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# Effects of block scheduling and specific demographic factors on teacher job satisfaction among small secondary schools in Arkansas

Brenda Jared Holder

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**EFFECTS OF BLOCK SCHEDULING AND SPECIFIC DEMOGRAPHIC  
FACTORS ON TEACHER JOB SATISFACTION AMONG  
SMALL SECONDARY SCHOOLS IN ARKANSAS**

**By**

**Brenda Jared Holder, B. S., M. S.**

**A Dissertation Presented in Partial Fulfillment  
Of the Requirements for the Degree  
Doctor of Education**

**COLLEGE OF EDUCATION  
LOUISIANA TECH UNIVERSITY**

**May 2003**

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THE GRADUATE SCHOOL

April 2, 2003

Date

We hereby recommend that the thesis/dissertation prepared under our supervision  
 by Brenda Jared Holder  
 entitled Effects of Block Scheduling and Specific Demographic Factors  
on Teacher Job Satisfaction Among Small Secondary Schools  
in Arkansas  
 be accepted in partial fulfillment of the requirements for the Degree of  
Doctor of Education

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## ABSTRACT

The purpose of this study was to explore the effects of block scheduling, as well as the effects of specific demographic factors, on teacher job satisfaction. All 25 of the 82 size AA schools in Arkansas which use block scheduling were asked to participate, and a systematic sampling of every third traditional schedule AA school yielded 27 schools with which to compare results. Of these 52 schools, teachers in 22 block scheduled schools and teachers in 18 traditional scheduled schools participated, yielding a total field of 601 respondents. The Minnesota Satisfaction Questionnaire was administered to teachers at each participating secondary school. In order to compare job satisfaction levels, questions were also asked concerning (a) gender, (b) age, (c) years of teaching experience, (d) educational background, (e) whether or not teachers were teaching in or outside of their field of certification, and (f) how many years teachers had taught under block scheduling.

Results of all seven hypotheses were analyzed by ANOVA. Results indicated that there were no significant differences in the levels of teacher job satisfaction between teachers in block schedule schools and traditional schedule schools. Among the twenty-one individual scales investigated for each demographic factor, three items showed significant differences in teacher job satisfaction levels. The paucity of significant differences suggests that administrators should look beyond school schedules for ways to attract and retain quality teachers.

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Author Brenda Jared Holder  
Date May 8, 2003



## **DEDICATION**

**To my family, who patiently did without my presence, my help, and my attention for many years, in order that I might accomplish this dream.**

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## CHAPTER 1

### Introduction

Block scheduling is a term broadly used to refer to any number of methods of scheduling classes, generally in secondary schools, in which the classes are significantly longer than the traditional 45- to 55-minute length. Researchers have studied the effects of block scheduling on: (a) the instruction of specific subjects (Lockwood, 1995; Queen, Algozzine, & Eaddy, 1996; Skrobarcek et al., 1997); (b) students' comprehension levels of certain subjects (Skrobarcek et al., 1997; Wallinger, 2000); (c) academics, in general, within particular schools (DiBiase & Queen, 1999; Erb, 2000; Reid, 1996); and (d) faculty, student, and community attitudes toward their local schools (Cates, 2000; Hurley, 1997a; Ullrich & Yeaman, 1999). There is a dearth of studies, however, on how block scheduling impacts teacher job satisfaction.

The effects of block scheduling on teacher job satisfaction was the subject of this research endeavor. Specifically, the differences between the job satisfaction levels of teachers in secondary schools where block scheduling is used and the job satisfaction levels of teachers in secondary schools employing traditional scheduling were investigated. In addition, several demographic factors will be investigated concerning teacher job satisfaction, specifically: (a) gender, (b) teacher age, (c) years of teaching experience, (d) educational background, (e) fields of certification, and (f) years of block scheduling experience.



## Purpose

More students, smaller classrooms and fewer teaching candidates are spurring what might be the biggest teacher shortage the country has ever faced. For the past 20 years an educational crisis has been looming on the horizon. There is a national teacher shortage that will get a lot worse before it gets better. It seems that the only thing tougher than recruiting qualified new teachers is retaining those already in existence. (Stager, 2000, p. 56)

The quality of education, specifically the quality of the nation's teaching force, is a major concern across the country. The failure to attract and retain able people is said to have reached crisis proportions (Ellis & Bernhardt, 1992). According to Stager (2000), American education is facing several crises at once. First, American schools will soon face the largest school-age population ever. Second, by 2010, it is projected that more than 2 million teachers will have to be replaced in the United States, just at the time when low unemployment levels present college graduates with a multitude of better paying, less stressful careers from which to choose. Third, of those teaching now, 20 - 25% of teachers are not certified in the fields in which they are teaching. Additionally, Ingersoll (1997) reported attrition rates as notoriously high, with more than half of all certified teachers leaving the profession within the first five years of teaching.

Since workload and time demands are among the major reasons identified as causing job dissatisfaction among teachers (Anonymous, 1992), many school administrators are using alternative scheduling methods in an attempt to (a) reduce teacher workload, (b) decrease paperwork, and (c) provide more classroom time for

teacher-student interaction (Skrobarcek et al., 1997). The scheduling methods commonly referred to as block scheduling were investigated in this research, since block scheduling has been suggested as one way to improve school climate, and, consequently, teacher morale (or job satisfaction), by creating a more relaxed environment for teachers and students alike (Shortt & Thayer, 1999). The purpose of this research was to determine the impact of block scheduling on teacher job satisfaction.

### Justification

Common problems facing institutions of education in America today and the reasons for these problems, including obstacles to attracting and retaining quality teachers and reasons for teacher job dissatisfaction, will be addressed in this section. An investigation of the following topics is addressed: (a) the concept of block scheduling and its possible attractions to educators, parents, and students, (b) what benefits block scheduling offers teachers and students, and (c) why research is needed to assess the effects of block scheduling on teacher job satisfaction.

#### *Obstacles in Attracting and Retaining Quality Teachers*

Three major trends are converging, which, if they continue, will result in simply too few qualified teachers to adequately staff all the nation's classrooms. Ingersoll (1997) reported these trends as (a) increasing teacher retirement rates due to a "graying" of the workforce and increasing teacher job dissatisfaction, (b) decreasing numbers of college graduates choosing to become teachers, and (c) increasing elementary and secondary student enrollments. Southworth (2000) claimed, "In the coming decade the population echo from the Baby Boom will threaten to swamp the

system” (p. 25). This is in addition to other class-size-related factors, such as legislated smaller class sizes and a great decline in the number of people who enter the areas of math, science, bilingual, and special education. Grissmer and Kirby (1997) described lower pupil/teacher ratios, rising teacher attrition rates, and a decline in the size of the teacher reserve pool as all combining to create a dismal future for the teaching profession.

#### *Increasing Retirements and Attrition Rates*

It is presently estimated that up to 30% of today’s teaching force will be eligible for retirement by 2008. Referred to as the graying of the teaching workforce, the cyclical demographics (caused chiefly by the aging of the baby boomers) have produced, and will continue to produce, major changes in the makeup of the teaching force including a significant decline in the reserve pool of experienced teachers (Grissmer & Kirby, 1997; “Student Numbers Boom,” 1997).

Problems of maintaining a motivated and satisfied workforce exacerbate the situation. Stressful conditions within the profession, such as (a) heavy workloads, (b) demanding parents, (c) bureaucratic and administrative pressures, and (d) limited opportunities for advancement, have combined to drive many teachers out of the profession (Ingersoll, 1997). These current situations make it difficult to recruit and retain good educators. High staff turnover is especially detrimental to young children because it undermines the stability of the adult-child relationship. “Children suffer because they do not have teachers who are adequately trained and because their young lives are disrupted each time a teacher departs” (Feeney, Christensen, & Moravcik, 2001, p. 51). Miller, Brownell, and Smith (1999) stated, “Understanding the variables

that contribute to a teacher's decision to leave the classroom may help in retention efforts that lead to stable and quality learning environments" (p. 209).

Ingersoll (1997) reported that the main reasons teachers need to be replaced are due to two related causes: (a) teachers seeking to better their careers and/or (b) teachers dissatisfied with teaching as a career. Ingersoll further attributed more than half of all teacher turnovers to these two reasons.

A 1995 comprehensive Metropolitan Life survey of American teachers by Louis Harris and Associates (cited in Latham, 1998) reported that almost half of the teachers surveyed, 46%, did not find their careers completely satisfying. While 38% of those who were somewhat dissatisfied or very dissatisfied planned to change careers soon, 7% of teachers who reported being very satisfied with their careers also planned to change careers within the next five years (Latham, 1998).

#### *A Growing Imbalance in Supply and Demand*

Stanish (1994) stated, "Possibly the greatest issue today in education is the exodus of the young and the talented from teaching" (p. 27). Perhaps for this reason alone, understanding is needed in order to create changes that would reverse the present trend of diminishing numbers of talented teacher prospects.

Research supports the contention that school administrators must do more to increase the attractiveness of the teaching profession (Abel & Sewell, 1999; Latham, 1998; Lester, 1990; Miller, Brownell, & Smith, 1999). Schools of education today are competing for talent to a greater extent than in the past. Careers with high salaries, opportunities for travel, and rapid advancement to higher levels of responsibility are attracting a greater percentage of the brightest students, especially females, who in the

past would have entered the field of education. Recent graduates who specialize in math and technology find their skills usually command a much larger salary in non-teaching jobs. For example, in Oklahoma, a beginning math teacher earns \$24,060, while that same professional can start out at up to \$50,000 in the computer field (Southworth, 2000).

Research on the backgrounds of teachers shows that the quality of those who choose to become teachers has been on the decline for several decades. Singer (1993) reported that special educators with high National Teachers Exam scores left teaching at higher rates than those with lower scores. Frank and Keith (1984) reported similar findings using verbal Scholastic Achievement Test scores. Leaf reported:

Not only has the average SAT verbal score of all students declined in the last thirty years, but so have those of successive cohorts of teachers. By the early 1980s, college students majoring in education averaged an SAT verbal score of below 400. A study done some years ago in Houston showed that applicants for teaching positions scored lower on basic skills tests in math than the average for high school seniors. In a Florida county, one-third of the teachers could not pass skills tests for eighth-graders. W. Timothy Weaver of Boston University has shown that education majors do more poorly on the SAT than majors in any other subject. Moreover, studies have shown that the education students who score highest are most likely to leave the field. Nor is the problem confined to the United States. Japan is the only nation among the economic leaders in the world which has elementary-school teachers who were

among the top half of their college classes in academic ability—undoubtedly one of the principal causes of its outstanding schools. (1997, p. 40-41)

Barter (1984) found that students enrolled in teacher education programs in American colleges ranked in the lowest quartile of all college students. Murnane and Vegas (1997) reported that, among female college graduates in the late 1980s, those with higher math and reading scores were less likely to become teachers than those with lower scores.

The Connetquot (New York) School District made the decision in 1997 to test its teacher applicants. The district used the State High School English Regents Test, a test that had been given to the state's own high school students for years, as its measuring device. Of the 758 licensed teachers who took the multiple-choice exam, only 202 answered the required 80% correctly (Leaf, 1997).

In addition to the apparent waning of the quality and preparation of teachers, changes in school policies are advancing the problem of teacher shortages, as well. Class size reduction measures together with pending retirements will cause California alone to need between 250,000 and 300,000 new teachers by 2008. The state of New York has decreed that, starting with the fall semester of 2000, the worst performing schools will not be allowed to employ any new teachers with temporary (emergency) licenses, and the employment of teachers on emergency credentials will be outlawed completely by 2003. Many other states are exploring similar policies (Stager, 2000).

Moreover, these trends appear at a time when enrollment in schools is expected to increase dramatically (Grissmer & Kirby, 1997). The United States is presently in a population surge that will raise school enrollments from 51.7 million in 1996 to 54.6

million by the year 2006, the largest school enrollment in American history. This surge accompanies the projected need for about 500,000 additional teachers between these same years, in addition to record numbers of replacement teachers for the current teachers leaving the workforce through retirement and various other reasons. (Hussar & Gerald, 1996). Stager (2000) estimated that the nation will have to replace two million teachers by 2010.

Martinez reported that:

Teacher quality is a critical element of successful school reform. It is estimated that 2.2 million additional teachers will be needed in the next decade to accommodate increasing student populations, class size reductions, and teacher attrition. Unfortunately, in order to meet these new demands, many states have lowered standards and hired teachers with marginal qualifications. More than 30% of newly hired teachers lack full certification when they enter the profession, more than 11% enter the classroom without a license, and more than one-quarter of public school teachers are teaching subjects out of their field of study. (*Yearbook 2001: The State of America's Children*, p. 66)

The end result of having fewer teachers in the workforce means offering the nation's children a lower quality of education. Because imbalances in the supply and demand of teachers are often resolved by adjusting teacher qualifications, the result of having fewer experienced, trained, and highly educated teachers in the workforce is a significant reduction in teacher quality (Baker & Smith, 1997).

### *Reasons for Teacher Job Dissatisfaction*

The importance of attracting and retaining qualified teachers is magnified by a decreasing teacher workforce. In a profession where, as Frymier (1987) said, “Motivation is as important as cognitive and professional skills” (p. 9), job satisfaction is especially important.

Knowing as much as possible about the teachers who leave the profession is vital, since not all teachers are professionally involved and/or committed in the first place. Yee (1990) stated, “Efforts to retain all teachers would be counterproductive, since some teachers should be allowed, or even encouraged, to leave” (p. 1). Yee continues, “What is known is that high rates of turnover carry serious implications for the quality of education . . . Frequent turnover inhibits the formation of a productive and coherent school culture” (p. 1).

Although educational researchers report a variety of reasons for teacher attrition, Ingersoll (1997) named job dissatisfaction as the single most important reason that record numbers of teachers are leaving the field. He considered the low status of the profession and high attrition problems to be among the top sources of job dissatisfaction within the profession. Gainey & Winn (1996) cited lack of respect for the profession, and Tack and Patitu (1992) cited low salaries and low prestige as causes of dissatisfaction. Tack and Patitu also stressed that today’s relatively high rates of teacher dissatisfaction indicated a crisis in attracting prospective teachers into the field. Job dissatisfaction in the forms of high stress (Friedman, 1993) and lack of change (Gainey & Winn, 1996) were also considered probable causes of diminishing teacher prospects. Low teacher morale (LeCompte & Dworkin, 1991; Lester, 1990),



the generally dissatisfied attitude of the public concerning the state of public education (Wadsworth, 1997), and the increasing number of career opportunities open to women (Murnane & Vegas, 1997) can all be considered major contributors to this problem of teacher job dissatisfaction.

Herzberg stated in his classic book, *The Motivation to Work* (1959), that job satisfaction resulted in increased productivity, decreased turnover, decreased absenteeism, and smoother working relations, as well as improved morale and greater self-realization to the individual. It would seem, according to the information offered in this review, that Herzberg was defining many of the specific issues facing the teaching profession today.

#### *Benefits of Block Scheduling*

It is possible that the restructuring of the secondary school day alone could reduce much present-day teacher stress. Research on vocational teachers indicated “the single most important negative influences on beginning [vocational] teachers is the educational system itself” (Camp & Heath-Camp, as cited in Adams, Heath-Camp, & Camp, 1999, p. 134). The authors concluded, “School systems and educational administrators could improve the conditions that contribute to many of the stressors [found]” (p. 142).

The management of time within American school systems has been of particular interest to educators, especially since the publication of *Prisoners of Time* (1994), a 59-page report based on a 24-month investigation by the National Education Commission on Time and Learning. Established by the Education Council Act of 1991, the Commission was to be an independent advisory body charged with

reviewing the relationship between time and learning in United States schools. The report overwhelmingly found time constraints in United States schools to seriously limit teachers in their efforts to teach and students in their efforts to learn. Written in clear, concise language, the report leaves no doubt as to the opinions of Commission members:

*Learning in America is a prisoner of time. For the past 150 years, American public schools have held time constant and let learning vary. The rule, only rarely voiced, is simple: Learn what you can in the time we make available. It should surprise no one that some bright, hard-working students do reasonably well. Everyone else--from the typical student to the dropout--runs into trouble. Time is learning's warden. Our time-bound mentality has fooled us all into believing that schools can educate all of the people all of the time in a school year of 180 six-hour days. The consequence of our self-deception has been to ask the impossible of our students. We expect them to learn as much as their counterparts abroad in only half the time.*

If experience, research, and common sense teach nothing else, they confirm the truism that people learn at different rates, and in different ways with different subjects. But we have put the cart before the horse: our schools and the people involved with them—students, parents, teachers, administrators, and staff—are captives of clock and calendar. The boundaries of student growth are defined by schedules for bells, buses, and vacations instead of standard for students and learning. (National Education Commission on Time and Learning, 1994, p. 7)

The National Education Commission on Time and Learning (1994) reported that schools have built learning environments based on premises that educators recognize as being untrue, such as (a) students arrive at school ready to learn in the same way and on the same schedule, (b) nonacademic purposes can encroach onto academic time without affecting learning, and (c) yesterday's calendars remain good for schools today despite major societal changes. Another untrue premise upon which schools have built learning environments is schools can be transformed without giving any additional time to teachers for purposes of reevaluating teaching styles and revamping administrative bureaucracies. Yet another premise is our society can reasonably expect our schools to compare favorably with the schools in other countries from within the time-bound system that the Commission claims is already failing them. The report calls these assumptions a "recipe for a kind of slow-motion social suicide" (p.8).

Carroll (1990), superintendent of Masconomet (Massachusetts) Regional School District, initiated early studies in the experimental restructuring of time in secondary schools. His scheduling concepts were among the first of those commonly referred to as alternative or block scheduling. He called his schedule the Copernican Plan due to its revolutionary rejection of the time-honored Carnegie unit, and with this plan proposed a fundamental change in the use of time in secondary schools. The newly created arrangement encouraged longer class periods (up to four hours long per day) which would meet for only a portion of the school year. Carroll claimed that by restructuring the high school schedule, the (a) average class size could be decreased in size by 20%, (b) number of course offerings could be increased by 20%, and (c) total

number of students which teachers work with on a daily basis could be reduced by 60% to 80%.

Carroll stated:

There is nothing wrong with the traditional Carnegie structure except that it is a structure under which teachers can't teach effectively and students can't learn effectively . . .its only justification is that it has become traditional; it is one of the few dominant characteristics of today's world that is familiar to the students, their parents, and their grandparents. (*The Copernican Plan Evaluated*, 1994a, p. xi)

Block scheduling has been controversial since its popularity began increasing in the late 1980s, largely because much of the early literature on the subject was composed of testimonials, opinion papers, and personal observations, with little empirical data to support or oppose the practice. However, it is estimated that about half of the country's secondary schools are now using some form of alternative or block scheduling (Black, 1998; Zepeda, 1999). Further, as increasing numbers of schools across the country have adopted alternative types of scheduling, more hard data have been provided by research (Eineder & Bishop, 1997; Rettig & Canady, 1999). While the focus of most studies has been on the effects of block scheduling on student academic achievement, findings of some studies have also detected positive changes in such things as school climate and teacher satisfaction (Cates, 2000; Erb, 2000; Hurley, 1997a; Hurley, 1997b).

A survey by Shortt and Thayer (1999) and research by Strock and Hottenstein (1994) revealed that block scheduling apparently affects several indicators of school

climate, including (a) a more relaxed atmosphere for teachers and students, (b) reduced numbers of discipline referrals, (c) higher teacher morale, and (d) decreased teacher absenteeism. Many researchers have found that teachers report less stress under block scheduling than under traditional scheduling (George & McEwin, 1999; Gerking, 1995; Hurley, 1997a; Rettig & Canady, 1999).

Besides producing a more positive school climate, additional advantages of block scheduling that have been cited include (a) the widespread use of more active teaching methods, (b) a smaller number of students with which teachers must deal, and (c) greater depth in the exploration of subjects (Carroll, 1994c; Rettig & Canady, 1999). Canady (1990) listed benefits of block scheduling as (a) fewer disruptions and reduced disciplinary problems, (b) less fragmentation, (c) reduced student-teacher ratio, (d) increased time for planning and collegial interaction, and (e) increased opportunities for creativity in selecting teaching methods. Other benefits may include (a) less time in start-up, attendance-taking, and clean-up activities; (b) more effective student evaluation; (c) more individualized instruction; and (d) less record-keeping (Skrobarcek et al., 1997). Other researchers report similar findings (Day, 1995; DiBiase & Queen, 1999; Dyrli, 2000; Edwards, 1993; Hurley, 1997a; Kissler, 1995; Lockwood, 1995; Ryan, 1991; Walker, 1999).

While examining levels of job satisfaction as an important aspect to research, especially concerning block scheduling (Ellis & Bernhardt, 1992; Gainey & Winn, 1996; Grissmer & Kirby, 1997; Lumsden, 1998), a scarcity of research addressing the effects of block scheduling on teacher job satisfaction was found. Although Loberg (1998) reported that teacher satisfaction was increased among teachers involved in

block scheduling, the author's use of the term "satisfaction" concerned pedagogy rather than "job satisfaction" in general.

*The Effects of Block Scheduling on Attracting  
and Retaining Teachers*

Research to determine if block scheduling increases job satisfaction among teachers could give direction to school administrators in attracting and retaining good teachers. If there is a significant difference in levels of teacher job satisfaction between schools using traditional scheduling and schools using block scheduling, this information could be used by school administrators to help lessen the problems of teacher attrition due to job dissatisfaction. If teachers in schools with block scheduling feel their workloads and stress levels are lower, and, as a result, their intrinsic motivation is increased, the consequent improved morale may help compensate for other drawbacks such as low pay and lack of job status.

