning depends on two indispensable characteristics.

1. A relaxed nervous system and a sense of safety and security.

2. Student self-motivation which is critical to the expansion of knowledge at more than surface level."

He reports that the first characteristic relates directly to improved discipline. Many schools, Mt. Everett Regional High School in Sheffield, Massachusetts and Racine High School in Racine, Wisconsin among them have changed to a non-traditional block schedule of some form and have reported a decline in discipline problems. They have reported that within each class a community of students evolves. The student who might feel insecure each time s/he enters the hall to change classes only has to change three times in an entire day instead of six or seven. Caine (1991, 30) also reported that "students immerse themselves much more readily in the non-traditional block because they are allowed the time to do so." This may be the result of a relaxed nervous system as referred to by Caine. The system is not constantly on edge ready and waiting for the next change. The need to move on quickly is removed.

The second characteristic that Caine refers to relates to giving students the opportunity for self-motivation. A non-traditional schedule undoubtedly enhances the second characteristic by providing greater opportunities for varied teaching techniques that directly support student self-motivation. Jensen (1995, 74) refers to activities that would work well in self-motivating, but these too require alternative uses of time. It seems that to enhance self-motivation, a longer block of time devoted to a particular class would help the student learn.

If we truly believe that everyone can learn and that it is important to learn, then it would seem we would make a greater effort to provide the appropriate time to learn. Ninety percent of students can learn what is normally taught in schools at an A level if they are given enough time and appropriate instruction. This means that the time given allows the student to demonstrate mastery of objectives (McIlrath and Huitt 1995, 5).

Another important aspect of learning is that all students are given the same amount of time to learn regardless of the amount of time needed. This suggests that students who learn more slowly learn less information. "If students with less academic aptitude are not allowed opportunities to increase time-spent or if they are not provided with exceptional instruction, then they will continue to fall further and further behind" (Carroll 1963, 3).

In their article about block scheduling, Rettig and Cannizzaro (1995) address the issue of expectations for both teachers and students. Teachers have from one hundred to as many as one hundred and eighty students in a day. There may be thirty students in one class alone. Historically a teacher might have been able to cope because of the expectations for behavior then as well as the expectations for the student when s/he would leave school. Rettig and Cannizzaro's (1995, 1) reference to a traditional schedule as "an assembly-line environment" is reminiscent of the industrial days when it is said that everyone felt that the assembly line worked so well that maybe it could apply to education (Cremin 1977). Rettig and Cannizzaro (1995) are referring to the students in present day situations moving from class to class in forty-five minutes or less, but an image of students from the early nineteen hundreds portrays the essence well. The students are seated in chairs that

are bolted to the floor, their desks in front of them bolted as well to keep them in order while the teacher strolls back and forth placing a bit of new knowledge in each of them every time s/he passes by. Their participation is obviously insignificant and with the large group that is seated and with those standing at the back wall, it is quite apparent that there can be no time for interaction between student and teacher. The difference between the picture of then and now is that today's students no longer sit quietly in their desks with their hands folded. Their behavior does not match that of the turn of the century. One hopes that it would not. A similarity between then and now is that their desks, although no longer bolted to the floor, are often found to be in rows. "Teachers must work with fewer students" (Rettig and Cannizzaro 1995, 2). If a teacher were to have fewer students and more time to work with them, then the desks might not have to be in rows and both the teachers and students would be better able to interact with one another and the subject.

It takes time to DO things, to use them in order to know them. Purveying information takes a fraction of that time. If there is pressure in a high school to cover ground, more time is spent informing and less on the process of individual knowing. The facts tumble forth (Horace's Compromise The Dilemma of the American High School 1992, 95)

Instead of having to provide information because there were too many students and not enough time, there would be time for questioning, time for discussing, time for practicing, processing and role-playing. As was true earlier this century very few of today's students will work on an assembly line. A different picture is evident.

It is still quite possible to enter many schools in Anytown, USA and feel a sense of the factory. The walls may be different, the lights may be brighter but the conveyor belt is still moving. The students move from class to class knowing that in each class a new piece of information from a different subject will be added to their already full load. They are expected to be ready in a matter of minutes to accept the new information that the teacher presented to them. It does not matter that they have already been to six other classes prior to the last one. It does not seem to matter that the student might not have had time to absorb material or time to practice in order to learn it well. The teacher, like the assembly line worker, might not have had time to make sure that the new piece of information was secure or to allow for what it takes to learn before the student had to move on. One hundred to one hundred and eighty students might move on that assembly line each day, passing before one teacher for their much-needed new parts, their much-needed new subject matter. Each student is faced with the ever-changing station, and the lack of time they are allowed to spend at each. Addressing their intellectual and emotional needs is impossible for the teacher. The possibilities for in-depth study are limited. The assumption that all students learn at the same rate continues to be the driving force for traditional schedules.