**Theoretical Framework**

The growing number of teachers who indicate dissatisfaction with teaching as a career may be dissatisfied because certain needs that they possess are not being met. Maslow (1954) divided human needs into five categories: (a) physical, (b) security, (c) social, (d) esteem, and (e) self-actualization. These categories formed the basis for Herzberg's Hygiene-Motivation Theory (1967). Several researchers applied this concept to the workplace (Frataccia & Hennington, 1982; Quaglia, Marion, & McIntyre, 1991).

Herzberg (1967) claimed that humans have two basic needs--psychological growth and the need to avoid unpleasantness. Psychological growth corresponds to the

motivation aspect of Herzberg's theory and to the top two needs espoused by Maslow's Hierarchy--esteem and self-actualization. Translated into the workplace, these needs include the need for advancement, recognition, autonomy, and increased responsibility. The need to avoid unpleasantness corresponds to the hygiene aspects of Herzberg's theory and the basic three needs of Maslow's Hierarchy--physical needs, security needs, and social needs. If these last three needs were translated into a description of the workplace, they would be seen as concerns such as (a) job security, (b) social support and acceptance by peers, (c) safety, and (d) other working conditions (Frataccia & Hennington, 1982).

Herzberg (1967) asserted that when workers were dissatisfied with a job, it was the hygiene component--the extrinsic aspects (or working conditions), that caused workers to be unhappy. Conversely, when workers were satisfied with their jobs, it was the motivation component--the intrinsic aspects of the job that the workers find satisfying.

Research has shown that increased interaction among teachers has the potential to improve secondary teachers' social support as well as to improve the working conditions at secondary schools (Yee, 1990). If this is so, then according to Herzberg's theory, teacher job satisfaction levels should be higher in schools that use block scheduling than in schools where traditional scheduling is used. This, then, is the question that emerges: Do teachers teaching in schools using block scheduling enjoy a higher level of job satisfaction than teachers teaching in schools using traditional scheduling?

Additionally, while conducting this research, it could prove helpful to learn more about teacher job satisfaction in relationship with certain demographic data. For example, how do gender differences affect teacher job satisfaction levels? Does the age of a teacher affect his or her level of job satisfaction? What about the number of a teacher's years of experience—does this have any effect on his or her level of teacher job satisfaction? How does the educational background of a teacher (whether a teacher has (a) less than a bachelors degree, (b) a bachelors degree, or (c) a masters degree) affect that teacher's job satisfaction level? Do teachers teaching in fields in which they are not certified experience different levels of job satisfaction than teachers teaching in fields in which they are certified? And finally, how does the number of years of experience teaching in block scheduling affect teachers' job satisfaction levels? It was the purpose of this investigation to add to the body of knowledge concerning teacher job satisfaction in each of these areas.

### Research Hypotheses

For the purposes of this study, the following hypotheses were proposed:

1. There are significant differences in the job satisfaction levels of teachers using block scheduling and teachers using traditional scheduling.
2. There are significant differences in the job satisfaction levels of males and females.
3. There are significant differences between teachers' age and their job satisfaction levels.
4. There are significant differences in the job satisfaction levels of teachers according to their years of teaching experience.



5. There are significant differences in the job satisfaction levels of teachers without college degrees, teachers with bachelors degrees, and teachers with masters degrees and above.
6. There are significant differences in the job satisfaction levels of teachers who are teaching in fields in which they are certified and teachers who are teaching in fields in which they are not certified.
7. Among teachers using block scheduling, there are significant differences between job satisfaction levels and number of years of teaching experience using block scheduling.

### Definitions

For purposes of this study, the following terms will be defined in the following manner:

*4x4 block schedule* -- This is a type of block scheduling in which students take four extended length classes (usually around 90 minutes) everyday, completing each course in one semester, and then take four different extended length classes the next semester (Wallinger, 2000).

*AA Schools* -- These include all secondary schools in Arkansas that have student populations (based on a three year average) of (roughly) between 110 and 200 students in grades ten through twelve, as categorized by the Arkansas Activities Association (L. Taylor, personal communication, December 10, 2001).

*Alternating day schedule* -- This is a type of block scheduling in which students take four extended length classes (usually around 90 minutes) one day (Day A) and four

different extended length classes the next day (Day B), and this alternation of Day A and Day B continues throughout the school year (Wallinger, 2000).

*Block scheduling* -- Although there are many variations in methods of alternative scheduling, most of them are based on creating longer blocks of time for separate classes during the typical school day. In this study, block scheduling will refer to any type of alternative scheduling based on creating longer class times to allow flexibility for varied instructional activities, including alternating day and 4x4 (Black, 1998; Canady & Rettig, 1993; Cawelti, as cited in Loberg, 1998; Day, 1995).

*Burnout* -- This is a phenomenon generally recognized according to three psychological constructs: (a) high levels of exhaustion, (b) great sense of depersonalization, and (c) perceived levels of reduced accomplishment (Gold, Roth, Wright, & Michael, 1991). There is no clear cut point at which someone becomes burned out, but a person's score is placed on a continuum of lower to higher feelings on burnout (McIntyre, 1982). In this study, burnout will be discussed as the major contributor to teacher job dissatisfaction (Byrne, 1998).

*General job satisfaction* -- Also called (in this study) teacher job satisfaction or just job satisfaction, this is a level of satisfaction or dissatisfaction that teachers may feel about their present working conditions and their choice of career in education as determined by their score on the Minnesota Satisfaction Questionnaire. For the purposes of this investigation, this term refers to a general score of from 20 to 100 based on twenty items (one from each scale) on the MSQ Long Form (Weiss, Dawis, England, & Lofquist, 1977).

*Minnesota Satisfaction Questionnaire (MSQ)* -- This is a survey designed to measure levels of job satisfaction levels among employees in a variety of career and job fields. Although it is available in both a long and a short form, for the purposes of this investigation, only the long form of the survey will be used. The long form of the MSQ allows a thorough examination of 21 different aspects of job satisfaction. These scales include 20 aspects of job satisfaction: (a) ability utilization, (b) achievement, (c) activity, (d) advancement, (e) authority, (f) company policies & practices, (g) compensation, (h) co-workers, (i) creativity, (j) independence, (k) moral values, (l) recognition, (m) responsibility, (n) security, (o) social service, (p) social status, (q) supervision-human relations, (r) supervision-technical, (s) variety, and (t) working conditions. Each scale consists of five different phrases, spaced at roughly 20-item intervals, that are designed to measure diverse facets of the scale. For example, the five phrases designed to measure variety are: (a) The variety in my work, (b) The chance to do different things from time to time, (c) The chance to try something different, (d) The chance to do something different every day, and (e) The chance to do many different things on the job. Each phrase is rated by participants along a continuum of five possible answers: (a) Very Dissatisfied, (b) Dissatisfied, (c) Neither, (d) Satisfied, and (e) Very Satisfied. Additionally, a General Satisfaction scale, consisting of 20 phrases (one from each scale) is also obtained and rated numerically from 20 to 100. It is this scale that will be used to compare satisfaction levels of block scheduled schools to traditionally scheduled schools (Weiss et al., 1977) (see Appendix A).

*Secondary schools* -- This study will include only those secondary schools from among the 107 Arkansas schools that are classified according to the Arkansas Activities Association as AA schools (because of their student populations). Only grades seven through twelve will, for the purposes of this study, be considered secondary (see Appendix A).

*Secondary teachers* -- For the purposes of this study, secondary teachers will be defined as those teachers currently employed in public schools who are teaching students in grades seven through twelve. This definition will include teachers of all subjects, including coaches, special education teachers, music and fine arts teachers, and others who spend over half their workday in independent classroom teaching. It will not include teachers' aides, tutors, librarians, counselors, or administrative staff.

*Small schools* -- For purposes of this study, this term encompasses all AA secondary schools in Arkansas that have student populations (based on a three year average) of (roughly) between 110 and 200 students in grades ten through twelve, as categorized by the Arkansas Activities Association (L. Taylor, personal communication, December 10, 2001).

*Teacher reserve pool* -- The teacher reserve pool refers to those fully-certified teachers who are not presently employed as teachers, but who could feasibly be persuaded into returning to the field, if necessary (Grissmer & Kirby, 1997).

*Traditional scheduling* -- Most secondary school administrations nationwide have traditionally arranged their secondary school schedules into daily sessions of six, seven, eight or more classes. These classes are usually only 40-50 minutes long, and students often spend up to 35 minutes a day in "passing," or in transition from one

class to another. This type of daily school schedule will be referred to as traditional scheduling (Canady & Rettig, 1993; Carroll, 1994c; Edwards, 1993).

## CHAPTER 2

### Literature Review

This investigation was designed to determine if there is a relationship between job satisfaction and block scheduling. Because there is a dearth of literature on the specific relationship between these issues, the following literature review will be present each topic separately.

The first section will summarize research on the major sources of teacher job dissatisfaction, including (a) workload and time demands; (b) social isolation; and (c) working conditions; followed by a review of the effects of extreme stress, or burnout, in education. The review of literature on burnout is included because job stress among teachers (a level, or stage, of burnout) appears to be a major cause of attrition (Adams, Heath-Camp, & Camp, 1999; Guglielme & Tatrow, 1998; Heston, Dedrick, Rashke, & Whitehead, 1996; Huston, 1989). Although the terms burnout and job dissatisfaction are not synonymous, high levels of stress, or burnout, and teacher job dissatisfaction are (a) closely related (Adams, Heath-Camp, & Camp, 1999), (b) positively correlated (Saros & Saros, 1987; Yee, 1990), (c) often used together (Yee, 1990), and (d) often used interchangeably (Abel & Sewell, 1999; Anderson, as cited in McIntyre, 1982; Davis & Wilson, 2000; Harden, 1999). Because of the close correlation of the terms burnout and teacher job dissatisfaction, for the purposes of this literature review, the terms will sometimes be intermingled according to the term used by the authors of the

the authors of the various articles reviewed. In the section on burnout, topics include: (a) definitions and characteristic results of burnout, (b) effects of burnout on teachers, (c) effects of burnout on levels of teacher job dissatisfaction, and (d) effects of burnout on the quality of education.

The second section of this literature review summarizes current educational research about block scheduling. For purposes of this study, the term block schedule is used to designate any schedule embraced by American schools for the express purpose of allowing longer time periods in fewer classes per school day. In contrast to the plethora of studies spawned by the topic of teacher job dissatisfaction, the subject of block scheduling has generated relatively few true empirical studies. While there is no scarcity of literature pertaining to the topic, much of it is emotional, unabashedly biased, or simply personal opinion (Dyrli, 2000; Snyder, 1997; Veal, 1999; Wronkovich, 1998). Block scheduling research findings begin with an explanation of the difficulties of finding objective data. Then, using empirical data, the overall effects of block scheduling on the quality of education are reviewed, including the effects on (a) teacher job satisfaction; (b) specific subject areas; (c) entire schools, which include such things as school climate and attendance rates; (d) academics in general; and (e) the attitudes of stakeholders. Next, literature is summarized (including non-empirical data) on the attitudes and beliefs about block scheduling. This includes opinions of leading authorities as well as opinions of stakeholders in schools having experienced block scheduling. This portion of the review of literature is categorized according to findings on (a) workload and time demands, (b) social isolation, and (c) working conditions. This section concludes with a summary of negative views concerning

block scheduling. The literature is explored primarily in an effort to examine how research illustrates that block scheduling could be a potential partial solution to the problems of teacher dissatisfaction.

### Teacher Job Dissatisfaction

The stress of being an educator has increased greatly since the 1980s, the years some of the following investigations were made. However, this research can be of historical value as one examines how many of the sources of teacher stress have remained constant and are still being reported as major causes of teacher job dissatisfaction today.

Several causes of teacher job dissatisfaction will be reviewed in the following section. These three major areas affecting teachers include (a) the typical workload of and time demands made on secondary teachers, (b) the social isolation experienced by teachers in traditional secondary schools, and (c) the working conditions of teachers in secondary schools across the country. For the sake of clarity, social isolation is reported in two subsections in this review: social isolation caused by highly bureaucratic school systems, and social isolation caused by lack of positive peer or superior relationships.

#### *Workload and Time Demands*

Several investigations have been made in efforts to discern specific sources of dissatisfaction among teachers, and many of these inquiries have yielded similar results. Two of the most commonly reported sources of dissatisfaction among teachers were workload and time demands (Abel & Sewell, 1999).



In Connecticut, a group of 360 public high school teachers with from 5 to 15 years of experience were systematically quota sampled (30 teachers from each of 12 subgroups). The subgroups were established by school setting (urban, suburban, or rural), subject taught, and teacher gender. When asked the most important reason for thinking about leaving the profession, 34% indicated too much work to do or too little time to accomplish it. In fact, role overload was among the most frequently cited reasons associated with teacher job dissatisfaction (Litt & Turk, 1985).

In research commissioned by the Canadian Teachers' Federation in 1992, over 17,000 teachers across Canada were surveyed and 223 were interviewed. As found in previous reports, this investigation revealed the teachers' perceptions of the largest contributors to stress as being workload and time demands, among others. Seventy-five percent of the respondents agreed that they did not have sufficient time to provide adequate help to students who were having difficulty. Over 50% said they were exhausted at the end of the day; and almost 50% stated that their workload was too heavy to do their work well. Teachers who were categorized in the high stress group were far more likely to agree that they had too much paperwork, too many deadlines, and too little preparation time (Anonymous, 1992).

Heston et al. (1996) reported findings from a survey to determine the specific sources of job satisfaction and stress among public school band directors involving 120 participants in school districts of various sizes in a Midwestern state. The survey used consisted of four parts: (a) demographic information, (b) 10 factors which directors were to rank according to how each factor contributed to their general job satisfaction, (c) 10 potential stressors which participants were to rate on a Likert scale

according to their own perceptions as to sources of their own stress, and (d) three open-ended questions which asked for directors' personal sources of job satisfaction and dissatisfaction as well as for their own individual suggestions for reducing stress in the work environment. Findings were remarkably consistent with those described in other educational literature.

The most important source of satisfaction among respondents was student success, and teaching load was one of the major contributors of job stress. In answer to the open-ended question concerning satisfying facets of their jobs, "Receiving support from colleagues, parents, and administration" was second only to the intrinsic reward "Working with students." In response to the question that asked respondents to list things about their jobs that were not satisfying, "lack of support from parents, administration, and community" and "workload" were the two answers most frequently given. When asked to list sources of coping mechanisms, various sources of social support were most often mentioned, specifically including spouses and coworkers. The researchers' recommendations (based on data from the study) included developing high-quality interpersonal relationships between students and teachers, and between teachers and administrators or coworkers (Heston et al., 1996).

Similar findings concerning workload and time demands have been reported by Byrne (1994), Huston (1989), and Luckert (1999). Byrne investigated the impact of organizational factors and specific personality factors (self-esteem and external locus of control) on three facets of burnout according to the Maslach Burnout Inventory, (2<sup>nd</sup> ed.) (Maslach & Jackson, 1986) and found work overload to be specifically related to burnout. Huston found that teachers expressed a need for

smaller classes, more consistent and meaningful discipline, the use of aides for non-teaching functions, and more preparation and less supervisory time—all facets of either workload or time constraints.

In an Australian investigation of teachers' social support, one thousand questionnaires were distributed among 109 New South Wales schools of various types throughout the country. Four hundred and eighty-seven questionnaires were returned, with 119 teachers volunteering to be interviewed. Of these, a random sample was drawn resulting in 23 semi-structured telephone interviews. The questionnaire consisted of two sections: the Teachers' Attribution of Responsibility for Stress Questionnaire (TARSQ) (McCormick & Solman, 1992), and a second section eliciting biographical data. In analyzing data, researchers found "work overload" to be the most common response from all teachers to the question of "What causes you the most stress?" "Relationship problems" with administration and colleagues was also found to be a significant cause of stress among teachers. The study concluded with recommendations for schools to facilitate the development of greater collegial support, particularly in secondary schools (McCormick, 1997).

Luckert (1999) compared teachers to football coaches in making a point that teachers have far too many students, too little time, and too little assistance to meet their students' needs in satisfactory ways. Luckert emphasized that football coaches would not even attempt to teach 150 players one hour per day and hope to win the Friday night game—they concentrate instead on 40 to 50 highly motivated players and utilize three or four assistant coaches to help teach the skills needed. Teachers,

however, with as few as 125 students would still require almost 42 hours per week just to read and respond to each student for only 20 minutes apiece.

### *Social Isolation*

Lack of social support and/or lack of professional interaction can contribute to teachers' feelings of failure. As do other social service professionals, teachers strive for a sense of capability or psychological success in their work. This is how they gain self-esteem. By feeling they have performed competently in a valuable venture, they thereby gain a sense of fulfillment or achievement. Therefore, when social and professional interaction among peers does occur, it can provide a critical source of professional identification and growth. Two reasons teachers report a lack of social support on the job are highly bureaucratic school systems and a lack of positive peer or superior relationships (Yee, 1990).

### *Highly Bureaucratic Systems*

There is general agreement among educational researchers that secondary teachers experience job dissatisfaction at a greater rate and degree than elementary teachers (Ellis & Bernhardt, 1992; Gold, Roth, Wright, & Michael, 1991). Schamer and Jackson (1996) proposed that one reason for this inequity is the "typical structure of the [high school] day" (p. 30).

Teachers in classrooms in schools with traditional schedules have long complained of the isolation they feel during the workday. Conference periods are often too busy to allow for meaningful sharing with fellow teachers, and there is little or no other time in the schedule for teachers to confer with each other concerning teaching methods, discipline problems, and the like. The antidote for this situation, providing

some method of social support for teachers during the workday, has been identified as a resource that enables individuals to cope with dissatisfaction and stress (Abel & Sewell, 1999; Cockburn, 2000; McCormick, 1997).

The structure of the organization itself and the jobs in it can either enhance or inhibit the potential for worker social support. According to House, when interaction with coworkers is limited, the bulk of social support often falls to work supervisors, who are often limited in their abilities to provide support due to any number of reasons. Some include the sheer number of employees they supervise, the nature of their supervisory tasks, or the relationships among supervised employees. Too, some workers do not have a supervisor or have one only in the strictest sense of the word. House suggested that a positive response to these situations should be that supervisors allow (or even require) the formation of groups of subordinates to plan and/or organize work activities (House, 1981).

Socialization experiences and the development of competence through training and interaction with colleagues are pivotal to the notion of bonding to a profession, according to Becker & Carper (cited in Yee, 1990). Literature on professional development in teaching emphasizes the important role that collegial exchange and collaboration play in successful schools. Workplaces that empower teachers to take part in making the decisions that will affect their own work conditions contribute to professional bonding and satisfaction with teaching as a career. The reverse has also been found to be true: bureaucratically controlled schools where teachers have little input produce dissatisfied and stressed teachers with low levels of involvement. Yee

claims this knowledge argues for the reorganization of the workplace in order to support and encourage collegial exchange and feedback.

Opportunities for collegial interaction are teachers' most valued form of professional stimulation. High-involvement teachers generally report more exchange with colleagues than do low-involvement ones, who often experience isolation from their peers and are more likely to be dissatisfied with teaching. Most teachers, however, report that their opportunities for peer exchange are inadequate. Faculties are often fragmented in the sense that they seldom are able to observe each other teach, to give feedback, to plan lessons or to solve problems together. (Yee, 1990, p. 113)

Saros and Saros (1987) explored the extent to which specific work factors predicted burnout among Canadian teachers, and their findings included information concerning the importance of social support among teachers. A 72-item survey composed of five sections was used to collect data. The sections included (a) demographic information, (b) a job satisfaction instrument derived from various sources (Holdaway, 1978; Rice, 1978; Weiss et al., 1977), (c) a job characteristics instrument (role clarity and job challenge) (Walsh, Taber, & Beehr, 1980), (d) the Maslach Burnout Instrument (Maslach & Jackson, 1981), and (e) a personal comments section. The sample investigated was 635 elementary and secondary teachers and 128 administrators in a large Western Canadian school district. Findings of this investigation suggested that the organization of schools, namely, highly bureaucratic systems, may both increase stress levels and decrease levels of job satisfaction among teachers. Such organizational systems "would exhibit more significant and potentially

dangerous levels of [stress] compared with teachers in democratically-run schools characterized by collaborative decision-making procedures” (Saros & Saros, 1987, p. 226).

Quaglia, Marion, and McIntire conducted research about teacher dissatisfaction at the University of Maine in 1991. In this inquiry, 477 teachers from 20 Maine communities took part in a Community Attitude Toward Education survey conducted by the Center for Research and Evaluation of the College of Education. This included completion of an extensive Teacher Opinion Inventory, of which 27 items were selected for analysis to assess teacher attitudes. Among information disclosed by the report was the revelation that 79% of teachers categorized as dissatisfied felt that teachers were not given enough time to communicate and coordinate with one another (1991).

Successful schools tend to involve teachers in collaborative efforts and allow significant staff input (Effective Schools, 1983). McNeil (1986) reported that schools organized around “hierarchical, bureaucratic control” deprive teachers of meaningful input, and, as a result, teachers and students alike tend to regard education less seriously. This yields the ultimate result of low student and staff involvement and negligible feelings of loyalty to the school. Byrne (1998) postulated that the effectiveness of a school would be increased if school-based decision-making could be broadened into all areas of the school, encouraging true collegiality among teachers. In addition, Yee (1990) reported that highly bureaucratic schools generally experience poor scholastic efforts on the part of their students.

Miller, Brownell, and Smith (1999) surveyed 1576 special education teachers in Florida to examine the teacher and workplace variables that contribute to their propensity to leave or stay in the same school as special education teachers. Their findings implicated that it was the teachers' perceptions of school's climate and levels of stress that were the significant factors in determining the teachers' decisions affecting their employment. The authors offered several suggestions for reducing attrition based on improving perceptions of school climate and stress, including increasing collaborative decision-making and increasing collegiality.