From another view, the length of time that a student retains information has been linked to the longer block of time used for learning. After four months, a student has retained 85% of the information. After eleven months, a student was shown to have retained 80% of the information (Smith &

Associates 1997). The longer blocks allow teaching for understanding to take place.

When time to learn is allowed to vary, a student's prior knowledge is most important. When time to learn is held constant, then a student's intelligence or academic ability is most important. This issue of "time to learn" is very important (McIlrath and Huitt 1995, 2).

Along with retention, varied time or longer time allows students a better chance to learn everything that is set before them. In considering a longer block and good teaching strategies, the student has time to receive the information, interact with it, practice it, and then be tested on their ability to apply it. The chance that the student has of relating what is learned in class to the world to which he will be moving offers him more possibilities for success. "Mastery Learning will take place if students are given enough time to learn normal information taught in school, and if students are provided quality instruction" (McIlrath and Huitt 1995, 3).

Chapter III

Personal Observations and Interviews

Horace (Horace's Compromise 1992) was my inspiration for the second part of this chapter. Although Horace is a fictitious character created by Theodore R.Sizer in order to create the setting for his books about American high schools, Horace could be any teacher in any school across America. I had read Horace's Compromise: The Dilemma of the American High School when I decided to embark along with my two daughters and my parents on the cross-country journey during the school that would allow me to visit several schools throughout the states. I wanted to have the opportunity to meet teachers in different areas, observe the situations in which they taught, and discover more about the time on learning that they were allowed or obliged to use. One of the factors that I had not realized about the trip was the time that I was going to need to keep my daughters on task and current with their schoolwork. Amanda was a seventh grader at the time and Sara was a third grader. Theirs was an issue of time on learning without walls but within limits. They succeeded and so too did I.

I visited eight schools from Brattleboro, Vermont to Walla Walla, Washington. The arrangements were made ahead of time. I had specific days and appointments at each school so our schedule revolved around those commitments. Each school that I visited was practicing a different schedule.

Two were using ninety-minute blocks, one was using an eighty-seven minute block, another a seventy-two minute block, while two schools were using close to fifty-minute blocks, one used fifty-five minutes and the other used fifty minutes. Finally, the last two schools used forty-five and forty-two minute blocks. Each of the schools had its own character, and each holds a place in my memory. The main reason for visiting these schools was to experience their schedules, to discover what the teachers and students had to say about them, and to observe first-hand the environment in which teaching and learning took place. I developed a set of questions to ask both the students (APPENDIX 2) and the teachers (APPENDIX 3) that would contribute first hand information to my exploration into teaching and learning.

It seems appropriate to start with the first school that I visited, Mt. Everett Regional High School in Sheffield, Massachusetts. It is my high school alma mater one of the first schools in Massachusetts to change to a ninety-minute block. The school operates the required one hundred and eighty days and was meeting the minimum requirement of 990 hours of class time long before it was mandated by the state. They offer their classes by semester and each student is able to take at least eight courses per year. Mt. Everett has been operating with this non-traditional block schedule longer than the other schools that I visited. At the time, the experience for all of the schools implementing a ninety-minute block ranged from zero to four years. The staff at Mt. Everett overall was very positive about the change. What intrigued me the

most was that the teachers whom I interviewed had been my teachers twenty years ago and they were ecstatic about the changes.

Their views about learning were that the students engaged in their learning process more than when they functioned in the traditional format. More students were on the honor roll and there were fewer failures. There were far fewer interruptions, if any, during the class and each student had fewer classes to keep track of which allowed them to gain more depth in each. The teachers felt that they had closure in each class - students did not run out the door as teachers shouted the last bit of information at them as they left.

In terms of teaching, the faculty felt rejuvenated. They had actually all gone to a weekend retreat the summer prior to adopting the ninety-minute block schedule, so they were very excited when they implemented the program. They had more in-service time as well as more prep time. Extra duties were no longer a part of their day. There were fewer study halls and fewer times during the day when students would have been in the halls. The year was divided into semesters so that in most cases the teachers knew what the schedule over several years would look like. Not only would the teachers know what they were going to be teaching, but also they were able to help their students plan a schedule that might best meet their needs.

It must be said, in spite of such positive results, that there are some negative aspects of this schedule according to the faculty at Mt. Everett. Some of the examples that they cited were that when a student missed a day it impacted their learning far greater than it had when they used to miss a time

period of forty to forty-five minutes. Guidance counselors were limited with the time available to see students because study halls were virtually non-existent. There was little to no time for team planning. When a student that had been in a traditional system transferred into Mt. Everett, it was difficult for that student to enter a class. If the student happened to enter in December, s/he might only be half through a course in their traditional school but be at the end of the course at Mt. Everett. The music teacher felt that the music program suffered without daily meetings because they followed an A/B schedule that meant that the students had four classes every other day. In light of this, it was decided to create a block in order to run a few key courses that were believed to need daily connections. One other stumbling block for the school was that some of the families were not convinced that the schedule and philosophy were the best for their children. What had worked for them when they went through high school was good enough for their children and all the changes that were being made seemed unnecessary to many of the parents. Despite the negative aspects of the schedule, the faculty felt that the positive attributes of the schedule outweighed the negative ones.

Brattleboro Union High School in Brattleboro, Vermont had also adopted a ninety-minute block schedule. They were quite new at it in comparison with Mt. Everett, but surprisingly their comments and attitudes were very similar. Brattleboro had not only chosen to implement a new schedule, but also had decided to implement a new foreign language curriculum. Students attended four classes per day while teachers taught three. Students had the

opportunity to take eight classes per year because the classes were set up on a semester basis. In the language classes, they had multi-level abilities that meant that the level at which each student was in a given class varied from a first year student level one to a second year student level one.

The positive aspects were that the students had the opportunity to go in depth with the subject matter. There was more time to do activities. The classes seemed to move at a faster pace and the details of the subject could be examined. The students felt that their classes were not as monotonous because there was more time to do activities in a longer block than there had been before. Students as well as teachers said that the students who normally were not workers in class could not hide. They could not get away with not doing the work. There was plenty of time to notice who was not prepared for class on any given day. There were fewer students in each class due to scheduling them on a semester basis, so each student felt that s/he received attention and that the teacher had time for them. Students thought that it was great that they might be able to graduate early if they chose their classes appropriately and did well enough to receive the necessary credits.

Again, it only seems fair to mention that although at the point of this observation and interview the positive aspects of the schedule far outweighed the negative, there were some negative. In some cases, the negative aspects did not have remedies, but several could be resolved with some small changes. Some classes were not available to every student when the student needed to have them. The students felt that classes in which the teacher lectured all of

the time were boring. When students missed a class, the impact was great. Study halls were too long and the schedule did not work well for students who did not want to be in school anyway.

Burlington High School in Burlington, Wisconsin was a school "on the move." They were using traditional, forty-five minute blocks in a seven period day, but were restructuring to a ninety-minute block the following year. There were various feelings about what was going on at this school. Not everyone was happy about the idea of restructuring. Those who were in favor of it were ecstatic, those who were against it were adamant. The students had not been consulted, and therefore had no input into the decisions that were being made around them. The school was also moving to "performance based learning" and the foreign language teachers felt that the ninety-minute blocks would allow for that concept to work well.

Some opinions about the idea of using ninety-minute blocks were similar to those that I had heard in other schools. Faculty members of schools that had changed to ninety-minute blocks and liked them believed that teachers who lectured would not like the ninety-minute blocks. Teachers who were accustomed to lecturing would have difficulty adapting and their students would not like what was going on in their classes. Teachers who were creative and had varied activities planned even in their short periods would survive well and actually excel in the ninety-minutes. An interesting view surfaced at this school. The foreign language teachers were not looking forward to the change because it would mean that they would be obliged to have all types of students in their

classrooms. Traditionally foreign language teachers would have only the honor or college preparatory students in their classes. The new schedule would mean a much more diverse group of students that might mean changes in approaches to teaching. There was also a concern about consistency and continuity. Several schools that had changed to ninety-minute blocks felt that the math, music, and foreign language programs needed to have classes everyday. In ninety-minute schedules, if a class met everyday it was only for a semester. If the class met every other day, it was for the year.