*Lack of Positive Peer or Superior Relationships*

The second largest contributor to stress, according to the Canadian Teachers' Federation survey mentioned previously, was found to be the lack of encouragement and support from administrators. This was described in relation to teacher satisfaction as the "degree to which principals recognize teaching ability, consult teachers about policy decisions, and generally respect them" (Anonymous, 1992, p. 13).

House theorized in his book, *Work Stress and Social Support* (1981), that time spent with coworkers can help to buffer the impact of the unavoidable crises and stresses of work, and that work-related sources of social support are, in fact, the most effective sources of reducing work stress. Simply put, social support is likely to make workers happier as well as more productive. If social support is to be effective in reducing stress or burnout, all people must be able to obtain support from the persons with whom they routinely work. Coworkers are more accessible, more familiar and sympathetic in their experiences and orientations, and more attuned to the unique



problems of their work situations than even any health professional or counselor could be.

This concept of social support as an aid to alleviating stress among teachers was the subject of a study entitled, "Job-Related Stress, Social Support, and Burnout Among Classroom Teachers," by Russell, Altmaier, and Van Velzen (1987). The authors attempted to examine the impact of different facets of social support on teacher burnout. Questionnaires were first created by the authors to measure job-related stress. A pilot study had resulted in a compilation of 47 stressful events teachers had reported experiencing during the previous year. The respondents were asked if they had experienced each of the 47 events, and, if so, they were asked to rate each event on a 0 to 7 scale, with 0 being not stressful at all to 7 being the most stressful event the teacher had ever experienced. From these scores, two measurements were taken: one was the number of events experienced by each teacher, and the other was the sum of the stress ratings by each teacher regarding those events.

Two different social support measures were included in this questionnaire. One measure focused on support received from supervisors, co-workers, spouses, and friends or relatives. The other social support measure assessed the extent to which the person's current social relationships provided the six specific relational provisions described by Weiss (1974). Weiss described these six provisions as (a) attachment, (b) social integration, (c) reassurance of worth, (d) guidance, (e) reliable alliance, and (f) opportunity for nurturance.

In addition to measuring job-related stress and social support, the Maslach Burnout Inventory (MBI), with its three facets of Emotional Exhaustion,

Depersonalization, and Reduced Personal Accomplishment, measured teachers' burnout (Maslach & Jackson, 1981). These questionnaires and research instruments were mailed to a stratified random sample of 600 public school teachers in Iowa, of which 316 were completed and returned.

Even though socio-demographic variables (age, gender, marital status and community size) were statistically compared to variables related to the teacher's job (education, years of teaching experience, grade level taught, average class size, and size of school), only weak relationships were found. Scores on the MBI, however, were strongly related to teacher characteristics. For Emotional Exhaustion, the statistically significant predictors were age and average class size, with younger teachers and teachers who taught larger classes displaying greater emotional exhaustion. Male teachers and teachers who taught in secondary grades reported higher levels of Depersonalization. Teachers who were married and who taught at the primary level reported greater feelings of Personal Accomplishment (Russell, Altmaier, & Van Veltzen, 1987).

Three of the six social support measures were found to have significant effects on burnout: (a) support from supervisors, (b) reassurance of worth, and (c) reliable alliance. Teachers with supportive supervisors reported less Emotional Exhaustion, more positive attitudes toward students, and greater Personal Accomplishment. Teachers who indicated that other people respected their skills and abilities reported less Emotional Exhaustion, more positive attitudes toward students, and greater Personal Accomplishment. Plus, feelings of Depersonalization were fewer in teachers who indicated there were people they could count on in an emergency, including,

typically, relatives. These researchers concluded that social interventions targeting those most at risk for burnout might indeed help resolve the problem of excessive stress among classroom teachers (Russell, Altmaier, & Van Veltzen, 1987).

Byrne (1998) examined the correlation between literature on teacher burnout and statistical evidence gathered from surveys conducted at John Dewey High School in Brooklyn, New York, and Bronx Community College, also in New York City. Byrne acknowledged that current literature indicated that such factors as (a) low salaries, (b) extreme workload, (c) shortage of teaching time, (d) unclear expectations, (e) lack of parent interest, and (f) disruptive student behavior were major sources of teachers stress. His research indicated, however, that the two main teacher stressors among his participants were problems with administrators and problems with students. Byrne posited that social support among teachers could be of vital importance in helping alleviate stress. He declared, "Teacher support groups have also proven effective for alleviating stress and preventing maladaptive responses through peer contact. Indeed, communication with self and others is often considered the most essential ingredient in successfully dealing with stress" (p. 89).

Providing time for coworker interaction has at least one other benefit worth mentioning. In addition to helping alleviate or prevent teacher burnout, research on effective schools indicates that highly collaborative relationships are most often found among faculty in the more effective schools, providing yet another reason to provide time for coworker interaction in the school schedule (Effective Schools, 1983).

### *Working Conditions*

Researchers sometimes attempt to discover the reasons why some teachers find their jobs satisfying, so that, conversely, more may be known about the reasons dissatisfied teachers so often leave the field. This is the premise behind the study by Quaglia, Marion, and McIntire (1991) who investigated differences among rural teachers regarding their perceptions of five specific factors relating to their attitudes about teaching. The subjects for this study were 477 teachers from 20 Maine communities who had each participated in a "Community Attitude toward Education" survey conducted by the Center for Research and Evaluation of the College of Education, University of Maine. This process included an extensive "Teacher Opinion Inventory." Twenty-seven items were selected for further analysis in the specific categories of (a) teacher empowerment, (b) teacher efficacy, (c) working conditions, (d) attitudes toward students, and (d) teachers' status in their communities. Teachers responding to the survey were categorized as satisfied or dissatisfied according to their responses to the question, "All things considered, how satisfied are you about becoming a teacher?" on a five point Likert scale. Thirty-eight teachers were identified as dissatisfied, 386 were identified as satisfied, and 49 classified themselves as neither satisfied nor dissatisfied and were not included in the subsequent analysis.

Although the greatest differences between satisfied and dissatisfied teachers were found in answers to all questions relating to perceptions of empowerment, large differences between the perceptions of satisfied and dissatisfied teachers were evident on specific items that related to school policy and teachers' relationships with administrators. For example, only 36% of dissatisfied teachers felt they could talk to

an administrator with ease, compared to 94% of satisfied teachers. On items designed to assess teacher perceptions of workload, as could be predicted, the satisfied teachers had more positive perceptions than their dissatisfied peers. These findings and most other findings concerning working conditions were supported by literature that purports social isolation and working conditions to be major sources of teacher dissatisfaction. As a whole, results supported Herzberg's Hygiene Theory (Quaglia, Marion, & McIntire, 1991).

Frattacia and Hennington (1982) surveyed a group of 37 teachers who had resigned from teaching. These teachers responded to two ten-item questionnaires designed to correspond with factors associated with Herzberg's motivation needs and hygiene needs (Herzberg, 1967). Results showed that teachers were found to have been dissatisfied with such areas as (a) recognition, (b) advancement, and (c) achievement. These former teachers also expressed having felt no satisfaction with such areas as (a) company policy and administration, (b) supervision, (c) salary, (d) interpersonal relations, and (e) working conditions. These findings supported Herzberg's Theory that job dissatisfaction is caused by hygiene factors.

Litt and Turk (1985) investigated the sources of stress and dissatisfaction among 291 high school teachers and found that working conditions and relationship factors were of prime concern. In this inquiry, a group of 360 Connecticut public high school teachers with from 5 to 15 years of experience (selected by systematically quota sampling) were surveyed to obtain information concerning the dependent variables of (a) job satisfaction, (b) job absenteeism, (c) intention to leave teaching, and (d) negative well-being, as well as the independent variables of (a) perceived role,

(b) school climate, (c) coping resources, and (d) severity of specific problems. For purposes of this research, the variable “stress” was treated as a multidimensional construct encompassing teachers’ job dissatisfaction, absenteeism, intention to leave teaching, and emotional and physical symptoms of distress. Information regarding perceived role was obtained using the Job-Related Tension Scale (Gurin, Veroff, & Field, 1961, as revised by Kahn, Wolfe, Quinn, & Snoek, 1964). This instrument yields four subscales: (a) role overload (feeling overloaded with work), (b) supervisor evaluation (the pressure that arises from being evaluated), (c) role conflict (frustrations experienced when opposing roles are imposed), and (d) role ambiguity (confusion from unclear demands).

When data were collected and analyzed, results indicated, first, that problems arising from (a) the demands of supervisors, (b) conflicts arising from the demands of the job, (b) lack of clarity about responsibilities, and (d) unhappiness with the principal all contributed greatly to teachers’ general distress and dissatisfaction. Second, results also indicated that feelings of being overloaded with work and the perceptions that their colleagues lack enthusiasm for their school and fail to communicate with parents and other faculty contributed greatly to the emotional and physical distress of the teachers in the study. Third, results suggested that (a) the ability of teachers to cope effectively with their worst problems, (b) the degree to which teachers feel overloaded with work, and (c) the teachers’ perceptions of the quality of the personal relations among the faculty, all bear significantly on teachers’ intentions to leave teaching. In summary, two sets of variables appeared to play a large role in terms of job satisfaction and teacher stress. These were (a) perceived role

variables (specifically, role conflict, which includes such conflicting demands as amount of work versus quality of work, and job demand versus needs of pupils) and (b) teachers' perception of the principal. These conclusions support data found in other studies that have found work overload and social support to be two of the main causes of teacher job dissatisfaction (Litt & Turk, 1985).

The previous findings correspond with a report by Ellis (1984) who concluded that extrinsic rewards, such as salary and job security, played a lesser role in teacher's job satisfaction than did intrinsic rewards, which are the emotional and personal benefits of the job itself. Results from these two studies also affirmed Herzberg's Hygiene-Motivation Theory, in which Herzberg contended that workers who were satisfied with a job were satisfied because of the job's motivation (intrinsic) component, while those workers that were dissatisfied with a job were dissatisfied because of the hygiene, or extrinsic, component (working conditions) (Herzberg, 1967).

### The Effects of Burnout on Education

#### *Definitions and Characteristic Results of Burnout*

The subject of burnout has produced a surfeit of studies and other literature in educational research since the term was first coined by Freudenberger in 1973 (cited in Byrne, 1994). The concept is now commonly used in reference to all human service professionals such as nurses, police officers, physicians, social workers, therapists, and, perhaps most commonly, teachers (Byrne, 1994).

Burnout is generally understood to mean a response to the chronic emotional strain of dealing extensively with others in need (Byrne, 1994), or, the perceived

failure to cope with prolonged work stress (Saros & Saros, 1987). Schamer & Jackson (1996) defined burnout as “a syndrome composed of a person’s inability to cope effectively with a continual bombardment of stressors, a syndrome whose symptoms are a continuing loss of idealism, energy, and purpose” (p. 30). Burnout is generally considered a result of extended periods of excessive stress and is “a phenomenon of dramatic importance in education” (Brouwers & Tomic, 2000, p. 239).

The most commonly accepted (and most widely studied) concept of burnout has been the three-component structure proposed by Maslach and Jackson (1981), the Maslach Burnout Inventory (MBI). This inventory views burnout in three separate but related facets: (a) Emotional Exhaustion, (b) Depersonalization, and (c) Reduced Personal Accomplishment. Emotional exhaustion is defined as when teachers no longer perceive themselves as being able to give of themselves to students. Depersonalization is said to occur when teachers develop negative, cynical, and even callous attitudes toward their students, their students’ parents, and/or toward their colleagues. Reduced personal accomplishment is identified at the point when teachers perceive themselves as unsuccessful in helping students learn or in performing other job-related duties.

There is no clear-cut point that defines exactly when a person becomes burned out, but people may place themselves on a continuum based on their own perceptions of lower to higher feelings of burnout (McIntyre, 1982). In this section, the terms excessive stress and burnout will be used interchangeably.



### *Effects of Burnout on Teachers*

Although most other occupations do involve some amount of stress, many studies reveal that job stress among teachers, in particular, causes many teachers, over time, to become burned out. Guglielmi and Tatrow (1998) underscored the unique situation of teachers:

*In recent years, our educational system has become the target of widespread scrutiny and criticism, while at the same time the rewards of teaching are often obscured by the difficult working conditions that are prevalent in many of our schools. Against this backdrop of heightened job pressure and reduced professional satisfaction, it is not surprising that alarming statements have been issued repeatedly in the educational literature about the growing prevalence of teacher stress and burnout. (p. 1)*

In fact, there is widespread agreement in educational literature that teaching is a particularly stressful occupation (Abel & Sewell, 1999; Bradford, 1999; Gainey & Wynn, 1996; Harden, 1999; McCormick, 1997; Wisniewski & Gargiulo, 1997). Maslach (1982) reported that inner-city high school teachers ranked only behind air-traffic controllers and physicians in stress intensity. Litt and Turk (1985) claimed “the severity and scope of [teacher stress] is unprecedented” (p. 178). Cox, Mackay, Cox, Watts, and Brockley reported in 1978 that in a study comparing teachers with semi-professionals (matched for sex, age, and marital status), 79% of the teachers mentioned their job as a main source of stress in their life, whereas only 38% of the non-teachers did so. More recently, in 1987, Holt, Fine, and Tollefson (as cited in Heston, Dedrick, Rashke, & Whitehead, 1996) reported that 67% of teachers who

were sampled stated that their work environments were usually or always stressful. Adams, Heath-Camp, and Camp (1999) reported that a majority of teachers report excessive stress levels.

Burnout has been found to particularly affect those teachers who were originally among the most talented, idealistic, and highly conscientious (Farber, 1984; Frank & Keith, 1984; Stephenson, 1990). Singer (1993) found the career durations of North Carolina special educators to be closely associated with their NTE scores. Singer reported that in every year of their careers, special education teachers with high NTE scores were nearly twice as likely to leave the profession as their colleagues with low NTE scores. Schamer and Jackson (1996) stated:

Perhaps it is the most conscientious or idealistic teachers—often new teachers—who feel most heavily the responsibility for reaching students who seem to make no effort, the ambiguity of enforcing rules that neither they nor the students had much to say about, and the burden of an imposed curriculum, poor class sizes and locations, and limited supplies and budgets. They perhaps are then most likely to feel unappreciated or inadequate, to need approval and support, and to leave the profession. Their higher-order professional objectives cannot survive the lower-order, more basic stress, the need for self-preservation: Enthusiasm, creativity, and caring fall by the wayside. (p. 30)

Schwab and Iwanicki (1982) examined the relationship between select teacher background variables and aspects of teacher burnout in order to discover exactly who were the most likely teachers to become burned out. The Maslach Burnout Inventory (Maslach & Jackson, 1981) was used with selected variables to discover that gender,

age, and grade level taught did indeed make a difference in levels of burnout. Data from the sample of 469 randomly selected Massachusetts classroom teachers were statistically analyzed for sex, age, level of education, grade level taught, number of years in teaching, and type of community in which teaching occurred. According to the findings of this study, younger teachers experience more Emotional Exhaustion, male teachers and secondary school teachers experience more Depersonalization, and high school teachers experience more Reduced Personal Accomplishment than other variables tested. This test was one of the early (1982) investigations into the concept of burnout, but its findings have been largely supported by similar or related studies in more recent years (Abel & Sewell, 1999; Byrne, 1998; Guglielmi & Tatrow, 1998; McCormick, 1997).

McIntyre (1982) investigated the factors related to burnout among special education teachers and also evaluated the influence of the psychological variable locus of control along with certain other background variables. Locus of control, a concept based on the work of Rotter (1966), is the degree one feels in control over the occurring events which affect him. A low score on the scale used to measure this variable indicates a person perceives himself to be greatly in control of his own fate, and he is said to have an internal locus of control. A high score indicates that a person attributes a great deal of power to luck, or fate, to powerful others, or to those in authority over him. This person is considered to have an external locus of control.

McIntyre (1982) found that people who evidenced an internal locus of control experienced lower levels of burnout, and this was consistent with current literature. His investigation also found the variables of (a) teaching position, (b) grade level

taught, (c) type of child taught, (d) level of education, (e) student load, (f) size of district, and (g) marital status were found not to be statistically related to burnout.

Finally, his inquiry found that (a) youngest teachers, (b) males, (c) teachers with many years of experience, (d) teachers teaching outside of their fields, and (e) teachers with little desire to remain in the field all experienced high levels of burnout.

Huston (1989) researched the issue of burnout in order to (a) discover specific demographic information about those teachers who were identified as suffering from burnout, (b) determine if these teachers were considered less effective by student perception, and (c) determine if there existed a relationship between teacher effectiveness and teachers with the personality construct of internal locus of control. Sixty-eight teachers volunteered to take part in this study. Participants were full-time classroom teachers (with three or more years of teaching experience) from one middle class, mostly white, 9-12 grade public school in a small city in western New York. Three instruments were used in the study. One instrument was the Maslach Burnout Inventory (2<sup>nd</sup> ed.) (Maslach & Jackson, 1986), which is designed to assess the three aspects of the burnout syndrome: Emotional Exhaustion, Depersonalization, and Reduced Personal Accomplishment. The other two instruments were the Rotter Internal-External Locus of Control Scale (Rotter, 1966) and the Perdue Teacher Evaluation Scale (PTES) (Bentley & Starry, 1970), a 60-item scale which provides specific information regarding students' perceptions of their teachers' strengths and weaknesses. Participants were also asked to consent to an interview consisting of eight questions designed to explore their personal thoughts on burnout and effectiveness. Demographic information included age, gender, religion, marital status, total years of

teaching experience, years of experience in the current position, and subject area taught (Huston, 1989).

The only significant differences found among demographic information in Huston's findings showed that Protestants, males, and teachers in the 36-45 age range group were significantly more depersonalized than others in comparable categories. Students ranked the effectiveness of both groups of teachers, those with internal and those with external locii of control, as nearly equally effective. And, while the trend was observed that low levels of burnout were associated with higher levels of perception of personal accomplishment, and these results corresponded with greater teacher effectiveness as perceived by students, the relationships did not reach significant levels (Huston, 1989).

In the course of the investigation, Huston found enlightening information concerning teacher job dissatisfaction. Among the 31 subjects interviewed, only 16 participants said that they considered themselves very satisfied with their careers as teachers. Fourteen teachers considered themselves to have little or no burnout, while nine described themselves as having greater-than-average to high levels of burnout. Among those teachers who described themselves as experiencing some degree of burnout, two of the main sources of frustration mentioned most often were lack of meaningful input into chief areas of concern and heavy workload. Twenty-three teachers expressed unhesitatingly that teaching was regularly stressful, and six of the eight who said that teaching was not draining did admit to occasional emotional drain (Huston, 1989).

Byrne (1998) said, “. . . burnout is a very devastating deterrent to the successful performance of the pedagogue’s duties” (p. 90). Burned out teachers tend to (a) be less sympathetic toward students, (b) have less patience for classroom disruptions, (c) be less prepared for class, and (d) feel less dedicated to their work (Byrne, 1994). Kaiser and Polczynski (1982) explained that when teachers are under stress, their teaching performances may deteriorate, resulting in the reduction of their ability to (a) plan creatively, (b) manage classrooms effectively, and (c) implement educational techniques successfully.

#### *Effects of Burnout on Teacher Job Dissatisfaction*

Teacher burnout is considered to be one reason for increasing numbers of competent teachers who are leaving the classroom for alternative careers (Cockburn, 2000; Friedman, 1993; Guglielmi & Tatrow, 1998; Lumsden, 1998; Miller, Brownell, & Smith, 1999). For example, a report by Moracco, D’Areinso, and Danford (1983) stated that fewer than half the teachers they surveyed planned to continue teaching until retirement. Similarly, Southworth (2000) reported that almost one-half of America’s teachers will be leaving the public-school system in the next few years either to retire or to change careers, many citing burnout as a major reason. Byrne (1994) contends that burnout has become so commonplace among teachers that “teacher burnout is a function of the quality of work life in the educational institution” (p. 646).

Saros and Saros (1987) initiated a study to determine the nature of burnout, as well as to discover the difference in burnout among teachers and school-based administrators, and to learn to what extent job satisfaction, role clarity, and job

challenge predict burnout among teachers. A 72-item survey was used in the collection of data. The survey contained five sections: (a) the respondent's demographic information, (b) a job satisfaction instrument, (c) a job characteristics instrument (role clarity and job challenge), (d) the Maslach Burnout Inventory (MBI), which involves the three subscales of Emotional Exhaustion, Depersonalization, and Reduced Personal Accomplishment (Maslach & Jackson, 1981), and (e) a personal comments section.

The job satisfaction instrument, reported by Saros and Saros as being derived from several unnamed sources, consisted of 26 items, with an additional item measuring overall job satisfaction. On the instrument, educators are asked to rate each item in response to the statement "In your present position, indicate how you feel about each of these aspects." Responses ranged from zero for "Dissatisfied" to five for "Extremely Satisfied." The seven factors of job satisfaction are (a) Status and Recognition, (b) Autonomy, (c) Interpersonal Relationships, (d) Advancement, (e) Security and Involvement, (f) Workload, and (g) Salary and Benefits. Role Clarity and Job Challenge were measured using the job characteristics instruments developed by Walsh, Taber, and Beehr (1980). Respondents were asked to indicate the extent to which each aspect of job characteristics occurred on the job. Responses range from zero for "Not At All" to five for "Always." Examples of items include, for role clarity: "It is clear what is expected of me on my job" and, for job challenge: "My job requires that I keep learning new things." The MBI was used to measure the intensity of each of the three subscales, using a scale from zero for "Never" to seven for "Major, Very Strong" (Saros & Saros, 1987).