The faculty at Burlington High School was only able to express their beliefs based on what they thought might happen. There seemed to be equal numbers for as there were against the change. One observation that I had about several of the classes at this high school was that the students did not move from their seats during the entire class. As I mentioned earlier, they were not consulted about the changes that they were about to face. These two points of interest led me to wonder about the process of change and what might be some of the aspects that help it to be more successful or not.

Three more of the schools that I visited had forty-minute, fifty-minute and fifty-five minute schedules. The teachers involved in the forty-minute periods were perfectly content with their program. They had an eight period day and students were required to take five classes plus gym. They had labs and study halls to fill the other periods. The teachers were still being trained in traditional methods and there were no thoughts about change in the future.

In the other two schools that had similar schedules, one group of faculty felt that the time they had was not enough while in the other school the teachers were quite content. Harrison High School in Evansville, Indiana represented another school that was "on the move." The teachers were open and interested in new ideas and the possibilities for change. They felt that if fifty-minutes were all that they had to work with then they would continue, but that if they had the opportunity for change, then they would leap at the chance. They felt that they could not go in-depth in only fifty minutes and that more time was needed in order to provide for more detail. When the foreign language teachers wanted to work on activities that pertained to speaking proficiency, they would have to use three days to complete the task instead of one. Some of their comments about their schedule were that it was "piece meal," the days were "exhausting" and that there was "too much paperwork." Students had to focus on six subjects each day instead of four, which would have been their load in a ninety-minute block schedule.

The third school was in Walla Walla, Washington. The schedule in Walla Walla allowed for fifty-four minute blocks of time. The school ran for one hundred and eighty days and used a semester system for classes. The teachers that I observed used specifically traditional methods. Traditional methods in this case means that the teacher remained in the front of the class during the entire class. The students were seated in rows and did not move about or do any activities during the entire fifty-four minutes. The teachers seemed happy with the status quo and there was no apparent idea about

moving to any other kind of schedule. The students seemed accepting and were very polite and well behaved in spite of their lack of opportunity to participate in any type of engaging activities in the classroom. The students with whom I spoke did not seem to have any ideas for change nor did they seem to think that a change was necessary. They were content with their learning.

The last school that I visited was in Ketchum, Idaho. This school operated in seventy-two minute blocks in a trimester program. The school year was spread over one hundred and eighty days. Wood River High School was another school that was in transition. There was a sense of excitement among both teachers and students. The positive aspects of the longer block schedule were that there was flexibility, more time on task, time for questions, hands on activities, individual help, group work, in-depth learning, and practice. Some students felt that the teacher played an important role in the success of the class. They felt that the value of the class depended upon how well the teacher managed the class. If there was enough time to practice new concepts, vary activities, and examine new materials then the students valued that class. The students as well as the teachers liked the idea that they had fewer classes to be responsible for at any given time. By having fewer classes, the teacher was able to prepare more involved classroom activities and the student was able to delve deeper into the subject matter. The students also felt that they had more time to pursue other aspects of school such as extra-curricular activities as well as sports.

Two negative aspects of the schedule that were similar to other schools were that there might be a loss of continuity in some courses and that if the teacher only lectured during the seventy-two minute block, the class was boring. These were the only two negative comments that were voiced at this school. The teachers and students for the most part seemed to be very happy with the schedule in which they were working.

The observations and interviews that were the basis of this chapter show two opposing viewpoints. One view is that there is a need for change in how schools function in their use of time. The other is that there is no need for change. In three of the schools, there were more feelings against change than there were for change. The other schools were happy about the changes that they had made and were looking forward to continuing down the path of change to make what they were doing even better. Donald L. Breen, the English Department Head at Burlington High School in Wisconsin, talked about change and how he and his staff were going to deal with it in their school. He said that the effort to begin change was daunting and that the logistics seemed frightening. For many of the teachers, the urge to do nothing just because the task seemed so large was resisted. Small pieces of real change have a rippling effect that intensifies at a rapid rate. The key was to get started, to get that first domino to fall, and the place to start was with teachers, in the classroom.

His ideas speak for what many schools go through in order to deal with change. For some schools, the task is so great that they return to doing nothing. For others, the task is so worthy that they risk the change, one piece

at a time until the first domino falls. Changing both the times in which students learn and the way in which teachers teach is the worthy risk.

Chapter IV

A Practice and Survey Produced and Conducted at Drury High School

This chapter will offer you an example of one school, the school in which I teach, and its way of grappling with the use of time within constraints imposed by the State Department of Education in Massachusetts. Drury, like many schools in Massachusetts, was faced with a dilemma about four years ago. Not only was there an explosion in the country regarding school reform, but in the state as well. All schools, including secondary schools, were going to have to meet a minimum learning time for teaching and learning. The time in which students would be engaged in regularly scheduled instruction, learning activities, or learning assessments within the curriculum for study of the core subjects, labeled, "structured learning time," would have a minimum requirement. The new minimum of 990 hours per school year devoted to structured learning time was necessary in all public schools (The Commonwealth of Massachusetts Department of Education 1994). Our school was required to present a school improvement plan, first to the school council which is the Principal's advisory board, then to the school committee which is the governing body for the North Adams School Department, and finally to the State Department of Education.

Because of the new regulations imposed by the state, the teachers at

my high school were asked to form a scheduling committee. Joining the committee would allow me the perfect opportunity to convince my colleagues that the use of non-traditional blocks of time was the best manner in which students might learn. The committee along with the principal, Mr. Roger Cirone, decided to experiment with different uses of time and therefore set up a schedule that would allow teachers as well as students to experience a variety of blocks of time for their classes. Along with setting up a variety of scheduling possibilities, another colleague, Keith Davis, and I created a survey. The survey, we hoped, would offer us insight into the students' view of the varying schedules that they would be experiencing. The survey did not provide us with insight into our colleagues' point of view. There were other less formal ways that the information was gathered from the faculty, including informal interviews, discussion at faculty meetings as well as at department meetings, and general conversation during lunch.

There are seventy teachers at Drury High School resulting in several points of view. During that year of experiencing different uses of time, not only did we examine the use of non-traditional blocks but also the use of a "drop" schedule and a "rotating" schedule. A "drop" schedule allows students to have seven classes per year, but each day they only attend six. In this way the block programmed for each class was about fifty-five minutes. A "rotating" schedule allows students to have seven classes per year, but each day the time in which the class meets varies. This schedule does not allow for as many as fifty-five minutes per class and is very similar to the traditional

use of time considered when scheduling classes. The non-traditional blocks of ninety-minutes each were scheduled every Wednesday and Thursday. We practiced a regular, traditional schedule on Mondays, Tuesdays, and Fridays. There were two weeks set aside in the semester to try the drop schedule and then the rotating schedule. I would have liked to have been able to compare the non-traditional and the traditional schedules without having to include the other two schedules as well, but it seemed that limited time, as in our classes, was a factor again. We had a relatively short period to present and experiment with schedules that met the needs of everyone, teachers and students alike. Seventy personalities and opinions contributed to the discussion every time there were meetings, some positive and some negative. The task set before the scheduling committee was overwhelming. The committee succeeded in having the survey completed. The ninth through eleventh grade classes received the survey that included questions about each of the schedules. An explanation of the survey given to the students follows.

The students were asked a few simple questions. They were to indicate whether they liked a particular schedule or not and whether they felt that they learned more, learned less, or learned the same. On the survey, the students were also asked to indicate whether they took mostly honors classes, college preparatory classes, or standard classes. A question about how many study halls they had was also included. It was believed that students who might have a ninety-minute study hall on a regular basis would

find themselves bored and unhappy. By keeping the questions simple and few, it was our hope that the students would respond honestly about their opinions for the different schedules and about how they felt about their learning.

Three hundred thirty four students participated. Since there were three new schedules as well as our normal schedule included in the experiment, the numbers reflected by the survey include information about those as well. I will refer to the "block," which I have defined as the non-traditional schedule, and the "normal," otherwise known as the traditional, schedules as I discuss the information provided by this survey (APPENDIX 1).

Overall, the students liked the block schedule the best. Two of the three classes questioned preferred the block schedule. The one class that preferred the normal schedule only showed a difference of two votes between those in favor and those against. Honor and college preparatory students preferred the block while more students taking standard classes preferred the normal schedule. In response to the question about their perception of learning, the majority of the students felt that they learned the same in the block schedule as they did in the normal schedule. Honor students felt that they learned more while college preparatory students felt that they learned the same. The difference between those two groups was only two points. The students in the standard classes felt that they had learned the same.

Even though there were no specific questions on the survey that asked why the student might have liked or disliked a particular schedule, some

students chose to offer their opinions. One comment that prevailed was that the class and how it functioned strongly depended upon the teacher. If the teacher had a class with several variations and activities then the students tended to like it. "Learning is best when it provides many options and paths" (Jensen 1995). If the teacher lectured throughout the ninety minutes then the students dislike was intense.