Results indicated that teachers were not experiencing unduly high levels of Emotional Exhaustion and Depersonalization when compared to other groups of helping service professionals, but they were experiencing greater Personal Accomplishment burnout than other helping service professionals. The Saros and Saros (1987) research also revealed that teachers experienced higher levels of Emotional Exhaustion and Personal Accomplishment burnout than administrators did, and that burnout can be caused by factors in the workplace such as job dissatisfaction.

Educational literature shows that burnout is also related to a variety of other indicators of teacher job dissatisfaction. These include: (a) low worker morale (Cockburn, 2000; Lumsden, 1998), (b) absenteeism (Litt & Turk, 1985; Schwab & Iwanicki, 1982), (c) job turnover (Miller, Brownell, & Smith, 1999), (d) low performance quality (Cadiz, 1989; Wisniewski & Gargiulo, 1997) and (e) stress-related health problems (Abel & Sewell, 1999; Guglielmi & Tatrow, 1998).

#### *Effects of Burnout on the Quality of Education*

The same changes that would work to improve levels of teacher satisfaction would result in more effective schools. Schamer & Jackson (1996) explained, "If burnout is related to frustration . . . in the achievement of a teacher's professional goals, then it would seem that those changes most likely to prevent burnout would also be most likely to improve student learning and school effectiveness" (p. 31). Abel and Sewell (1999) said it this way:

Effective delivery of a productive education requires that teachers meet demands and cope with potential threats to their psychological and physical well being, whatever the source. Consequently, achieving education goals for



students in the classroom mandates addressing the negative implications of stress and burnout among teachers. (p. 293)

As the number of dissatisfied teachers increases, so the quality of education declines. Guglielmi and Tatrow stated “. . . teacher stress and burnout inevitably affect the learning environment and interfere with the achievement of educational goals insofar as they lead to teachers’ detachment, alienation, cynicism, apathy, and absenteeism and ultimately the decision to leave the field” (1998, p. 1).

Unfortunately, burnout does not necessarily end with teachers leaving the field. Burnout should be of major concern not only because of the increasing numbers of teachers leaving the field--often the brightest and the best--but because so many victims of burnout choose to stay in the classroom. This situation contributes in a different manner to the declining quality of education (Wisniewski & Gargiulo, 1997). Often, teachers compensate for their feelings of burnout by concentrating emphasis on other areas of their lives. Within the classroom itself, teachers may respond in several ways: (a) by lowering their expectations for student performance, (b) by reducing efforts toward personal/professional improvement, (c) by relinquishing personal responsibility for student performance, or (d) by placing an increased value on extrinsic rewards, such as vacation time or pay. Additionally, “many teachers do not physically leave the profession but may, instead, withdraw emotionally and psychologically, basically retiring on the job” (Yee, 1990, p. 120).

Wisniewski and Gargiulo (1997) asserted:

Occupational stress and burnout have been found to affect the quality of educational services because they affect instructional and interpersonal

interactions as well as educators' physical and mental health . . . Inside the classroom, teachers teaching under stressful conditions respond more negatively, are less task-oriented, deliver less positive reinforcement, are less focused on instructional tasks, and are less able to concentrate on instructional interactions. The immediate effect of stress is to limit both good teaching and professional interactions. Stressed teachers were rated as less effective in managing classroom disciplinary problems and as more likely to use aversives to modify student behavior. The use of aversives may further intensify a cycle of maladaptive behaviors and lead to teacher withdrawal. Consequently, the effect of stress is to create a learning environment that lacks cohesion and is more disorganized. Finally, these educators were also viewed as less sensitive to the social, physical, and emotional needs of their students. When stress reached the burnout level, educators directed their energies to basic survival: getting through the day became the first priority. (p. 339)

In summary, extreme, continual stress is a major contributor to teacher job dissatisfaction, and therefore, a contributing factor in the decline of quality in education. By employing strategies to successfully reduce the consequences or prevalence of extreme stress, or burnout, administrators could make significant strides toward improving the quality of our nation's educational services.

### The Potential of Block Scheduling to Diminish

#### Teacher Job Dissatisfaction

The following review is divided into sections according to the types of research found on block scheduling. First, problems encountered in seeking empirical

data and the weaknesses discovered in much of the literature and in research about block scheduling are summarized. Second, empirical research that has been done specifically on the relationship between block scheduling and teacher satisfaction is summarized. Next are summaries of case studies investigating the academic impact of block scheduling on specific academic subjects, and then summaries of case studies investigating the many varied effects of block scheduling on entire schools before, during, and after the transition to block scheduling from traditional scheduling. This is followed by summaries of miscellaneous types of research on the effects of block scheduling on academics in general. Next, research about attitudinal changes of observers as well as participants (concerning block scheduling) will be summarized, to be followed by the testimonials of participants involved in transitions to block scheduling and articles advising how to implement block scheduling. This is followed with a review of promotional literature, first by leading authorities, then by writers in general. This section will conclude with a summary of negative views of block scheduling.

#### *Problems in Gleaning Objective Data*

The issue of block scheduling has been and remains controversial. Wronkovich said this about the issue:

The problem we are facing at the secondary level in education with block scheduling is that slogans seem to have replaced logical debate on the subject. It is very difficult to find objective secondary educators on this subject. Proponents and opponents alike tend to be nearly evangelical in their zeal to promote their position. (1998, p. 3)

In reviewing literature, one must explore a quantity of such zealous testimonials in an effort to seek empirical data. Much of the current literature on the subject is composed of opinion pieces written by people who have witnessed or who have been involved in the transition process of a school that has gone from traditional scheduling to some form of block scheduling. Most of the articles are unabashedly biased for or against block scheduling, although most are in favor of alternative scheduling (Alam & Seick, 1994; Black, 1998; Cunningham & Nogel, 1996; DiRocco, 1999; Edwards, 1993; Eineder & Bishop, 1997).

However, even in supposedly objective data, results must be closely examined for bias. For example, Wronkovich (1998) attempted to offer an objective literature review on block scheduling with recommendations based on his findings. In his review of literature, five pages in length with twelve references, Wronkovich defined block scheduling by using the Copernican model offered by Carroll (1989). In fact, Carroll himself argued that his Copernican model “is not about block scheduling” (Carroll, 1994c, p. 26) and is much more complex a model than is typically considered block scheduling. Wronkovich, himself, admitted “the biggest objection presently to alternative scheduling is the dogmatic manner in which each side seems to defend its style of scheduling,” (1998, p. 5).

Administrators in schools experiencing basic changes in daily scheduling might recognize that the novelty of the experience itself would be likely to affect such matters as discipline or attendance rates, but the Hawthorne effect is ignored in almost all of the research this writer found on block scheduling. In addition, (a) time lapses are often ignored, (b) true random samples are rarely used, (c) additional policy

changes which might possibly influence school outcomes (initiated simultaneously with scheduling changes) are rarely mentioned, and (d) methods of keeping attendance and other types of records are often ignored (Veal, 1999).

Veal (1999) emphasized that findings from much of the data published on block scheduling can be problematic when either the collection process or the analyzing process is not described, as is often the case. Much research fails to mention any attempts to control external variables, such as changes in discipline policies instituted simultaneously with the initiation of alternative scheduling, or changes in how attendance rates were figured under the new type of scheduling. Positive findings tend to be unilaterally attributed to the change in scheduling alone, often without any evidence of direct correlation.

### *Effects of Block Scheduling on the Quality of Education*

#### *Effects of Block Scheduling on Teacher Job Satisfaction*

Specific research on teacher satisfaction with block scheduling is limited. Loberg's 1998 study indicated that teachers are more satisfied with their teaching while using block scheduling, but this aspect was the main gist of the research. Loberg did not investigate teacher job satisfaction in its full sense. Her definition of satisfaction was determined by teachers' own perceptions of pedagogy. Teachers disclosed their opinions as to how satisfied they were with block scheduling specifically according to how satisfied they were with their teaching under the new system.

Loberg attempted to examine three aspects of teacher satisfaction: (a) to determine the impact of block scheduling on teacher satisfaction, (b) to determine if

this impact is based on various stages of pedagogical skills development, and (c) to examine descriptive data from open-ended questions answered by teachers before and after the implementation of block scheduling. Her investigation was limited to one high school, with a population of 1500 students and 81 teachers, in south central Minnesota (1998).

Loberg's research consisted of a survey composed of specific questions from the National Association of Secondary School Principals' (NASSP) *Teacher Satisfaction Survey* and *School Climate Survey*. Two of nine scales were assessed in Loberg's study: Student Responsibility and Discipline, and Curriculum and Job Tasks. Also, the overall satisfaction question from five other scales was included, along with the Teacher-Student Relationship scale from the *NASSP School Climate Survey*, as well as a selection of open-ended questions, yielding a resulting survey of 94 questions. Of these, only 22 questions were used for the purposes of Loberg's study (1998).

Surveys were administered to all teachers during routine faculty meetings in the spring of 1996 and again in the spring of 1997 to gather data both before and after the implementation of block scheduling. Due to retirements, resignations, absences, etc., the total study population was reduced to 58 teachers, which were further divided by school administrators into three categories: Beginner, Experienced, and Expert. In addition, qualitative data were gathered from quarterly interviews conducted with six volunteer teachers during the first year block scheduling was implemented (Loberg, 1998).

Results of survey findings on teacher satisfaction were mixed. Block scheduling did not significantly impact teacher satisfaction in the area of student responsibility and discipline, or in the area of teacher-student relationships, but did positively affect teachers' satisfaction with curriculum and job tasks. Interview data were generally positive, with the majority of teachers responding negatively when asked if they wished to return to a six-period day, while the level of teachers' pedagogical skills development was found to have had no significant impact on teachers' satisfaction with block scheduling (Loberg, 1998).

Freeman (1996) likewise investigated the satisfaction of teachers and students concerning block scheduling, but the goal of this research was specifically aimed at how learning was affected. Although block scheduling was found to lead to greater student and teacher satisfaction, the satisfaction was chiefly concerned with the conditions involving teaching processes rather than actual teacher job satisfaction.

#### *Effects of Block Scheduling on Specific Subject Areas*

The transition of many schools to block scheduling caused serious concern among many teachers of particular subjects, notably fine arts, mathematics, and foreign languages. These subject teachers actively defended the belief that their subjects required daily classes for superior mastery. Concerns also included doubts about having less total class time to cover material, difficulties making up absences, and student difficulties paying attention during the longer class periods. Of particular concern to foreign language teachers was the sequencing of courses so that language study would continue without long time lapses (Wallinger, 2000). It was because of these concerns that a majority of the early studies were done involving these subjects.

A quasi-experimental study by Wallinger (2000) in Virginia examined the effects of three different schedules on the end-of-course test scores of 60 classes of ninth-graders in French I. Students had been taught according to (a) the traditional 6- or 7-period day, (b) the 4x4 block schedule, or (c) an alternating day schedule. Stanford 9 test scores were used as covariates to establish pre-existing differences among groups/classes participating in the study. The study did not control for such variables as (a) different teachers, (b) different teaching strategies, (c) full student participation within each classroom, or (d) random selection, since only volunteers were used, although all 276 French I classes in the state of Virginia were invited to participate. Also, the reliability of the tests used indicated only moderate reliability, as it was a new instrument designed and field-tested by the researcher.

Wallinger tested students in French in four separate components: (a) speaking, (b) reading, (c) writing, and (d) listening. In discussing results, the author of the study states, "This study found no significant difference in the performance of French I students in the skills of speaking, writing, listening, and reading as measured by the end-of-course tests developed by the researcher" (p. 46). The only additional result of note was the finding that students in 4x4 block classes were over-represented in the lowest quartile in the listening and reading tests. However, the author then pointed out problems with the 4x4 schedule "that information provided by this study seems to indicate." (Wallinger, 2000, p. 46). This statement, unsupported by data, and other assumptions in the concluding section of the study seemed to indicate a biased or conflicted opinion on the part of the author. It could be argued that this study



contained such a number of uncontrolled variables as to render its conclusions weak or even useless.

Two separate probes into block scheduling's effects on math programs yielded positive results. Skrobarcek et al. (1997) reported on the implementation of a modified block schedule during the 1993-94 school year designed to assist students who were having difficulty with Algebra I. The Algebra I block was defined as a two-period block lasting for 120 minutes calculated to meet the needs of students who had demonstrated difficulty with math in the past. Students were handpicked for this program because of (a) low standardized test scores, (b) low math grades, (c) a recommendation by a mathematics teacher, or (d) by a request from parents. A team of graduate students from Texas A & M was asked to investigate the effectiveness of the pilot program during the summer of 1996. Data collected included interviews of teachers, phone interviews of randomly selected students who had been in the program, and an interview of the principal on staff training and background. In addition, individual teacher failure rates were compared.

The Algebra I block students in the previous study overwhelmingly preferred the Algebra I block, offering comments such as, "I felt less stressed and rushed in learning Algebra I content" (p. 5). Results of the teacher survey showed similar findings, with teachers generally positive about their experiences in the Algebra I block, due to such factors as fewer time constraints, less fragmentation, more individualization, and more time for creativity and innovation. Recommendations from the evaluation committee included keeping the block schedule intact (Skrobarcek et al., 1997).

Lockwood (1995) focused on block scheduling's effects on students in both algebra and geometry in both high schools in Dothan, Alabama during the 1993-94 and 1994-95 school years. The change to a 4x4 block schedule from a traditional six-period schedule was instituted at Dothan in an effort to allow students to enroll in a wider selection of courses. However, mathematics teachers at Dothan had been attempting (successfully) since 1989 to encourage more students to enroll in suitable math classes and to build enrollment in the higher mathematics classes. Concern about student achievement on the new schedule was the impetus for this research. The students, 456 in algebra and 207 in geometry, were randomly assigned by computer to either block classes or traditional classes. All students were given a nationally normed standardized test for algebra or geometry at the end of the spring term in 1994 or at the end of the fall term in 1995. Safeguards in the form of statistical groupings according to stanines by previous years' tests scores and a four-way ANOVA of final test scores were used to determine that differences in scores were not the result of scholastic ability. The researchers concluded that there was no significant difference in the achievement of students in algebra or geometry on the two schedules, and, therefore, the block schedule could provide a viable option for school districts.

In Lincoln County, North Carolina, researchers observed the effects of the transition to a 4x4 block schedule (from a traditional six-period schedule) on the social studies programs of its three high schools, as well as its effects on general attitudes of participants and stakeholders. Data on opinions and attitudes were gathered through the use of (a) three separate questionnaires, (b) weekly observations, (c) interviews, and (d) parent surveys. Although most data collected were qualitative rather than

quantitative, student test scores for the three implementation years were compared to the student test scores for the year previous to implementation, and a pattern of higher achievement was found in social studies. Even though state scores for this subject had decreased significantly during the same time period, officials in Lincoln County attributed their increased test scores to better pacing of instruction and the use of a variety of instructional methods now available in the lengthier class periods. Additionally, widespread support among parents, students, teachers, and administrators was attributed to the three-year implementation plan in which teachers were offered a strong staff development program focused on preparing teachers to use pacing guides and varied instructional strategies. Support for the 4x4 schedule was found to be positive (Queen, Algozzine, & Eaddy, 1996).

Positive aspects of block scheduling included (a) flexibility in classroom instruction, (b) longer planning times for teachers, (c) greater course offerings for students, (d) one or two class preparations per semester, and (d) more time each day for in-depth study. Negative aspects of block scheduling included (a) loss of retention from one level of a course to the next, (b) too much independent study needed outside of class, (c) students transferring from schools not using the 4x4 model, (d) limited numbers of new electives being offered, and (e) continued overuse of the lectures in the classroom (Queen, Algozzine, & Eaddy, 1996).

DiBiase and Queen (1999) reported on the success of the Lewisburg (Pennsylvania) Area Middle School's transition to block scheduling, especially in the subject of social studies. Percentile means in social studies for block and traditional eighth-grade classes were 72.9 and 60.2, respectively, as measured by the California

Achievement Tests. Course averages, also, yielded significant differences between seventh and eighth grade block versus seventh and eighth grade traditional classes in social studies. Furthermore, these authors continued to expound in this report on the virtues of block scheduling as it relates particularly to middle schools. The authors emphasized the importance of employing a variety of teaching methods, stating, "It is almost impossible to keep students' attention for a full 90 minutes" (DiBiase & Queen, 1999, p. 383).

### *Effects of Block Scheduling on Entire Schools*

Many case studies of the effects of block scheduling upon individual schools have been reported. Almost without exception, the studies present favorable results in a variety of areas.

Lubbock High School, in Lubbock, Texas, was near closure by the late 1970s, according to Cates (2000). However, in 1979, the school was revitalized when the Lubbock Independent School District Board of Trustees established a citywide magnet program, the Lubbock Exemplary Academic Program. Lubbock became the first school in Texas to have a successful four-day academic week (with a half-day Activity Friday program) in 1984. Although classes were originally 70 minutes long, they now are 100 minutes in length as students take up to eight classes per year on an alternating block schedule. Students are in class at least four hours each Friday, and most students attend three 55-minute classes and homeroom. The majority of students are dismissed at noon each Friday. The non-credit classes on Friday provide for all ability levels, provide for real-life learning through community service programs, and appeal to a wide range of interests. These classes include such subjects as PSAT or SAT

preparation, flower arranging, ping pong, bachelor cooking, kickboxing, calligraphy, chess, peer mediation, beginning tap dance, academic decathlon, drivers education, black history, weightlifting for women, leather crafts, and stormchasers. Elections, meetings, assemblies, fine arts performances, and other special activities are held during the homeroom time.

Cates (2000) claims students now (a) have time for individual help or remediation activities, (b) enjoy less pressure because they prepare for and attend only four classes per day, (c) experience fewer classtime interruptions, (d) profit from learning that is more in depth, (d) benefit from classes taught from a variety of instructional activities due to the extended length of time in classes, and (e) have less instructional time lost due to co-curricular activities or field trips, which are now held, as much as possible, on Fridays. Teachers, also, benefit from teaching only three out of four classes per day, leaving them 100 minutes per day for preparation/conference periods. When surveyed concerning possible additional changes in the school schedule, teachers and students alike overwhelmingly supported keeping the four-day block schedule with Activity Friday.

Snyder (1997) reported data analysis on the change of Angola (Indiana) High School to block scheduling. Data collected after two years of block scheduling were compared to baseline data from the previous two years, and significant improvements were found in school-wide grade point averages, semester exam grades, percentage of students on the honor roll, ACT scores, and the Indiana State Proficiency Exam scores. While SAT scores remained the same and AP test scores dropped slightly, attendance improved, as did library usage. Fewer discipline problems were also

reported. The author stressed, however, that extensive teacher preparation and teacher support were vital to the success of the transition.

Researchers at Becker Middle School in Becker, Minnesota, found that after two years on block scheduling student grades improved, as did attendance rates, while discipline improved significantly. Surveys of students and teachers yielded largely positive responses. Student surveys included results such as 87% of students believing that having 90-minute classes helped their learning, 92% reported having received the same or more individual attention, and 81% reported having learned the same amount or more with block scheduling (Ulrich & Yeaman, 1999).

Eineder and Bishop (1997) studied the effects of block scheduling on achievement, behavior, and student-teacher relationships at Philo High School in Southeastern Ohio. Their findings included a 92% increase among ninth graders achieving honor roll status, and, among juniors and seniors, a 24% increase in the number of A's with a 15% decrease in the number of F's. Significant improvement was also found (among juniors and seniors) in accumulated grade point averages and in the frequency of honor roll attainment. Surveys revealed that 95% of teachers and 80% of students felt the student-teacher relationships had improved, and the number of fights among students was reduced by 40%.

#### *Effects of Block Scheduling on Academics in General*

The majority of literature reporting the effects of block scheduling on academics in general record significant improvement in academic gain (DiBiase & Queen, 1999; Reid, 1996; Wallinger, 2000). Perhaps the study that first convinced many educators that block scheduling had possibilities to offer was the First

Copernican Pilot program in Masconomet Regional High School in Boxford, Massachusetts. Designed by Joseph Carroll, district superintendent at that time, the program was called the Renaissance Program and was initiated in 1989. The schedule, inspired by the success of highly intense summer school classes, was designed to have three trimesters of 60 days each. Students took two 100-minute classes (118 minutes the second year) each morning and two traditionally scheduled classes plus a seminar program in the afternoons (Carroll, 1994c).

Because Carroll's plan was controversial, a team of evaluators from Harvard University was assembled to examine and critique the program. Findings largely dispelled the negative predictions of the program's critics. Students enjoyed their classes more, positive interpersonal relationships increased between teachers and students, teachers reported feeling rejuvenated, and academic achievement was not negatively affected by the decrease in total class time or by gaps in class sequences. Carroll reported that these findings were substantiated by a study of seven other high schools, which initiated Copernican schedules following the Masconomet pilot study. In addition to findings already mentioned, this second study found reductions in dropout rates, increased academic achievement, improved attendance rates, and decreased suspension rates (Carroll, 1994c).

Similar findings were revealed from an investigation conducted in School District 7 in Nelson, British Columbia. Comparing test results on final tests developed by the province of British Columbia, researchers found that 10th graders had failure rates that had significantly declined in four of five subject areas, 11th graders had decreased failure rates in eight of nine courses, and 12th graders' performances had

improved in six of nine subject areas. In addition, the number of students achieving honor roll status had increased by 50%, and the projected graduation rate climbed from 70% to 90% (Reid, Hierck, & Veregin, 1994).