The theory of multiple intelligences suggests that the classroom environment – or classroom *ecology*, if you will - may need to be fundamentally restructured to accommodate the needs of different kinds of learners. (Armstrong 1994 p.86)

The teacher who allowed students time to participate, process, and practice what they were doing in class gave them several paths to use for learning. The lecturing teacher did not allow the students any time for practice nor did they allow time for processing the information. Sitting still for ninety minutes is very difficult to do. If we had been given more time to experiment with different schedules, the results might have shown that more learning was taking place using the block schedule along with the kind of teaching it takes to allow for a positive learning environment. The teachers would have had more time to adapt to the new time frames and the students would have had more time to reflect upon their learning.

The use of time and how it was scheduled were the focus for the survey that we created. Time also became the issue when we dealt with the results of this survey. It took months to develop, distribute, and record the information for the survey. The time that we, Keith Davis and I, took to enter

the information, examine the results, and make copies was above and beyond our regular teaching duties. The time that was used to present this to the rest of the faculty as well as allow for processing it was less than ninety minutes. A vote was taken and a decision was made to use a schedule that would meet the requirements of the state but remain as close to a traditional schedule as possible. The majority of the faculty felt comfortable with what they had been doing in forty-five minutes. Many had been teaching in that style for as long as they had been teaching and the thought of change seemed too daunting a task to undertake.

The school did not adopt the use of non-traditional, ninety-minute blocks of time. Although a longer period, fifty-five minutes, is now offered for teaching and learning it still does not seem like enough for teachers to teach and students to learn. We have met the standard set by the state of Massachusetts for the time needed for learning, but the question still remain as to whether it has been divided appropriately for optimal teaching and learning.

Chapter 5 Conclusion

In conclusion, I have discovered that there are several issues raised when one looks at traditional vs. non-traditional blocks of time in relationship to teaching and learning. Time is a key factor in teaching and learning but it is not the only one. Students have a better chance to learn what they need when they are allowed more time to do so. Other factors that have surfaced as a result of my investigation include the impact of the teacher, the classroom environment, and what the expectations are according to the curriculum.

As long as the teacher offers "good teaching" practices in the longer blocks of time, then the best opportunity for maximum learning takes place. A longer block of time for learning will not necessarily mean that the student will have more time for greater depth in the subject matter, more time for practice, and more time for reflection unless the teacher makes it possible.

The longer block by its nature reduces the amount of time that the students are in the halls between classes and therefore decreases the number of times in a day that the student is expected to shift gear. This helps the student have fewer areas to concentrate on in a given day and allows the chance for better focus. It is also known that all students do not

learn at the same rate nor in the same manner, so having greater flexibility with time and with the way in which materials are presented helps all students have a better chance to learn.

The issue of change also impacted this study in that I discovered more people were opposed to change than I had imagined. The process of change is not an easy process and it takes time for change to occur. This seems obvious when one looks at the history of education, the reflections on education, as it is today, and the survey that I conducted at the high school where I continue to teach. It is still quite possible to see many classrooms set up in the traditional manner with the student's desks placed in rows and the teacher's desk as a focal point in the front of the room. In many classrooms across the country, the teachers are still teaching under the assumption that all students learn at the same rate and under the same conditions. Last but not least, the difficulty in the process of change can be portrayed by all of the examples of that which remains the same in the educational process today. There are those who offer a different approach but they work among those who are still as they were.

A move to using a non-traditional block forces certain changes but does not necessarily mean that good teaching and better learning will take place. It very possibly could allow for better learning but never guarantee it. There are too many issues. After all, we are humans not machines and therefore there are no easy answers to the dilemma of time and its

relationship to teaching and learning. There is, however, fuel for continued study which results in continued learning and hopefully better teaching.

Appendix 1

**SCHEDULE SURVEY
RESULTS**
Ninth through Eleventh Grade
1995
334 students participated

	Liked 90 minutes	Disliked 90 minutes	Learned more	Learned less	Learned same
Honors	86	36	68	13	41
College Prep	75	69	41	26	70
Standard	27	41	13	18	36
Total	188	146	122	58	147

Appendix 2

INTERVIEW QUESTIONS Students

1. Have you ever thought about the schedule in which you are learning? In what way have you thought about it?
2. How do you feel about the blocks of time in which you learn? (Are the blocks too long or too short?) Why?
3. What would be your ideal learning situation and why?
4. How long have you been learning with the schedule that you are in?
5. If you were to describe in two words or less what you feel about the learning situation you are in, what would those words be? How would you describe it?
6. Do you have any other comments that you think are important?