DiRocco (1999) also found similar data in his analysis of the Lewisburg Area Middle School's transition to a block schedule. DiRocco compared the means of final course averages for the graduating eighth grade class of 1996 to the means of final course averages for the graduating eighth grade class of 1997. The 1996 graduating class received most of its academic instruction under a traditional schedule of 40 minute classes for 180 days, while the 1997 graduating class obtained nearly all of its core academic instruction in extended blocks of 82 minutes every other day for a total of 90 school days. An analysis of covariance adjusted for academic ability. The results showed that the means of the eighth grade averages and the means of four of six achievement tests favored the alternating-day block schedule. DiRocco, however, was one of the few researchers discovered by this writer to mention the possibility of the Hawthorne effect and/or the Pygmalion effect as having influenced the study. He emphasized the importance of establishing a teacher consensus of support for the transition to block scheduling, as well as for maintaining ongoing teacher training to learn new strategies for use in 90-minute blocks of time. He also stressed the importance of community support of the transition.

Veal (1999) reported a study that supports with empirical data the positive conclusions inferred from the soft data reported in other studies. Veal's research was done at a large high school in a medium-sized college town located in the Midwest. The Springfield High School population of 1800 students is 92% white and combines



both rural and city areas of the county. College bound students consistently score 100 points higher than the national average on the SAT, attendance rates are consistently 94%, and there are many opportunities for students to take AP courses and/or attend university classes.

Veal's 1999 investigation compared three different schedule types within one school during the same time period using both quantitative and qualitative techniques. The three schedules compared were (a) the traditional (involving 768 students), (b) the block (involving 396 students), and (c) a hybrid, or mixture of both traditional and block scheduling (involving 227 students). Qualitative data included information from surveys, interviews, classroom observations, teacher journals, and both teacher and administrator documents. Quantitative data were collected from teacher, student, and parent surveys, which used a five-point Likert scale, and semester exams from different academic departments. Student databases were used to locate GPA information for the 1996-97 and 1997-98 school years.

Considering all variables, the hybrid schedule seemed to benefit most students. Grade point averages improved for students in both block and hybrid classes while dropping for students in traditional classes. Hybrid classes reported the lowest absentee rate as well as the lowest number of discipline referrals. Qualitative data showed student attitudes about school also improved under either type of block classes (block or hybrid schedule). Conclusions reached by researchers agreed with findings from literature concerning the academic benefits of block scheduling. However, Veal stressed that what is most important is what happens in a classroom between teacher and student, and that change for the sake of change will not ensure better instruction

by teachers or increased learning by students. He stressed also the importance of collaboration of teachers and administrators in making a successful transition to block scheduling (Veal, 1999).

### *Effects of Block Scheduling on Attitudes of Stakeholders*

Because of state mandated increased graduation requirements in Tennessee, 25 secondary schools chose to implement block scheduling during the 1994-95 school year. Besides increasing opportunities for electives, school officials were attracted to block scheduling because of reports of improved student/teacher morale, among other things. Questionnaires were created by the Center of Research in Educational Policy, University of Memphis, Tennessee, consisting of several domains. These included: (a) open-ended items related to teacher training, (b) parent and student involvement in the design and implementation, and (c) concerns related to financial support needed for the transition to block scheduling. They also included: (a) teacher concerns about the use of block scheduling, and (b) stakeholders' perceived successes and failures of the transition to block scheduling. These questionnaires were administered to principals, and group interviews were conducted with selected teachers, principals, and other school personnel following the first year of implementation. Survey responses indicated a consensus that the advantages to block scheduling outweighed the disadvantages (Smith & McNelis, 1998).

Among the major successes of the transition were (a) positive changes in teaching styles, enabling more hands-on involvement by students; (b) more student-centered teaching and learning; (c) an increase in elective courses; (d) reduced discipline problems; (e) quieter, less stressful days; (f) improved teacher and student

morale; (g) decreases in failure and drop-out rates; and (h) a general perception that students were learning more. Negative aspects included (a) difficulty in maintaining students' attention through longer time blocks, (b) difficulty in covering the coursework, (c) lack of alternative teaching strategies, (d) lack of adequate computer software for scheduling and reporting, (e) a general resistance to change, (f) complications from absenteeism and transfers, (g) complications resulting from intrusions on class time and days missed during the spring semester, and (h) the possible inappropriateness of study halls (Smith & McNelis, 1998).

After Queen Creek (Arizona) High School's transition to block scheduling, surveys revealed that 90% of students surveyed did not wish to return to the traditional schedule. Teacher surveys showed that teachers felt more satisfaction with their teaching, their students, and their students' involvement in the learning process under block scheduling. Additionally, hard data showed that the retention rates had been halved, dropout rates declined from 10 - 6%, and the attendance rate was the highest it had been in five years. Stakeholders had been originally concerned about (a) a possible decline in test scores, (b) sufficient time to cover course material, and (c) effects on classes intended to be taken sequentially. After the change, the principal reported the main problems to be (a) lower test scores on state-mandated achievement tests, (b) large classes, and (c) loss of state revenue due to students graduating early or attending school part-time (Walker, 1999).

Hurley conducted research in 1996 among five high schools in western North Carolina to discover how students alone felt about block scheduling. Results showed that students were overwhelmingly in favor of block scheduling. With high school

enrollments ranging from 350 to 768 students, each of the five schools had changed to a 4x4 block schedule in the fall of 1994. After three semesters, researchers conducted open-ended interviews (of about 30 minutes in length) with 37 students (from 6 to 9 students from each school) who represented a cross-section of the student population. Only two of the 37 students interviewed did not wish to stay with the new schedule. Students reported that they were getting better grades, they had more time for in-depth study, they received more individual attention from teachers, their lives were less hectic, and they had a fresh start after the semester (Hurley, 1997b).

Santos and Rettig (1999) conducted semi-structured interviews with eighteen special education teachers, nine from 4x4 block scheduled schools and nine from alternating day block schedules, to determine the teachers' perceptions of their schools' new schedules. Included in the interviews were questions concerning (a) alterations in delivery, (b) teacher preferences, (c) implementation of instructional modifications, and (d) student reactions. Support for block scheduling was strong, with 15 of 18 special education teachers preferring it to traditional scheduling. Teachers mentioned such characteristics as (a) increased flexibility, (b) increased numbers of choices for students, (c) increased collaboration among teachers, (d) improvements in student behavior, and (e) better relationships with students. Among negatives mentioned was the fact that block scheduling, especially the alternating day schedule, sometimes caused problems with students in relation to (a) remembering assignments, (b) continuity of instruction, (c) retention of lessons, and (d) scheduling individual time with students. The article concluded with a list of recommendations for initiating and utilizing the two types of block scheduling.

A case study of three teachers' attitudes and perceptions concerning the depth of covered material versus the slightly diminished quantity of material covered revealed that all three teachers believed the change to longer class times to be positive. These volunteers at Alvertime (Georgia) High School, each in their second year of transition to block scheduling from traditional scheduling, were similar according to type of teaching experience and subject taught (English), and represented wide range of years in teaching. In spite of the actual reduction in overall class hours, these teachers believed the reduction in scope was more than counteracted by the greater depth of the content covered (Benton-Kupper, 1999).

Research on student and teacher attitudes toward block scheduling was done in a small, rural, economically depressed area of Southeast Alabama. The unspecified district has two high schools with a large percentage of minority students (56%). Researchers conducted interviews, observed the longer classes in action, and compiled two sets of surveys—one for teachers and one for students. Compared to 29% of the student body and 55% of teacher respondents agreeing or strongly agreeing with the change initially, after one year of block scheduling, 65% of students and 83% of teachers held a positive attitude concerning block schedule. While 60% of students said they obtained higher grades, 53% claimed to have been more actively involved in their classes, and 54% reported they had received more individual help from their teachers, student responses were still less positive than those of their teachers. Among responding teachers, 73.3% reported favoring the longer period of time available for preparing lesson plans, 72% reported having varied their teaching strategies, and 87% of teachers expressed a desire to continue using the new schedule. However, the

authors stressed that more research is needed in the area of long-term retention of students' knowledge and skills before the schedule can be endorsed totally (Liu & Dye, 1998).

Staunton (1997) reported on results of a survey conducted at Huntington Beach (California) Union High School District to determine teachers' opinions as to how restructuring time in the instructional day affected their behaviors in the classroom. An anonymous survey instrument asked teachers 50 questions, each using a five-point scale of from zero (strongly disagree) to four (strongly agree). Data were tabulated and reported, first using the total data and then using separate factors related to school site, department, numbers of years taught, and number of years taught under block scheduling. Results indicated that teachers felt more relaxed and more satisfied with the longer class times afforded by block scheduling, and these satisfaction levels increased with the number of years teachers had worked under the block system. The author concluded that it is vital that teachers embrace the concept of block scheduling in order for the transition to be a success. Otherwise, restructuring may be delayed if teachers view block scheduling as a fad that will soon disappear (Staunton, 1997).

#### *Attitudes and Beliefs about Block Scheduling*

Many of the benefits of block scheduling described by the following authors could be categorized as improvements in teachers' workload and time demands, working conditions, and social isolation, three of the major factors contributing to teacher job dissatisfaction. Canady, Rettig, Carroll, Shortt, and Thayer have all written extensively on the positive aspects of block scheduling and are considered leading authorities on the subject.

*Opinions of Leading Authorities*

Robert Canady, of the University of Virginia, and Michael D. Rettig, of James Madison University in Harrisburg, Virginia, are considered to be leading authorities on the topic of block scheduling and, both together and separately, have authored numerous articles on the subject (Canady, 1990; Canady & Reina, 1993; Canady & Rettig, 1995, 1993, 1992; Hopkins & Canady, 1997; Rettig & Canady, 1999, 1998, 1996; Rettig & Colbert, 1995; Santos & Rettig, 1999). Without exception, these authors offer block scheduling as a viable alternative to traditional scheduling that can help to ameliorate many of the problems being experienced in today's public schools. "We must view a schedule not simply as a barrier blocking the path to school improvement, but as an untapped resource that can be drawn on to solve problems and implement need programs" (Canady & Rettig, 1993, p. 314).

Among the many benefits of block scheduling as touted by Canady and Rettig (1993) are (a) students and teachers can prepare for just three classes a semester rather than the typical five to seven; (b) capable students who desire to do so can move ahead quickly, completing, for example, up to three math courses in one year; (c) students can repeat a failed course without having to wait an entire year to do so; and (d) teachers can venture away from lecture and discussion to produce more productive models of teaching, in classes of 90 to 120 minutes in length. Also included in their list of benefits are (a) instructional time is gained through the elimination of time previously used in passing from one class to the next, (b) discipline problems are reduced; and (c) teachers have daily contact with smaller numbers of students, and students, likewise, have daily contact with fewer teachers. Canady and Rettig also

point out the negative aspects of traditional scheduling, such as (a) the near impossibility of teaching in-depth concepts, allowing sufficient practice of vocational skills, or investigating a complicated issue on the Internet in 40 minutes (the length of some traditional classes); (b) the impersonal, assembly-line mindset promoted by six to eight periods a day in traditional schedules; (c) the high numbers of students with which teachers must deal daily; and (d) relatively high amounts of bookkeeping or paperwork involved in keeping records of attendance, tardiness, and assignments for up to eight classes per day.

Many of the articles of both Canady and Rettig are rich in ideas for successful implementation of block scheduling, analyses of the pros and cons of the different types of block schedules, and/or suggestions of resources for further study of the concept (Canady, 1990; Canady & Rettig, 1993; Rettig & Canady, 1999).

Another recognized authority on the subject of extended classroom time is Joseph M. Carroll, author of the book, *The Copernican Plan: Restructuring the American High School* (Carroll, 1994a). Carroll is credited with popularizing the concept of extended-length or concentrated classes. Although his original plan called for several additional facets besides extended length classes, such as (a) seminar programs, (b) a mastery-based credit system, (c) individualized learning plans, and (d) differentiated diplomas, teaching single subjects in large blocks of time appears to be his most enduring contribution to modern thoughts on restructuring (Carroll, 1994a).

Carroll is critical of the traditional American high school, stating, “[National education reports] state forcefully that high schools are not performing satisfactorily; indeed high schools seem to be failing us and must be greatly improved” (Carroll,



1990, p. 359). He later voiced his criticism even more pointedly: “. . . our schools, particularly our high schools, are in serious trouble and may be replaced by new institutions of choice, both public and private. Our education efforts are failing to produce either a work force capable of competing with those of other industrialized nations or a citizenry capable of meeting its critically important responsibilities under our form of government” (Carroll, 1994b, p. 105). Moreover, he claims that individualization is the key concept to effective schools, and that teachers cannot individualize when dealing with every student every day under traditional scheduling (Carroll, 1994c).

His own plan came from his experiences as a high school principal who observed positive outcomes from summer school classes, which met for four hours daily, five days per week, for six weeks. After observing the student successes and positive attitudes of both teachers and students, Carroll later confronted a cutback of funds and staff with his idea of macro scheduling, which was later evaluated positively by an independent team of educators from Harvard University (Carroll, 1994b).

Carroll makes several claims for extending the length of class time per subject and limiting the number of subjects taught at one time. He says, “Virtually every high school in the U. S. can reduce its average class size by 20%; increase the number of courses or sections it offers by 20%; reduce the total number of students with whom a teacher works each day by 60 to 80%; . . . and establish a flexible, productive instructional environment that fosters effective mastery learning” (Carroll, 1990, p. 358). Also, Carroll states:

The most important [of the contributions of the Copernican plan] are to improve vastly the relationships between teachers and students and to provide teachers and students with much more manageable workloads. In theory, improved teacher/student relationships and more manageable workloads should result in more successful schools. (Carroll, 1994c, p. 27)

Shortt & Thayer have also written extensively on the subject of block scheduling (Shortt & Thayer, 2000; 1999; 1997; 1995; Thayer & Shortt, 1999). These writers, admitted proponents of block scheduling, have written on the subject from a variety of angles, such as (a) suggestions for implementation (Shortt & Thayer, 1995), (b) considerations of possible concerns (Shortt & Thayer, 1995), and (c) ways principals affect the schedule (Shortt & Thayer, 2000); but of most interest to this writer is their support of block scheduling as a basis for improved climate in schools. They report that principals noted the transition to block scheduling appeared to (a) create a more relaxed environment for teachers and students; (b) cut down on unsupervised movement within the school; (c) result in a decline in disciplinary referrals; (d) improve teacher attendance; (e) improve teacher morale; and (f) have a positive impact on at-risk students (Thayer & Shortt, 1999).

Often, articles resemble “How-To” (or “How-Not-To”) pieces that simply presume block scheduling is desirable for all schools, and are composed of lists of its benefits (with few or no drawbacks named) and offer suggestions for its implementation. Cunningham and Nogel (1996) listed six key elements they claim are necessary for any successful transition to block scheduling. They include (a) encouraging teacher input and ownership, (b) encouraging student and parent input

and ownership, (c) providing sufficient staff development, (d) allowing plenty of time for planning, (e) providing many opportunities for sharing concerns and successes, and (f) planning for the evaluation of student and teacher successes. George and McEwin (1999) reviewed the changes public education has undergone during the last half of the 20<sup>th</sup> century. Changes these authors explained include (a) the increase in student diversity, (b) the group the authors refer to as the “forgotten half” of the population who do not attend college after high school, (c) the increasing influence of government mandates and national reports, and (d) the abundance of problems exhibited by ninth graders. The authors then discussed the influence of the middle school movement on the restructuring of many public high schools, and the different types of block scheduling high schools are now adopting as a result of this influence. Zepeda (1999) also gave a brief review of the different types of block scheduling popular in schools today, listed benefits of this method of scheduling, and offered tips to principals for a successful transition.

There is also an abundance of articles by authors who simply advocate the idea but offer little in the way of hard data. Following are some examples of this type of promotional literature.

Black (1998) and Dyrli (2000) both offered simplified explanations of how block scheduling works and some of its options, as well as suggestions for implementations, selected quotations by well-known researchers, and a list of resources/references for further investigation. Edwards (1993) pointed out the many failures of public secondary education, such as low graduation rates and limited improvement in student performance after decades of efforts. He explained several

ways a block schedule could possibly work toward strengthening the core subject areas and improving graduation rates.

### *Opinions of Stakeholders*

The literature on block scheduling is filled with testimonials of parents, teachers, and administrators who have observed or been involved in the transition of a local school from traditional scheduling to a form of block scheduling. Generally, these authors attest to the benefits of block scheduling. The following sections contain summaries of such testimonials and are grouped into three categories of major factors contributing to teacher job dissatisfaction: (a) workload and time demands, (b) social isolation, and (c) working conditions.

*Effects of block scheduling on workload and time demands.* Alam and Seick (1994) reported on the successful implementation of an Intensive Core Program (ICP) instated at Parker Vista Middle School in Douglas County, Colorado, in which four teachers experimented in teaching core courses for 4 and one-half week periods, three hours daily. The teachers reported high levels of satisfaction with the program, especially enjoying concentrating on only 25 students at a time. Students were likewise enthusiastic about the program, citing feelings of being better organized, and less stressed about homework. When teacher-made test scores from previous years were compared to test scores for the experimental ICP program, the means score was higher, and the range was tighter. Parents, too, reported positive results, particularly fewer hassles about school, a more positive attitude about school, and a more relaxed family environment.

Gerking, a science teacher at Laramie High School in Laramie, Wyoming, related her school's desires of (a) wanting more time to teach, (b) wanting more time to advise and prepare future graduates, and (c) wanting fewer classes during each day, down from six or seven classes daily. After two years of study, the faculty voted to implement an alternating day block schedule. Gerking reported enthusiastically about the newfound ability to teach in-depth concepts in science classes and labs, and indicated that other faculty members are equally enamored with the schedule (1995).

Teachers at two high schools in a metropolitan area of South Florida participated in research to determine teacher perceptions of block scheduling. Although the schools had adopted different types of block schedules (one school implemented the 4x4 schedule and the other school implemented the A/B schedule), teachers agreed that (a) inservice before adoption of block scheduling is critical to gaining acceptance, (b) block scheduling was preferable to traditional scheduling because it offered more planning time and fewer student contacts during the school day, and (c) teachers initially felt more stress in relation to classroom management and teaching responsibilities. Administrators expressed full support for block scheduling, viewing it as both a cost efficient factor and as a method to get teachers away from the lecture method of teaching. Although faculty agreed that certain individual adaptations were required concerning the types of classes offered, class sizes, and student ages involved in block scheduling, findings indicated that block scheduling has potential for school improvement (Hamdy & Urich, 1998).

MacIntosh Academy, on the coast of Georgia, is a combined middle and high school in one of Georgia's poorest counties, and, according to Phillips (1997), until

recently had little to boast about. Few MacIntosh students went to college, and the few who took the SAT averaged 723. Phillips attributed recent positive changes at MacIntosh Academy to the school's recent adoption of 4x4 block scheduling. Listed among the positive changes are (a) fewer class changes and the resultant fewer discipline problems; (b) higher grades, with the honor roll more than doubling and improved SAT average of 963; (c) better interpersonal relationships between teachers and students; (d) fewer classes for teachers to teach daily and longer daily preparation periods, and (e) an improved learning environment.

Kissler (1995) and the staff of Douglas County High School considered changing their high school schedule with the aim of improving instruction. In the course of their research, they examined seven different schedules and narrowed them down to two, both of which were types of block schedules. Kissler reported many of the advantages of block scheduling to students, including (a) students are able to take more classes during their high school career, (b) students are able to focus on fewer subjects at one time, and (c) students can compensate for deficits in their course work. However, the chief advantage he mentions for teachers is that teachers' workloads are reduced. The author also mentions some disadvantages of block scheduling, such as (a) a brisk pace must be maintained to cover course requirements, (b) teachers must initially modify their teaching plans to fit the new schedule, and (c) significant student illness could make catching up an impossibility. However, he is quick to admit that some disadvantages could arguably prove advantageous to students, such as the ability of students to finish their coursework and graduate early. Kissler addresses two types of block schedules, the 4x4 and the alternating day, and explains why his school chose

the alternating day schedule. He also offers suggestions to faculties who are considering making such decisions.

Wilson (1995) reported on improved teacher attitudes only one month after Hope (Arkansas) High school changed to block scheduling. Wilson noted that teachers expressed satisfaction with several facts. They agreed that teacher-pupil ratios had decreased, falling from 120 to 150 students per day under traditional scheduling to about 90 students per term under block scheduling. They agreed that teachers were better able to offer additional, more personalized help to those students who needed it because of the lowered teacher-pupil ratios and longer class times in which to get to more personally know their students. Additionally, teachers reported that they could actually do more teaching, including more in-depth teaching for advanced students, during the longer class times. Furthermore, teachers concluded the longer preparation time allowed teachers to get more work done at school, thus lowering their work load.

*Effects of block scheduling on social isolation.* Bruckner (1997) wrote on teachers' reactions to block scheduling during the first year of implementation at Fremont High School in eastern Nebraska. Teachers were assigned to regular sharing sessions in an effort to ease transition stresses, and Bruckner reported both negative and positive responses. These included (a) excessive work and emotional strain during the first quarter; (b) worries over how to budget class time, activities, and homework; (c) frustration in dealing with alternative learners and larger class sizes; (d) development of student rubrics; and (e) less talk during the fourth quarter about block scheduling and more talk about effective practices for teaching and learning. The decision was made to continue the sharing sessions during the second year of block

schedule implementation as teachers became adjusted to the new schedule and appreciated the collegiality in the longer preparation time provided by block scheduling.

When the staff of Pine Lake Middle School, in Parker, Colorado, decided that the fragmented daily schedule of both teachers and students was the most pressing problem they faced, Principal Dubrovich and his teachers decided that the time had come to implement a block schedule. This they did, and Dubrovich reported both positive and unexpected results. Positive results he listed were (a) all students were able to receive more physical education instruction and more music instruction, (b) all teachers were able to have at least three uninterrupted 90-minute planning periods per week as well as two 45 minutes periods on the other two days, and (c) all teachers at each grade level were free at the same time. He also included as positive results that (d) all students benefited from a school-wide enrichment program, and (e) all changes were achieved without adding personnel or costing any more money. While Dubrovich acknowledged that making such changes involved a certain amount of risk-taking, he strongly recommended that other schools attempt similar schedule changes (Dubrovich, 1991).

*Effects of block scheduling on working conditions.* Day (1995) wrote as a science teacher whose school had been using different types of modified block schedules for five years with apparent success. She describes the longer class times as ideal for teaching science and chemistry labs, for allowing greater interpersonal relationships between teachers and students, and for encouraging a positive classroom atmosphere which, in turn, leads to fewer disciplinary interruptions. She also reported



the added benefits of block scheduling as forcing teachers to become better at planning, presenting, and reviewing lessons and concepts.

The Scotland County R-1 High School staff in Memphis, Missouri, implemented an alternating day block schedule in 1992, and, after having experienced this scheduling system for three years, offered benefits found from its implementation. Huff, the school principal, listed several of these as (a) fewer students will fall through the cracks, (b) students work more efficiently to master the material, (c) longer class periods allow teachers time to develop key concepts, (d) students have a greater range of classes from which to select, two days to complete homework, and only four classes daily instead of six, (e) creativity is enhanced on the parts of both teachers and students, (f) a greater variety of teaching methods can be employed to aid individual learning styles, and (g) the elimination of study halls provided more time for guided practice in the regular classroom. In addition, Huff reported that, at the end of the first year, 96% of the staff either agreed or strongly agreed that the schedule should be not only continued but expanded. Seventy-nine percent of the students believed that the restructured classes were superior or greatly superior to the previous year's schedule (Huff, 1995).

Jung and Gunn (1990) reported on Des Plaines Elementary school's restructuring to a team block design as a definite success. Many positive results were reported in various areas, including (a) greater flexibility in meeting students' needs, (b) dramatic changes from pessimism to positive enthusiasm in parental, student, and teacher attitudes, (c) improved student attendance, (d) greater accommodation for

students in the areas of foreign language and reading, and (e) greater enthusiasm on the part of many veteran teachers.

Ryan (1991) also called for a change to block (or intensive) scheduling as an answer to the ills of today's public secondary schools. He notes the spiraling dropout rate among high school students, the problems of at risk students, and the challenge of educating an increasingly diverse student population as reason enough to make basic changes in scheduling on the high school level. He stated, "The allocation of time is the single most controllable, and therefore, one of the most powerful operational decisions a school can make" (p. 26). He further stated, "Research indicates that an increase in time, whether it be engaged or allocated, leads to greater achievement . . . There is no question that once a policy to reschedule time on task is activated, achievement will be affected" (p. 27). While Ryan pointed out (as do other writers) that an enhanced student/teacher relationship enriches the educational process, he also stressed a unique benefit of block scheduling that few other writers mention: Teachers in block scheduling gain the privilege and responsibility of providing the students with a meaningful role model for an extended period of time each day.

#### *Opposition to Block Scheduling*

Several objections have been made concerning the growing popularity of block scheduling in schools across the country. Perhaps the most well-known research to produce negative results was a study by Bateson, published in 1990, which reported on the math and science achievement of students in British Columbia. Tests scores were significantly lower when compared to students who were in traditionally scheduled schools, but the study did not account for the fact that students on the block schedule

were tested months after completion of classes, and, in addition, teachers were given little training in modifying their teaching strategies to better suit 90-minute classes (DiBiase & Queen, 1999; Eineder & Bishop, 1997; Lockwood, 1995; Rettig & Canady, 1999).

Among those who oppose block scheduling is Jeff Lindsay, a father of children in the Appleton, Wisconsin, school district. Lindsay, who has a doctorate in chemical engineering, created and has sustained for a number of years a continually updated website on the problems with block scheduling. He offers summaries of articles, book lists, and other internet resources for interested readers who want to know more about the potential drawbacks of block scheduling (Lindsay, 2001).

Some of the most commonly reported problems with block scheduling include (a) problems with students transferring from other schools not using block scheduling (Queen, Algozzine, & Eaddy, 1996); (b) loss of retention from one level of a course to the next course in sequence (Santos & Rettig, 1999); and (c) overuse of lecturing as a teaching method, usually due to a lack of teacher preparation (DiBiase & Queen, 1999; DiRocco, 1999; Zepeda, 1999). Other common problems include (d) lack of teacher buy-in or community support (DiRocco, 1999; Snyder, 1997; Veal, 1999); (e) resistance to change (Bruckner, 1997; Smith & McNelis, 1998); (f) problems covering the curriculum (Walker, 1999); and (g) complications from absenteeism (Smith & McNelis, 1998).

## Teacher Job Satisfaction as Related to Specific Demographic Factors

In order to increase knowledge in the realm of teacher job satisfaction, the questionnaires used in this investigation have been modified to include specific demographic questions. These questions will concern the participants' (a) gender, (b) age, (c) number of years of teaching experience, (d) educational background, (e) teaching in fields of certification or outside of their fields of certification, and, when applicable, (f) number of years of teaching under block scheduling. This section will show what is presently found in educational literature regarding each factor.

### *Gender*

Findings from educational literature on the subject of the relationship between teacher job satisfaction and gender are inconsistent. Many studies report that women are more satisfied with their teaching jobs than men (Huston, 1989; Ma & MacMillan, 1999; McIntyre, 1982; Moore, 1987; Nederveen, 1982; Sutter, 1996).

Correspondingly, male teachers have been shown to have more frequent and intense negative feelings toward their students, both of which are characteristics of Depersonalization, one of three aspects of burnout as measured by the Maslach Burnout Inventory (Russell, Altmaier, & Van Velzen, 1987; Schwab & Iwanicki, 1982).

Other research findings have reported women teachers to be less satisfied with their teaching careers than men and much more likely to leave the profession (Frusher, 1984; Singer, 1992; Tack & Patitu, 1992). Nevertheless, some investigations show males and females to be similarly satisfied with teaching as a career (Cano & Miller,

1992; Hill, 1983; Klecker, 1997), while still other studies reported that men and women differ simply in the factors that affect teacher job satisfaction and dissatisfaction (Castillo, Conklin, & Cano, 1999; Sinha, 1998).

### *Teacher Age*

While research findings on relationships between teacher job satisfaction and teacher age are not invariable, most educational literature supports the concept that older teachers are more satisfied than younger teachers. Nederveen (1982) and McIntyre (1982) both reported older teachers to be more satisfied than younger teachers. Gold, Roth, Wright, and Michael (1991) found young male teachers more susceptible to stress factors that cause burnout, and Sinha (1998) likewise found younger teachers more likely to leave the profession. Singer (1992) reported young special education teachers nearly twice as likely to leave the profession as mature teachers.

Teachers in the 20 - 39 age bracket have been shown to have greater feelings of exhaustion and fatigue than teachers aged 50 and above (Russell, Altmaier, & Van Velzen, 1987; Schwab & Iwanicki, 1982). Huston (1989) discovered teachers ages 36-45 were significantly more depersonalized than either older or younger teachers. Frusher (1984) and Ma and MacMillan (1999) also found increasing age to be negatively correlated to teacher job satisfaction during early and middle adulthood. Interestingly, Steitz and Kulpa (1984) showed increasing age to be a negative influence on teacher job satisfaction among women while being a positive influence on teacher job satisfaction among men.

Speculation as to the rationale behind these research findings was rare. The bulk of the findings, however, supports the conclusion that the oldest teachers are, as a group, more satisfied than younger teachers.

### *Years of Teaching Experience*

Findings on the relationship between teacher job satisfaction and years of teaching experience have varied widely. A review of educational literature, however, indicates that a majority of investigations show the most experienced teachers reporting the highest levels of teacher job satisfaction.

Both Nederveen (1982) and McIntyre (1982) found the most experienced teachers to be more satisfied than less experienced teachers. McIntyre (1982) reported a significant correlation between increased years of experience and lessened feelings of emotional exhaustion, and found teachers with over fifteen years of experience showing significantly weaker feelings of emotional exhaustion.

Wilkerson (2000), conversely, reported teacher attrition rates of approximately 33% or higher even after five years of teaching, which could be interpreted that increasing experience does not show a parallel correlation with increasing teacher job satisfaction. The findings of Wisniewski and Garguilo (1997) may be even more indicative that increased experience does not always yield greater teacher job satisfaction. They reported that, regardless of age, special education teachers stay in the classroom an average of only six years. And at least one study (Schwab, 1980) reported no significant relationship at all between groups of varying years of teaching experience and their levels of teacher job satisfaction.

### *Educational Background*

Data from educational literature on relationships between teacher job satisfaction and educational levels were limited. The data that were found would indicate that there are no significant differences between levels of education among teachers and levels of teacher job satisfaction. McIntyre (1982) reported no significant correlation between burnout and levels of education. Schwab (1980) (as cited in McIntyre, 1982) also found no significant differences in teachers according to levels of education.

However, Schwab (1980) reported that research by Gann (1979) and by Maslach and Jackson (1979) found people [non-teachers in the general population] with higher education levels to be slightly more satisfied in their jobs than people with lower levels of education. People with higher levels of education score higher on the Emotional Exhaustion subscale, higher on the Personal Accomplishment subscale, and lower on the Depersonalization subscale on the Maslach Burnout Inventory (Maslach & Jackson, 1986).

### *Fields of Certification*

Nationwide, almost one-fourth of secondary teachers do not even have a minor in their main teaching field (State Legislatures, 1997). Ingersoll reported levels of out-of-field teaching as high as 54% in some subject areas (1997). However, the relationship between teacher job satisfaction and teachers teaching within or outside of their fields of certification has not been reported by educational literature. There is a dearth of research on this aspect of teacher job satisfaction.

### *Years of Experience in Block Scheduling*

Data on the relationship between teacher job satisfaction and number of years of teaching experience in block scheduling were extremely limited. The two investigations found on this topic showed that teachers in their first year(s) of teaching under block scheduling are often dissatisfied with the system (Hamdy & Urich, 1998; Howard, 1998).

However, it is interesting to note that among teachers using various school schedules (not just block schedules), the relationship of levels of teacher job satisfaction and number of years of teaching experience was shown to be cyclical, with teachers in their first year(s) often reporting dissatisfaction with their jobs. McIntyre (1982) reported that teachers with one to three and seven to ten years of experience had more frequent feelings of emotional exhaustion than teachers in groups of other experience levels.

### Summary and Implications

Research shows teachers who are satisfied with their jobs are more effective teachers, and effective teachers are the main component of effective schools (Frymier, 1987; Gainey & Winn, 1996; Kaiser & Polczynski, 1982; Latham, 1998). Zigarelli (1996) concluded from his research that, "The effective school is one where there is plenty of classroom time to learn, where teachers are afforded much time to prepare their classes, and where teachers are satisfied with their work environment" (p. 107). Other investigators confirm his findings (Byrne, 1998; Coyle & Witcher, 1992).

Yet numerous studies show serious problems with these same themes of workload and time demands, social isolation, and less-than-ideal working conditions.



With few exceptions, complaints are generally concerned with working conditions (extrinsic components), rather than with the work itself (intrinsic components) (Cockburn, 2000; Davis & Wilson, 2000; Ellis, 1984; Harden, 1999).

Educational literature is replete with articles describing the high levels of stress associated with careers in teaching. Excessive stress levels among teachers, over time, result in burnout, producing a teaching force that becomes less capable and less effective (Guglielme & Tatrow, 1998). Burnout is also associated with a multitude of related problems, including absenteeism, low worker morale, and job turnover, and has been found to be a major cause of attrition among teachers( Cockburn, 2000; Litt & Turk, 1985; Miller, Brownell & Smith, 1999). Educational literature reveals burnout to be positively correlated with high levels of job dissatisfaction. Job dissatisfaction among teachers is of major concern not only because of the related high attrition rates, but because of the lowered quality of teaching that is generated when teachers, for various reasons, choose to remain in the classroom (Wisniewshi & Gargiulo, 1997).

A review of educational literature reveals that the causes of burnout among teachers can be categorized into three general areas: (a) less than ideal working conditions, (b) too great a workload and excessive time demands, and (c) social isolation. Strategies to ameliorate the negative effects of any or all of these situations could have the potential to reduce problems of teacher burnout, and, ultimately, improve the quality of our nation's educational system (Schamer & Jackson, 1996).

Research shows that block scheduling has the capability of creating a slower paced, less stressful atmosphere for students and teachers alike. Reducing a six-period (or more) day into fewer but longer blocks of time daily allows more time for teachers

to do their work and to collaborate with each other concerning teaching plans, as well as providing time for collegiality among coworkers—a recognized aid in reducing teacher burnout. Block scheduling also significantly reduces the number of students teachers must deal with on a daily basis, thus reducing paperwork and workload in general (Queen, Algozzine, & Eaddy, 1996).

Not all literature is completely positive concerning block scheduling. There are objections to several facets of its use, including (a) the need for extensive staff training and stakeholder consensus (DiRocco, 1999; Snyder, 1997), (b) trouble with absenteeism and transfer students (Queen, Algozzine, & Eaddy, 1996), and (c) problems created by the timing of sequential courses and state-mandated achievement tests (Walker, 1999). However, most literature on block scheduling is overwhelmingly in favor of block scheduling as one way of (a) changing the working conditions that can exacerbate teacher stress, (b) reducing teacher workload, and (c) creating less isolation and more social support—three important sources of teacher job dissatisfaction (Canady & Rettig, 1993).

Because of the potential of block scheduling to lessen or change these situations, it seems possible that schools that employ block scheduling would have teachers who are more satisfied with their jobs than schools that use traditional scheduling. If so, research could give important direction to school officials across the nation and world who are seeking to attract and keep the best possible teachers.

Furthermore, there exists a lack of knowledge in some areas, as well as a confusing mixture of investigative results in other areas, concerning how teacher job satisfaction is affected by specific demographic factors. Research results concerning

how teacher job satisfaction is affected by these specific factors will be a valuable addition to the body of knowledge in this domain.

## CHAPTER 3

### Methodology

The purpose of this study was to determine if teachers who teach in schools where block scheduling is used have higher levels of job satisfaction than those teachers who teach in schools which use traditional scheduling. If there exists a significant difference in levels of job satisfaction, this information could be useful to education administrators in their efforts to attract and retain high-quality teachers. Administrators may choose to adopt some form of block schedule in order to lessen their teachers' stress levels and to use it as an appealing bonus in enticing new teachers to their schools.

In this chapter, the research design will be described and the procedures for the selection of the sample to be tested will be presented. Also, the instrument to be used in the study will be described and the details of the procedure to be followed in collecting data will be explained. Finally, plans for the analysis of the data collected will be described.

#### Research Design

This group comparison, an *ex post facto* investigation based on a survey of secondary teachers from AA schools in Arkansas, attempted to discover if there was a difference in levels of job satisfaction between teachers in schools using block scheduling when compared to teachers in schools using traditional scheduling. A

sample of secondary teachers from small to middle-sized schools across the state of Arkansas was surveyed to determine their levels of job satisfaction according to the Minnesota Satisfaction Questionnaire (MSQ) (Weiss, Dawis, England, & Lofquist, 1977). The levels of job satisfaction indicated by teachers in schools using block scheduling were compared to the results shown by teachers from schools using traditional scheduling, and the results were statistically analyzed to determine if significant differences exist.

### Sample

In order to keep the sample as homogeneous as possible, participants in the study had several common characteristics. Participants worked in either public or private schools that were similar in student population (all were classified by the Arkansas Activities Association as AA according to student populations) and geographical location (within Arkansas). Schools in the sample varied typically in nationally-normed test scores, and black/white ratios varied from over 98% white (example: Magnet Cove Public Schools, in Magnet Cove) to over 75% black (example: Altheimer Unified School District, in Altheimer). Although there were a few school districts composed of students with relatively high socio-economic backgrounds (example: Harding Academy, in Searcy), the vast majority of schools were populated with students from middle to lower income levels. These schools represented small, rural districts in Arkansas, with secondary student populations roughly between 110 and 200 in grades ten through twelve. This size school was chosen because approximately one-fourth of these districts now use block schedules, while larger school districts in Arkansas have increasingly smaller percentages of

schools using block schedules (Arkansas Activities Association, Associate Executive Director L. Taylor, personal communication, December 10, 2001).

Administrators from all 107 AA schools were contacted and all agreed to take part in the MSQ survey. There are 25 AA schools that presently use block scheduling, while 82 schools use traditional scheduling. In order to yield comparable numbers, all 25 block scheduled schools were surveyed, and a systematic sampling of every third school of the traditionally scheduled schools yielded 27 schools to be surveyed. All teachers in each school were asked to complete the MSQ. With approximately 52 schools asked to participate, yielding a field of approximately 1200 to 1250 teachers, a return rate of 50 - 60% was anticipated, yielding at least 625 completed questionnaires.

#### Instrumentation

All participants were asked to complete the long form of the MSQ (see Appendix A). This questionnaire was chosen for several reasons. First, the long form of the MSQ (Weiss et al., 1977) allows for a thorough examination of 21 different aspects of job satisfaction through a survey of 100 questions. Each of the first 20 aspects or scales consists of five items (phrases) with items constituting a given scale appearing at 20-item intervals. These items measure such widely varied constructs as “the chance to tell others what to do” (authority), and “my pay and the amount of work I do” (compensation), to “the chance to try my own methods of doing the job” (creativity). The twenty-first scale measured by the MSQ is a General Satisfaction scale that consists of 20 items, one from each scale. While each individual phrase is marked by participants along a Likert-type scale of five possible answers ranging from

(1) Very Dissatisfied, (2) Dissatisfied, (3) Neither ("I can't decide whether I am satisfied or not with this aspect of my job"), (4) Satisfied, to (5) Very Satisfied, the General Satisfaction scale uses a numerically-assigned scoring method to yield a resulting score of from 20 to 100. This General Satisfaction score, which measures job satisfaction, will be the score used solely to compare the satisfaction levels of block scheduled schools to traditionally scheduled schools.

Second, this questionnaire has high validity and reliability factors and has been widely accepted, and used among researchers to study respondents in many different vocational areas, including teachers. It has been normed for teachers and widely used in research on job satisfaction levels among educators (Brown-Wright, 1993; Chen, Blendinger, & McGrath, 2000; Funderburg & Kapes, 1997; Hirschfield, 2000). Third, the questionnaire is easy to understand, quick to complete, and required minimal alterations (and these only concerning demographic information). This instrument contains one hundred brief questions which may be answered on a continuum along a Likert-type scale of five possible answers, from Very Dissatisfied, Dissatisfied, Cannot Decide, Satisfied, and Very Satisfied (Weiss et al., 1977).

The MSQ is described by Robert Guion in *The Eighth Mental Measurement Yearbook* (1978), as being "well developed," giving "reasonably reliable, valid, well-normed indications of general satisfaction at work" (p. 1051 – 1052). The MSQ has Hoyt reliability coefficients that range from a high of .97 on Ability Utilization (for both stenographers and typists) and on Working Conditions (for social workers) to a low of .59 on Variety (for buyers). The median Hoyt reliability coefficients ranged from .93 for Advancement and Recognition to .78 for Responsibility. Of the 567 Hoyt

reliability coefficients reported in Section III-B (27 groups with 21 scales each), 83% were .80 or higher and only 2.5% were lower than .70 (Weiss et al., 1977, p.14).

Much of the evidence supporting construct validity for the MSQ is derived indirectly from the validation studies of the Minnesota Importance Questionnaire. Only three of the sixteen MSQ scales have not yielded evidence that conforms to theoretical expectation (Compensation, Independence, and Social Service) according to construct validity and only these three scales are not recommended without reservation (Weiss et al., 1977).

Considering concurrent validity, when compared to 25 other occupational groups, group differences were statistically significant at the .001 level for both means and variances on all 21 MSQ scales, indicating that the MSQ can differentiate among occupational groups. When means and variances for each of the 21 scales are compared to separate occupations, the results found are comparable with those reported in research literature (Weiss et al., 1977).

According to Guion (as cited in the *Eighth Mental Measurement Yearbook*, 1978) the MSQ compares well with a major alternate instrument (the Job Descriptive Index), and it can give either a detailed diagnostic or a frugal summary. Adjustments were made to make the questionnaires more specific for this particular study. These included adding blanks for demographic information (a) gender, (b) age, (c) number of years of teaching experience, (d) educational background, (e) determination of whether the teacher is teaching in a field in which he/she is certified, and (f) years of experience in teaching using block scheduling (if applicable) (see Appendix A).



The purpose of reporting this demographic data was to discover if this investigation revealed data similar to previous reports, according to levels of teacher job satisfaction, in matters of (a) gender, (b) age, (c) years of experience, (d) educational background, and (e) teaching in fields in which teachers are certified. It will also enable identification of the responses of teachers who are in their first year of teaching block scheduling. This particular response is important because research reveals that teachers in the first year of transition to block scheduling often feel overly stressed from the transition itself, and this temporary stress could skew their attitudes concerning the block scheduling method (Bruckner, 1997; Hamdy & Urich, 1998; Howard, 1998; Hurley, 1997a).

#### Procedural Details

One of the first steps before proceeding with any study involving humans is to obtain a Human Use and Consent form, which was approved by Louisiana Tech University (see Appendix B). The phone number and address of the administrative office of each school was obtained, and each administrator was contacted by phone. Human Use and Consent forms were included in the packets sent to these schools along with the survey and instructions for completion and return (see Appendix C). Along with this was a memo of approval of the use of the Minnesota Satisfaction Questionnaire signed by Mr. Ray Simon, Director of the Arkansas State Department of Education (see Appendix D).