Appendix 3

INTERVIEW QUESTIONS Teachers

1. How do you feel about the schedule in which you teach? (Are the blocks too long or too short?) Why?
2. What affect do you think the schedule you are in has on learning?
3. What affect do you think the schedule you are in has on teaching?
4. How long have you been teaching with the schedule that you are in?
5. If you were to describe in two words or less what you feel about the teaching and learning situation you are in, what would those words be?
6. If you could design and ideal schedule, what would it look like and why?

Bibliography

- "Academic Learning Time." (1997, July 13). *Educational Psychology Interactive*.
- Anderson, L.W. & Walberg, H.J. (1995). Timepiece: Extending and enhancing learning time. *American Secondary Education*, pp. 37-39.
- Armstrong, T. (1994). *Multiple Intelligences in the Classroom*. Alexandria, VA: Association for Supervision and Curriculum Development
- Aronson, J.Z (1995). *Stop the clock: Ending the tyranny of time in education*. San Francisco, CA: Far West Laboratory for Educational Research and Development.
- Astuto, T. A. and Clark, D. L. & Read, A. & McGree, K, & deKoven Pelton Fernandez, L. (1994). *Roots of Reform: Challenging the Assumptions That Control Education Reform*. Indiana: Phi Delta Kappa Educational Foundation.
- Ballinger, C. (1988, February). "Rethinking the school calendar." *Educational Leadership*, pp. 57-61.
- Ballinger, C. (1995, November). "Prisoners No More." *Educational Leadership*, Volume 53.
- Berkey, N. (1994, October 24). "Fewer, longer classes get high marks." *Walla Walla Union-Bulletin*.
- Caine, R.N. & Caine, G. (1991). *Making connections: Teaching and the human brain*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Canady, R.L. & Rettig, M.D. (1995, November). "The power of innovative scheduling." *Educational Leadership*, pp. 4-10.
- Canady, R.L. & Rettig, M.D. (1995). *Block Scheduling: A Catalyst for Change in High Schools*. Princeton, NJ: Eye On Education.
- Carroll, J.M. (1990, January). "The Copernican Plan: Restructuring the American high school." *Phi Delta Kappan*, pp. 359-365.
- Compton's Interactive Encyclopedia* (1992-1996) [Computer program].

- Cremin, L.A. (1976). *Traditions of American Education*. New York: Basic Books, Inc..
- Cushman, K. (1995, November). "Using Time Well: Schedules in Essential Schools." *Horace: The Coalition of Essential Schools*, Volume 12, Number 2.
- Edwards, C.M. (1995, November). "The 4X4 plan." *Educational Leadership*, pp 16-19.
- Hackman, D.G. (1995, November). "Ten guidelines for implementing block Scheduling." *Educational Leadership*, pp. 24-27.
- Jensen, E. (1995). *The Learning Brain*. San Diego, CA: Turning Point Publishing.
- Kane, C.M. (1994, September). *Prisoners of Time research: What we know and what we need to know*. Washington, DC: U.S. Government Printing Office.
- Lawrence Lightfoot, S. (1983). *The Good High School: Portraits of Character and Culture*. New York: Basic Books.
- "Mastery Learning." (1996, March) *Educational Psychology Interactive*.
- McIlrath, D. A. & Huitt, W. G. (1995, December) "The Teaching-Learning Process: A Discussion of Models." Valdosta, GA: Valdosta State University [Internet]
- Murphy, R. J. (1994, October 21). "A matter of time: MTA takes issue with Board of Ed report." *MTA Today*.
- "Education: No time for learning." (1994, May 16). *Newsweek*.
- Perkins, D. (1993, Fall). "Teaching for Understanding." *American Educator*.
- Rettig, M. & Cannizzaro, J. (1996). "Block Scheduling: An Introduction." *Block Scheduling*. [Internet].
- Sizer, T. R. (1992). *Horace's Compromise: The Dilemma of the American High School*. Boston, MA: Houghton Mifflin Company.
- "A Transactional Model of the Teaching/Learning Process." (1997, October 26). *Educational Psychology Interactive*. [Internet].