Surveys were mailed to each school administrator. The surveys were accompanied by a personal letter emphasizing the importance of the investigation, and expressing appreciation for cooperation, as well as reiterating requests as to

completion and return of the instrument (see Appendix E). Surveys were to be (a) completed anonymously within two weeks after delivery (preferably during a regularly scheduled staff meeting), (b) sealed immediately by participants in individual envelopes provided by the researcher, (c) then collected by a teacher or school secretary, and (d) returned by mail in a postage-paid, self-addressed envelope provided by the researcher. As a safeguard against tampering by school administrators, each individual envelope will be inconspicuously marked to ensure that surveys were returned in the original envelope provided.

The researcher contacted, personally or by phone, each administrator who did not return completed surveys within three weeks after receiving them. This process was repeated after two additional weeks. Results from all participating schools were analyzed by the principal investigator, with help from Grambling State University faculty. A copy of the final results of the study will be sent to each participating school, upon the request of the administrator.

#### Internal Validity

The investigation's participant sampling included all AA schools in the state of Arkansas to insure an unbiased representation (see Appendix F). Teachers were given an envelope in which to place their completed questionnaire and were instructed to seal it (and mark across the seal, if they so desire) before they allowed it to be collected for return to the researcher. This should have ensured that teachers felt sufficiently protected in order to enable them to be completely honest in their answers. Teachers completed and returned questionnaires at the same time of the school year, so that possible seasonal emotional highs and lows (end-of-the-year exhaustion, for

instance, or beginning-of-school eagerness) experienced by teachers would not affect results. Although the purpose of the study is clearly stated on the Human Use and Consent form, principals were instructed to have teachers complete the MSQ before they were presented with the consent forms, since a foreknowledge of the study's purpose could have possibly caused some skewing of answers. This could be a significant problem had teachers been inordinately enamored or resentful of their present state.

### Data Analysis

Responses were summed and averaged for each item on the MSQ to determine raw scores, means, and the standard deviations of responses within each of the twenty MSQ subscales for all instruments completed. In addition, scoring included a general satisfaction scale, also figured as a raw score. The mean percentile scores of teachers using block scheduling and teachers using traditional scheduling were compared by the use of a univariate analysis of variance (ANOVA). The General Satisfaction scale was the determining factor in proving or disproving each of this study's hypotheses.

In addition to analyzing data with ANOVA, the respondents were also classified according to their means on the General Satisfaction scale as being either Satisfied or Dissatisfied with their job. All respondents whose means were between 3.5 and 5.0 were categorized as Satisfied. Respondents whose means were between 1 and 2.49 were categorized as Dissatisfied. Those respondents whose means were between 2.5 and 3.49 were be categorized as Neither (Satisfied nor Dissatisfied) and their numbers were disregarded for this analysis. A chi-square analysis was performed to determine if there was a significant difference in the numbers of Satisfied and

**Dissatisfied teachers in block scheduled schools as compared to the numbers of Satisfied and Dissatisfied teachers in traditional scheduled schools.**

The .05 level of significance determines total rejection of each hypothesis. This is the level of rigor selected for this study. However, when analyzing data using all twenty scales of the MSQ by ANOVA, if any of the individual items are found to have levels of significance, those hypotheses may be partially rejected rather than totally rejected. The following null hypotheses were investigated:

(1) There are no significant differences in the job satisfaction levels of teachers in schools using block scheduling and teachers using traditional scheduling.

(2) There are no significant differences in the job satisfaction levels of males and females.

(3) There are no significant differences between teachers' age and their job satisfaction levels.

(4) There are no significant differences in the job satisfaction levels of teachers according to their years of teaching experience.

(5) There are no significant differences in the job satisfaction levels of teachers without college degrees, teachers with bachelors degrees, and teachers with masters degrees and above.

(6) There are no significant differences in the job satisfaction levels of teachers who are teaching in fields in which they are certified and teachers teaching in fields in which they are not certified.

**(7) Among teachers using block scheduling, there are no significant differences in job satisfaction levels and number of years of teaching experience using block scheduling.**

## CHAPTER 4

### Results

The purpose of this investigation was to add to the body of knowledge concerning factors that affect the job satisfaction of teachers. While the major aim of the investigation was to determine if there are relationships between teacher job satisfaction and the use of block scheduling, other factors that could affect levels of teacher job satisfaction were explored, also.

#### Descriptive Data

Of 25 block schedule schools which were sent questionnaire packets, a total of 22 (88%) responded. Of 27 traditional schedule schools which were sent questionnaire packets, 18 (67%) responded. Thirty-four schools returned their packets within four weeks. Phone calls to administrators who did not initially respond resulted in a second mail-out of packets. The second mail-out resulted in the participation of 6 additional schools (3 from block schedule schools and 3 from traditional schedule schools).

Numbers of respondents from both types of schools were remarkably evenly divided. Furthermore, participating schools were surprisingly homogeneous, with comparable percentages of gender types, comparable average ages, and comparable numbers of teachers teaching within and outside of their fields of certification.

### *Teacher Job Satisfaction and Block Scheduling*

Teacher job satisfaction was determined by the General Satisfaction score. As previously stated, the General Satisfaction level of each respondent was a sum of twenty particular questions which represent the twenty different categories of the Minnesota Satisfaction Questionnaire (MSQ). Numerical scores were assigned based on which of five responses were chosen for each item, ranging from Very Dissatisfied (1) to Very Satisfied (5). The specific items included for this analysis were as follows: 24, 25, 28, 30, 35, 43, 51, 61, 66, 67, 69, 72, 74, 77, 82, 93, 96, 89, 99, 100 (see Appendix A).

Additionally, because the MSQ did not force the respondents to specifically choose “Satisfied” or “Dissatisfied” (there was a “Neither” choice), respondents were placed into two groups (“Satisfied” and “Dissatisfied”) based on their average score on the twenty scales used to indicate General Satisfaction. Teachers whose average score was between 1 and 2.49 were defined as “Dissatisfied” while those teachers whose score was between 3.5 and 5 were defined as “Satisfied.” Those mean scores between 2.5 and 3.49 were categorized as neither satisfied nor dissatisfied, and so were not included in these calculations. The number of participants who were categorized as “Satisfied” and “Dissatisfied” were counted in each of the two types of schools and results are shown in Table 1. Only the 564 questionnaires which were complete for these items were used in calculating this score ( $N = 284$  for block scheduled teachers;  $N = 280$  for traditional scheduled teachers). In total, 431 respondents’ mean General Satisfaction levels, or 76%, were at least 3.5.

Table 1

*Totals of "Satisfied" and "Dissatisfied" Teachers*

Source	Satisfied	Dissatisfied
Traditional scheduled teachers	203	6
Block scheduled teachers	228	0

*Note.* 133 teachers were categorized as neither satisfied nor dissatisfied.

*Demographic Data*

Demographic data included teacher (a) gender, (b) age, (c) years of teaching experience, (d) educational background, (e) teaching in fields in which they are certified or are not certified, and (f) number of years of teaching experience under block scheduling (among teachers using block scheduling). Not all questions were completed by every respondent who attempted to complete the demographic page. Eight questionnaires were returned without any demographic data (seven from traditional schedule schools and one from block schedule schools), but these were included in the investigation of  $H_{01}$  because the participants' school type was known.

*Gender*

Of 601 participating teachers, 186 (31%) were males and 398 (66%) were females, with 18 participants (3%) not reporting this data (see Table 2). One might note that in traditional schools, males were 34% of the total teaching staff, while in block scheduled schools males constituted 30% of the teaching staff.

*Teacher Age*

Teacher age ranged from 21 to 71 years (see Table 3). The average teacher ages was 42. Since the demographic information asked for each teacher to state his or



her age, it was possible to determine the average age for teachers for each school type. The average age of traditional scheduled teachers was 43.4, while the average age of block scheduled teachers was 41.9. Ages were grouped into ranges similar to other studies found in educational literature, as well as similar to the ranges reported in the *Manual for the Minnesota Satisfaction Questionnaire* (Weiss, Dawis, England, & Lofquist, 1977).

Table 2

*Participant Breakdown by Gender*

Gender	Traditional schedule	Block schedule	Total participants
Male	98	88	186
Female	188	210	398
Missing	7	1	8
Total	293	299	592

*Note.* Nine participants did not report any of these data.

Table 3

*Participant Breakdown by Age Groups*

Years of age	Traditional schedule	Block schedule	Total participants
21-29	50	52	102
30-39	62	80	142
40-49	88	80	168
50-59	69	70	139
60 & older	8	12	20
Missing	18	4	22
Total	295	298	593

*Note.* Eight participants did not report these data.

### *Years of Teaching Experience*

Teachers were placed into four groups according to years of experience reported, with the youngest group (0 – 9 years of experience) having the largest proportion of teachers (see Table 4). The average number of years taught was 14 years. Grouping of years of experience was modeled after similar studies found in educational literature, as well as groupings found in the *Manual for the Minnesota Satisfaction Questionnaire* (Weiss et al., 1977).

Table 4

#### *Participant Breakdown by Years of Teaching Experience*

Years of teaching experience	Traditional schedule	Block schedule	Total participants
0 – 9	112	134	246
10 – 19	88	73	161
20 - 29	60	65	125
30 & more	23	25	48
Missing	11	1	12
Total number reporting	294	298	592

*Note.* Nine responses had little or no demographic data.

### *Educational Background*

Among participants reporting their educational backgrounds, 402 (69%) had completed bachelors degrees, and 181 (31%) had completed masters degrees. Only one teacher (< .2%) had less than a bachelors degree (see Table 5). Approximately 33% of block scheduled teachers had masters degree or higher, while 29% of traditional scheduled teachers had masters degrees or higher.

Table 5

*Participant Breakdown by Educational Background*

Educational background	Traditional schedule	Block schedule	Total participants
No degree	0	1	1
Bachelors	205	197	402
Masters or higher	82	99	181
Missing	7	1	8
Total	294	298	592

*Note.* Nine responses had little or no demographic data.

*Fields of Certification*

Eighty-eight percent (88%) of the 530 respondents reported that they were teaching within a field of certification, while 9% reported that they were teaching outside of their field(s) of certification (see Table 6). Seventeen (17) participants (3%) offered no information on this question. Almost 92% of traditional scheduled teachers were teaching within their fields of certification, while approximately 90% of block scheduled teachers were teaching within their fields of certification.

Table 6

*Participant Breakdown According to Teaching In or Outside of Certified Field(s)*

Subject area taught	Traditional schedule	Block schedule	Total Participants
Teaching in a field of certification	266	264	530
Teaching outside certification field(s)	24	30	54
Missing	7	1	8
Total	297	295	592

*Note.* Nine responses had little or no demographic data.

### *Years of Block Scheduling Experience*

Only 234 of 298 block scheduled teachers reported the number of years they had taught under block scheduling. These numbers varied widely. For example, while no teachers reported having had exactly nine years of experience under block scheduling, 43 teachers, or 18% of reporting teachers, reported having taught under block scheduling for exactly two years (see Table 7).

Table 7

#### *Block Teachers' Years of Experience in Block Scheduled Schools*

Years of block teaching experience	0	1	2	3	4	5	6	7	8	9	10
Number of teachers	23	29	43	41	35	21	26	10	13	0	3

*Note.*  $N = 234$

### *Analysis of Data*

The purpose of the following section is to discuss the findings of each hypothesis as presented in Chapter 1. A univariate analysis of variance (ANOVA) was used to test each of the following hypotheses, and the level of significance was chosen as  $p < .05$  to determine General Satisfaction levels. The level of significance for ANOVA for all twenty scales of the MSQ was also  $p < .05$ .

#### *Teacher Job Satisfaction and Block Scheduling*

$H_{01}$ : There are no significant differences in the job satisfaction levels of teachers in schools using block scheduling and teachers using traditional scheduling. There were no significant differences in the General Satisfaction levels of teachers in schools using block scheduling and teachers using traditional scheduling ( $F = .671$ ,

$P < .05$ ). Therefore, the null hypothesis is not rejected. Table 8 shows descriptive data for this hypothesis. Results of the ANOVA for all twenty-one scales are shown in Appendix G.

Table 8

*General Satisfaction Levels of Block Schedule and Traditional Schedule Teachers*

Source	<i>N</i>	<i>M</i>	<i>SD</i>
Traditional schedule teachers	259	75.48	11.31
Block schedule teachers	286	76.46	9.18
Total	545	76.00	10.25

Data were examined further, however, when the number of participants who were categorized as “Satisfied” and “Dissatisfied” were counted in each of the two types of schools. Almost 77% of participants were categorized as “Satisfied,” while less than 1% were categorized as “Dissatisfied.” Just under 24% were categorized as neither “Satisfied” nor “Dissatisfied.” It is interesting to note that all of the teachers categorized as “Dissatisfied” were from traditional schedule schools. There were no teachers from block schedule schools categorized as “Dissatisfied.”

*Teacher Job Satisfaction and Gender*

$H_{02}$ : There are no significant differences in the job satisfaction levels of males and females. There were no significant differences found in the General Satisfaction levels of male and female teachers ( $F = .954, P < .05$ ). Therefore, the null hypothesis is not rejected. Descriptive data for this hypothesis are shown in Table 9. Results of the ANOVA for all twenty-one scales are shown in Appendix H.

Table 9

*General Satisfaction Levels of Male and Female Teachers*

Gender	<i>N</i>	<i>M</i>	<i>SD</i>
Male teachers	179	76.75	10.94
Female teachers	378	75.86	9.85
Total	557	76.15	10.21

*Teacher Job Satisfaction and Teacher Age*

H<sub>03</sub>: There are no significant differences between teachers' age and their job satisfaction levels. There were no significant differences found between teachers' age and General Satisfaction levels ( $F = .971, P < .05$ ). Therefore, the null hypothesis is not rejected. Descriptive data for this hypothesis are shown in Table 10. Results of the ANOVA of all twenty-one scales are shown in Appendix I.

*Teacher Job Satisfaction and Years of**Teaching Experience*

H<sub>04</sub>: There are no significant differences in the job satisfaction levels of teachers according to their years of teaching experience. There were no significant differences found in the General Satisfaction levels of teachers according to their years of teaching experience. Therefore, the null hypothesis is not rejected. Descriptive data for this hypothesis are shown in Table 11 ( $F = .989, P < .05$ ). Results of the ANOVA of all twenty-one scales are shown in Appendix J.

Table 10

*General Satisfaction Levels of Teachers in Specific Age Groups*

Teacher age	<i>N</i>	<i>M</i>	<i>SD</i>
20 – 29 years	99	76.77	10.00
30 – 39 years	139	76.16	10.48
40 – 49 years	159	75.34	9.50
50 – 59 years	127	76.08	11.20
60 years & above	20	78.89	9.43
Total	544	76.19	10.23

Table 11

*General Satisfaction Levels of Teachers and Years of Teaching Experience*

Years of teaching experience	<i>N</i>	<i>M</i>	<i>SD</i>
0 – 9 years	236	76.25	9.83
10 – 19 years	156	76.05	10.30
20 – 29 years	116	75.55	10.62
30 or more years	45	77.71	11.27
Total	553	76.16	10.24

*Teacher Job Satisfaction and Educational Background*

$H_{05}$ : There are no significant differences in the job satisfaction levels of teachers without college degrees, teachers with bachelors degrees, and teachers with

Masters degrees and above. There were no significant differences in the General Satisfaction levels of teachers without college degrees, teachers with bachelors degrees, and teachers with Masters degrees and above ( $F = 1.066, P < .05$ ). Table 12 shows descriptive data for this hypothesis. Results of the ANOVA of all twenty-one scales are shown in Appendix K. As seen in Appendix K there was a significant difference in Ability Utilization. In this scale, teachers with Masters degrees had a mean score of 20.59 ( $N = 178$ ), while teachers with bachelors degrees had a mean score of 20.15 ( $N = 391$ ). Therefore, the null hypothesis is partially rejected.

Table 12

*General Satisfaction Levels of Teachers and Educational Background*

Educational background	<i>N</i>	<i>M</i>	<i>SD</i>
No college degree	1	73.00	
Bachelors degree	382	75.83	10.19
Masters degree & above	174	76.87	10.28
Total	557	76.15	10.21

*Teacher Job Satisfaction and Fields of Certification*

$H_{06}$ : There are no significant differences in the job satisfaction levels of teachers who are teaching in fields in which they are certified and teachers teaching in fields in which they are not certified. There were no significant differences in the General Satisfaction levels of teachers teaching fields in which they were certified and teachers teaching in fields in which they were not certified ( $F = .978, P < .05$ ).

Descriptive data for this hypothesis are shown in Table 13. Results of the ANOVA for



all twenty-one scales is shown in Appendix L. As seen in Appendix L, there was a significant difference in the scale of Independence. In this scale, the mean for teachers certified in their teaching field was 20.13 ( $N = 512$ ), while the mean for teachers not certified in their field of teaching was 19.5 ( $N = 53$ ). The null hypothesis is partially rejected.

Table 13

*General Satisfaction Levels of Teachers and Fields of Certification*

Teachers' field(s) of teaching	<i>N</i>	<i>M</i>	<i>SD</i>
Teaching outside of fields of certification	51	75.59	11.35
Teaching within fields of certification	506	76.24	10.11
Total	557	76.18	10.22

*Teacher Job Satisfaction and Years of*

*Block Scheduling Experience*

$H_{07}$ : Among teachers using block scheduling, there are no significant differences in job satisfaction levels and number of years of teaching experience using block scheduling. There were no significant differences in the General Satisfaction levels of teachers according to number of years of teaching experience under block scheduling ( $F = .871, P < .05$ ). Descriptive data for this hypothesis are shown in Table 14. Results of the ANOVA for all twenty-one scales in shown in Appendix M. As seen in Appendix M, there was a significant difference in the scale of Achievement. In this scale, the mean score for teachers with eight years' of block teaching

experience was 21.58 ( $N = 12$ ), and the mean score for teachers with ten years of block teaching experience was 16.67 ( $N = 3$ ). The null hypothesis is partially rejected.

Table 14

*General Satisfaction Levels and Years of Experience under Block Scheduling*

Years of experience	<i>N</i>	<i>M</i>	<i>SD</i>
0	20	77.00	10.97
1	29	78.93	8.22
2	40	78.35	9.96
3	40	75.20	9.51
4	34	76.82	9.66
5	21	76.67	8.63
6	25	77.44	8.04
7	8	77.13	7.26
8	12	79.75	7.81
10	3	71.33	8.62
Total	232	77.23	9.16

*Note.* No teachers reported having taught exactly 9 years.

## CHAPTER 5

### Discussion, Recommendations, and Conclusions

The purpose of this study was to determine if there is a relationship between teacher job satisfaction and block scheduling, and to investigate other factors that may affect the job satisfaction levels of teachers. These other factors included (a) gender, (b) teacher ages, (c) years of teaching experience, (d) educational background, (e) teaching in fields of certification, and (f) number of years of experience in teaching under block scheduling.

### Discussion

#### *Teacher Job Satisfaction and Block Scheduling*

Using ANOVA, results indicated no significant difference in levels of the General Satisfaction scale of job satisfaction of teachers who teach in traditionally scheduled schools and teachers who teach in block scheduled schools. This indicates that the type of schedule a school uses has no effect on teacher job satisfaction, and so administrators would do well to look elsewhere for ways to attract and retain quality teachers.

Still, in examining these data, one particular effect was noted. Block scheduled teachers' scores were unilaterally middle range and above, while traditional scheduled teachers' scores were not. This prompted a desire to examine the data further.

Categorizing the General Satisfaction scores into two groups of either “Satisfied” (those General Satisfaction scores whose mean levels were 3.5 to 5) or “Dissatisfied” (those General Satisfaction scores whose mean levels were 1 to 2.49) showed an interesting difference between block schedule teachers and traditional schedule teachers. There were no respondents from block schedule schools whose General Satisfaction levels were categorized as “Dissatisfied,” while there were six respondents from traditional schedule schools whose General Satisfaction levels fit this category. While the wording of  $H_{01}$  refers to levels of satisfaction and was not rejected, a closer examination of the data does indicate that there are differences between the numbers of satisfied and dissatisfied teachers in the two types of schools. This would suggest that further study of the topic is warranted.

It could be that simply comparing the levels of teachers’ satisfaction for each hypothesis was not the best way to ascertain the true picture of differences in job satisfaction between teachers in block scheduled and traditional scheduled schools. Because of the human tendency to score toward the middle ranges, the Likert-type scale used would have perhaps served the purposes of this investigation better had the middle choice of “Neither” not been available. “Neither” was number 3 on the scale from 1 (“Very Dissatisfied”) to 5 (“Very Satisfied”).

Another effect noted upon examination of these data was that the vast majority of respondents expressed satisfaction with their jobs. In total, 76% of the respondents were categorized as satisfied. Although educational literature is not entirely consistent on this topic, most literature would indicate that the majority of teachers are, indeed, satisfied.

A third consideration concerning the findings of the study is the fact that data collected in this investigation were from small, rural schools. Research shows that teachers in such schools are more satisfied with their teaching jobs than teachers in larger, more urban schools, and the findings here certainly support previous research. In actuality, this investigation was focused on an extremely homogeneous data set that is most likely not representative of all teachers everywhere. It is likely that the mean General Satisfaction levels would be very different in different settings, such as in large schools, in urban schools, or in schools in a more cosmopolitan environment.

It is interesting to note that the percentage of participating schools was much higher from block schedule schools than from traditional schedule schools (88% and 67%, respectively). Did the key terms “block scheduling” in the Human Use and Consent forms catch the attention of the administrators particularly from the block schedule schools? Or do the teachers at block schedule schools just naturally have a greater amount of time to spend on extraneous matters such as questionnaires? This seems entirely probable, since the number of incomplete answers for each question were consistently much lower for block schedule teachers. It would be interesting to follow up these surveys with qualitative research to find out why the disparity exists between the school types. If, indeed, block schedule schools simply have more time for matters such as this, would this not offer further support that block scheduling results in a less harried, less stressed school day?

#### *Teacher Job Satisfaction and Gender*

No significant findings were found in this investigation as far as a relationship between gender and teacher job satisfaction. Research findings concerning the effects

of gender on teacher job satisfaction are mixed. While this study showed no difference in job satisfaction levels between males and females, this finding is both disputed and supported by educational literature (Klecker, 1997; Sutter, 1996; Tack & Patitu, 1992). However, based on this study, which supports the findings reported by Cano & Miller (1992), Hill (1983), and Klecker (1997) administrators should eliminate the factor of gender in attempts to discover how to keep teachers satisfied with their jobs. Gender does not appear to be a factor in teacher job satisfaction.

### *Teacher Job Satisfaction and Teacher Age*

#### *And Years of Experience*

While this study found no significant differences between teacher age, years of teaching experience, and teacher job satisfaction, it is difficult to say that these findings are totally supported by literature. Educational literature tends to indicate that older, more experienced teachers are more satisfied than younger, less experienced teachers (Gold, Roth, Wright, & Michael, 1991; McIntyre, 1982; Singer, 1992; Sinha, 1998). Conversely, Huston (1989) and Ma and MacMillan (1999) found increasing age to be negatively correlated to teacher job satisfaction during early and middle adulthood. Few studies find there is absolutely no relationship between either age or years of teaching experience and teacher job satisfaction. However, if these findings were to be supported by further study, administrators could eliminate both age and number of years of experience as factors to consider when attempting to keep teachers satisfied with their jobs.

### *Teacher Job Satisfaction and Educational Background*

H<sub>05</sub> read: There are no significant differences in the job satisfaction levels of teachers without college degrees, teachers with bachelors degrees, and teachers with masters degrees and above. These findings are supported by previous studies, although data from educational literature on the relationship between teacher job satisfaction and education levels are quite limited. McIntyre (1982) found no significant correlation between high levels of stress (which can be equated to job dissatisfaction) and levels of education. Schwab (1980) (as cited in McIntyre, 1982) also found no significant differences in teacher satisfaction according to levels of education.

Although research is limited, the uniform results at this point in time would indicate that educational background has no significant effect on teacher job satisfaction. Administrators should look for ideas unrelated to educational background in their efforts to seek to improve teacher job satisfaction.

### *Teacher Job Satisfaction and Fields of Certification*

While this investigation found no significant differences in the satisfaction levels between those teachers who teach in their field of certification and those who do not, this finding could neither be supported nor refuted by educational literature. There is a dearth of research on this aspect of teacher job satisfaction. If this finding were to be supported by further investigations, administrators could eliminate the concept of teaching within or outside of one's field of certification as having any effect on teacher job satisfaction.

It should be noted that, in this particular situation, Arkansas teachers appear to be in a better situation than much of the rest of the country. Only 54 of 584

respondents (9%) were not teaching in their fields of certification. Nationwide, almost one-fourth of secondary teachers do not even have a minor in their main teaching field (State Legislatures, 1997). Ingersoll (1997) reported levels of out-of-field teaching as high as 54% in some subject areas. It is possible that one overall effect of this relatively high level of teaching within certification fields is a correspondingly high level of satisfaction among teachers in general, as is exemplified in this study. Further investigation of this idea, whether or not high levels of teaching within fields of certification results in high levels of satisfaction, as in comparing entire states with highly variant percentages, is needed.

*Teacher Job Satisfaction and Years of  
Block Scheduling Experience*

In the category of number of years of experience in teaching under block scheduling, findings were somewhat surprising. Educational research shows that the satisfaction levels of teachers are cyclical, and the means of teachers reporting in each grouping in this research certainly support these findings. However, while some research has shown that teachers in their first year(s) of teaching under a block schedule are often dissatisfied with the system (Hamdy & Urich, 1998; Howard, 1998), it was not supported by this investigation. There could be several reasons for this, particularly when one considers the relatively small sample sizes. Perhaps the most likely explanation for teachers experiencing their first few years of block scheduling in the schools participating in this investigation is that they were particularly well prepared for the change to block scheduling. Or, perhaps the small samples represented schools that had had unusually strong buy-in from teachers in the



small communities. Further study would be valuable in discovering why the tendency to be dissatisfied with block scheduling during one's first few years was not found in these particular schools.

It should also be noted that in this investigation, the means of teachers who had taught exactly ten years showed the teachers to be less satisfied (although not to levels of significance) than teachers with fewer years of experience. Since research shows levels of teacher job satisfaction to decline during the middle years of teachers' careers, this finding is supported by educational literature (McIntyre, 1982).

In any case, administrators would do well to look at the number of years of teaching experience under block scheduling that teachers have had whenever they are considering an overall look at teacher job satisfaction. While most educational literature indicates that dissatisfaction is often found during teachers' first few years of teaching under block scheduling, this study clearly shows that this need not always be the case.

### Recommendations

The findings of this study prompt a variety of questions that warrant further investigation. First and foremost, further study is needed to discover if a different instrument could yield different findings. Perhaps using the short form of the MSQ would have encouraged hurried teachers to be more thoughtful in their answers. It would be interesting to know if the short form of the MSQ would yield similar results. Perhaps a shorter questionnaire would have yielded results comparable in validity but would have been easier and quicker for participants to complete. One limitation of this study is the possibility that accurate responses were skewed by a number of non-

serious teachers. Several teachers' responses were repetitive from about page four to the end of the questionnaire, with answers simply all fours or all fives. Clues to this action were offered by respondents who wrote unsolicited comments about the repetitious questions and the length of the survey.

Second, an instrument designed to particularly measure the hypotheses investigated in this study could (possibly) more clearly contrast the unique differences in attitudes between teachers in block scheduled schools and teachers in traditional scheduled schools. Such an instrument would emphasize such things as (a) how teachers feel about the sufficiency of their preparation time, (b) teachers' feelings about collaboration time with coworkers, and (c) the amount of stress experienced on a daily basis. Concepts that do not have a direct bearing on the hypotheses being investigated, such as teachers' feelings about compensation or social status, could be eliminated.

Another possible enhancement of the instrument to be used would be the elimination of the "Neither" choice, thereby forcing respondents to choose whether they are "Satisfied" or "Dissatisfied." Perhaps levels of satisfaction would have then become more meaningful. When opinions are the basis of the data collected, grouping answers into two groups and using tests such as chi-square are entirely permissible and even advisable (Spatz & Johnson, 1984). Because the natural human response is to select toward the middle, a lack of a "Neither" choice might force respondents to yield more enlightening answers.

An additional consideration that could have added valuable knowledge from this investigation would have been to document the amount or quality of preparation

block schedule teachers were given before the transition from the traditional schedule occurred. Since so much of educational literature reports the necessity of good teacher preparation before a transition to block scheduling, whether or not block schedule teachers received adequate preparation could have been an important factor in determining their satisfaction with their new schedules.

Also, perhaps future studies would involve having the researcher present in order to administer each set of questionnaires. This would eliminate any possibility of participants being aware of the purpose of the study prior to completing the surveys, a situation which could influence participants' answers. Without the presence of the researcher, there is always the possibility of participants not following the instructions included in the packets.

Another consideration would be for qualitative investigations to be performed instead of quantitative research. Qualitative research could reveal more about how teachers really feel about their jobs in ways that standardized, one-size-fits-all questionnaires cannot, and could be the best way to explore this matter. Unsolicited responses written on the questionnaires demonstrated that teachers are eager to talk about their attitudes about their jobs. Note this comment, for example: "Today I am ready to resign—but since I live in one of the five poorest counties in the entire United States (see AP reports of December, 2001), and I have one of the higher paying jobs in the county and I must work . . ."

Finally, further study should involve schools from a variety of settings, not just rural schools. Several studies have shown that rural teachers have different levels of satisfaction, often higher, than teachers who teach in either urban or suburban areas

(Byren, 1998; McCormick, 1996; Quaglia, Marion, & McIntire, 1991). One could argue that the information gleaned from this study could only be generalized to other AA (sized) schools. An additional consideration would be to involve schools that more closely resemble the national norm of having 20 - 25% of teachers teaching outside of their field(s) of certification. It is possible that the high rate of teachers teaching within their field(s) of certification, as found in this study in Arkansas, may have influenced the overall levels of teacher job satisfaction. In considering these factors, a study that involved schools of various sizes and settings (such as outside of Arkansas) could have produced data with greater external validity.

### Conclusions

This study showed no significant differences in levels of teacher job satisfaction between teachers in block scheduled schools and teachers in traditionally scheduled schools. According to these findings, the type of school schedule has no bearing on teacher job satisfaction, and administrators should continue to look for other means of attracting and retaining quality teachers. However, it would be interesting to find out if changes in the (a) method or analysis of research that was used (mailed surveys; lengthy form of questionnaire; ANOVA of quantitative data), (b) perspective taken (levels of satisfaction when the middle choice was neutral), or the (c) setting (small, rural schools, or schools with higher rates of teachers teaching outside of their field(s) of certification) could yield different results. Further study could show whether or not changes such as these would, indeed, yield different conclusions.

Furthermore, studies utilizing different types of instruments should be employed in these investigations in order to determine if different instruments, such as those without a neutral answer, or using an instrument more closely designed for the purposes of this study, would yield different answers. In addition, qualitative methods of investigation would perhaps be even more revealing concerning the attitudes of teachers toward block scheduling or traditional scheduling. Finally, a more heterogeneous sampling of participants in different settings (for instance, various sizes, types, and locations of schools) could possibly highlight differences in job satisfaction levels between teachers in the different school types. Comparable results could be invaluable in helping administrators determine better ways to attract and retain teachers.

## REFERENCES

- Abel, M. H., & Sewell, J. (1999). Stress and burnout in rural and urban secondary school teachers. *Journal of Educational Research*, 92(5), 287-293.
- Adams, E., Heath-Camp, B., & Camp, W. G. (1999). Vocational teacher stress and the educational system. *Journal of Vocational Education Research*, 24(3), 133-44.
- Alam, D., & Seick, R.E., Jr. (1994, May). A block schedule with a twist. *Phi Delta Kappan*, 732-733.
- Anonymous. (1992). Satisfaction and stress of being a teacher. *The Worklife Report*, 8(6), 12-14.
- Baker, D. P., & Smith, T. (1997). Trend 2: Teacher turnover and teacher quality: Refocusing the issue. *Teachers College Record*, 99(1), 29-35.
- Barter, R. F. (1984). Rejuvenating teachers. *Independent School*, 43(3), 37-42.
- Bentley, R., & Starry, A. (1970). *Purdue teacher evaluation scale*. West Lafayette, IN: Purdue Research Foundation.
- Benton-Kupper, J. (1999). Can less be more? The quantity versus quality issue of curriculum in a block schedule. *Journal of Research and Development in Education*, 32(3), 168-177.
- Black, S. (1998). Learning on the block. *The American School Board Journal*, 185, 32-34.
- Bradford, J. J. (1999). How to stay in teaching (When you really feel like crying). *Educational Leadership*, 56(8), 67-68.

- Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education, 16*(2), 239-253.
- Brown-Wright, D. (1993, May). *Leadership, faculty, and decentralized authority*. Paper presented at the annual meeting of the Ohio Academy of Science, Youngstown, OH.
- Bruckner, M. (1997). Eavesdropping on change: Listening to teachers during the first year of an extended block schedule. *National Association of Secondary School Principals Bulletin, 81*(593), 42-53.
- Byrne, B. (1994). Burnout: Testing for the validity, replication, and variance of causal structure across elementary, intermediate, and secondary teachers. *American Educational Research Journal, 31*, 645-673.
- Byrne, J. (1998). Teacher as hunger artist: Burnout: Its causes, effects, and remedies. *Contemporary Education, 69*(2), 86-91.
- Cadiz, S. M. (1989). The continuum of teacher training: A developmental approach to teacher preparation (Report No. PS019334). New York: EDRS Clearinghouse. (ERIC Document Reproduction Service No. ED 330 436)
- Canady, R. L. (1990). Parallel block scheduling: A better way to organize school. *Principal, 69*(3), 34-36.
- Canady, R. L., & Reina, J. A. (1993). Parallel block scheduling: An alternative structure. *Principal, 72*(3), 26-29.
- Canady, R. L., & Rettig, M. (1992). Restructuring middle level schedules to promote equal access. *Schools in the Middle, 1*(4), 20-26.

- Canady, R. L., & Rettig, M. (1993). Unlocking the lockstep high school schedule. *Phi Delta Kappan*, 75, 310-314.
- Canady, R. L., & Rettig, M. (1995). *Block scheduling: A catalyst for change in high schools*. Princeton, NJ: Eye on Education.
- Carroll, J. M. (1989). *The Copernican plan: Restructuring the American high school*. Andover, MA: Regional Laboratory for Educational Improvement of the Northeast and Islands.
- Carroll, J. M. (1990). The Copernican plan: Restructuring the American high school. *Phi Delta Kappan*, 71, 358-365.
- Carroll, J. M. (1994a). *The Copernican plan evaluated: The evolution of a revolution*. Topsfield, MA: Copernican Associates.
- Carroll, J. M. (1994b). The Copernican plan evaluated: The evolution of a revolution. *Phi Delta Kappan*, 76, 104-110, 112-113.
- Carroll, J. M. (1994c). Organizing time to support learning. *The School Administrator*, 51, 26-33.
- Cates, P. (2000). Reinventing Lubbock high school. *The High School Magazine*, 7(9), 22-27.
- Chen, K., Blendinger, J., & McGrath, V. (2000, November). *Job satisfaction among high school assistant principals*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Bowling Green, KY.
- Cockburn, A. D. (2000). Elementary teachers' needs: Issues of retention and recruitment. *Teaching and Teacher Education*, 16(2), 223-238.



- Cox, T., Mackay, C. J., Cox, S., Watts, C., & Brockley, T. (1978). Stress and well-being in school teachers. Paper presented to the Ergonomics Society Conference on Psychophysiological Response to occupational stress, Nottingham University, Nottingham, England.
- Coyle, L., & Witcher, A. (1992). Transforming the idea into action: Policies and practices to enhance school effectiveness. *Urban Education, 26*(4), 390-400.
- Cunningham, R. D., Jr., & Nogel, S. A. (1996). 6 Keys to block scheduling. *Education Digest, 62*(4), 29-32.
- Davis, J., & Wilson, S. M. (2000). Principals' efforts to empower teachers: Effects on teacher motivation and job satisfaction and stress. *The Clearing House, 73*(6), 349-353.
- Day, T. (1995). New class on the block. *The Science Teacher 62*(4), 28-30.
- DiBiase, W. J., & Queen, J. A. (1999). Middle school social studies on the block. *The Clearing House, 72*, 377-384.
- DiRocco, M. D. (1999). How an alternating-day schedule empowers teachers. *Educational Leadership, 56*(4), 82-84.
- Dubrovich, M. A. (1991). Buying time for teachers. *Principal, 71*(2), 52-53.
- Dyrli, O. E. (2000, April). New schools on the block. *Curriculum Administrator, 81*-85.
- Effective schools: A summary of research.* (1983). Arlington, VA: Educational Research Service.
- Edwards, C. M., Jr. (1993). Restructuring to improve student performance. National Association of Secondary School Principals Bulletin, 77(553), 77-88.

- Eineder, D. V., & Bishop, H. L. (1997). Block scheduling the high school: The effects on achievement, behavior, and student-teacher relationships. *National Association of Secondary School Principals Bulletin*, 81(589), 45-54.
- Ellis, N. H., & Bernhardt, R. G. (1992). Prescription for teacher satisfaction: Recognition and responsibility. *The Clearing House*, 65, 179-182.
- Ellis, T. I. (1984). Motivating teachers for excellence (Report No. 6). Eugene, OR: ERIC Clearinghouse on Educational Management. (ERIC document Reproduction Service No. ED 259 449)
- Erb, T. O. (2000). Do middle school reforms really make a difference? *The Clearing House*, 73(4), 194-200.
- Farber, B. (1984). Teacher burnout: Assumptions, myths, and issues. *Teacher College Record*, 86, 331-338.
- Feeney, S., Christensen, D., & Moravcik, E. (2001). *Who am I in the lives of young children?* (6<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.
- Frank, A. R., & Keith, T. Z. (1984). Academic abilities of persons entering & remaining in special education. *Exceptional Children*, 51, 76-77.
- Frataccia, E. V., & Hennington, I. (1982, February). *Satisfaction of hygiene and motivation needs of teachers who resigned from teaching*. Paper presented at the annual meeting of the Southwest Educational Research Association, Austin, TX.
- Freeman, C. J. (1996). Block scheduling: A vehicle for school change (reform). (Doctoral dissertation, University of Minnesota, 1996). *Dissertation Abstracts International*, 57-06A, AAI9635855.

- Friedman, I. A. (1993). Burnout in teachers: The concept and its unique core meaning. *Educational and Psychological Measurement, 53*, 1035-1044.
- Frusher, S. S. (1984). The relationship between gender and psychological well-being. (Report No. CG021430) OK. Clearinghouse. (ERIC Document Reproduction Service No. ED 303 731)
- Frymier, J. (1987). Bureaucracy and the neutering of teachers. *Phi Delta Kappan, 69*, 9-14.
- Funderburg, D. L., & Kapes, J. T. (1997, January). *Work values and job satisfaction of Arkansas business educators in secondary systems and community/technical colleges*. Paper presented at the annual meeting of the Southwest Educational Research Association, Austin, TX.
- Gainey, D. D., & Winn, G. F. (1996). Who will teach tomorrow? *The Education Digest, 51*, 51-55.
- George, P. S., & McEwin, C. K. (1999). High schools for a new century: Why is the high school changing? *National Association of Secondary School Principals Bulletin, 83*(606), 10-24.
- Gerking, J. L. (1995). Building block schedules. *The Science Teacher, 62*(4), 23-27.
- Gold, Y., Roth, R. A., Wright, C. R., & Michael, W. B. (1991). The relationship of scores on the Educators Survey, a modified version of the Maslach Burnout Inventory, to three teaching-related variables for a sample of 132 beginning teachers. *Educational and Psychological Measurement, 51*, 429-438.
- Grissmer, D., & Kirby, S. N. (1997). Teacher turnover & teacher quality. *Teachers College Record, 99*, 45-56.

- Guglielmi, R. S., & Tatrow, K. (1998). Occupational stress, burnout, and health in teachers: A methodological and theoretical analysis. *Review of Educational Research, 68*, 61-99.
- Guion, R. M. (1978). Minnesota Satisfaction Questionnaire: In O. K. Buros (Ed.), *Eighth Mental Measurement Yearbook*, (Vol. II, no. 1052). Highland Park, NJ: The Gryphon Press.
- Gurin, G., Veroff, J., & Field, S. (1961). *Americans view their mental health*. New York: Basic Books.
- Hamdy, M., & Urich, T. (1998). Perceptions of teachers in South Florida toward block scheduling. *National Association of Secondary School Principals Bulletin, 82*(596), 79-82.
- Harden, R. M. (1999). Stress, pressure, and burnout in teachers: Is the swan exhausted? *Medical Teacher, 21*(3), 245-247.
- Herzberg, F. (1959). *The motivation to work*. New York: John Wiley & Sons.
- Herzberg, F. (1967). *Work and the nature of man*. Cleveland, IL: The World Publishing Company.
- Heston, M. L., Dedrick, C., Rashke, D., & Whitehead, J. (1996). Job satisfaction and stress among band directors. *Journal of Research in Music Education, 44*(4), 319-327.
- Hirschfield, R. R. (2000). Does revising the intrinsic and extrinsic subscales of the Minnesota Satisfaction Questionnaire short form make a difference? *Educational and Psychological Measurement, 60*(2), 255-270.

- Holdaway, E. A. (1978). Satisfaction of teachers in Alberta with their work and working conditions. University of Alberta, Edmonton, Canada: Department of Educational Administration.
- Hopkins, H. J., & Canady, R. L. (1997). Integrating the curriculum with parallel block scheduling. *Principal*, 76(4), 28-31.
- House, J. S. (1981). *Workstress and social support*. Reading, MA: Addison-Wesley.
- Howard, E. (1998). The trouble with block. *The American School Board Journal*, 185(1), 35-36.
- Huff, A. L. (1995). Flexible block scheduling: It works for us! *National Association of Secondary School Principals Bulletin*, 79(571), 19-22.
- Hurley, J. C. (1997a). The 4X4 block scheduling model: What do teachers have to say about it? *National Association of Secondary School Principals Bulletin*, 81(593), 53-63.
- Hurley, J. C. (1997b). The 4X4 block scheduling model: What do students have to say about it? *National Association of Secondary School Principals Bulletin*, 81(593), 64-72.
- Hussar, W. J., & Gerald, D. E. (1996). *Projections of Education Statistics to 2006. Twenty-Fifth Edition* (Report No. NCES-96-661; ISBN 0-16-048572 X). Washington, DC: U. S. Government Printing Office. (ERIC Document Service No. ED 399 278)
- Huston, J. (1989). Teacher burnout and effectiveness: A case study. *Education*, 110, 70-78.

- Ingersoll, R. (1997). Teacher turnover and teacher quality: The recurring myth of teacher shortages. *Teachers College Record*, 99, 41-44.
- Jung, P. W., & Gunn, R. M. (1990). Serving the educational and developmental needs of middle level students. *National Association of Secondary School Principals Bulletin*, 74(525), 73-79.
- Kahn, R. L., Wolfe, D. M., Quinn, R. P., & Snoek, J. D. (1964). *Organizational stress: Studies in role conflict and ambiguity*. New York: Wiley.
- Kaiser, J. S., & Polczynski, J. J. (1982). Educational stress: Sources, reactions, prevention. *Peabody Journal of Education*, 60, 127-134.
- Kissler, K. D. (1995, April). Invited papers. *The Science Teacher*, 10.
- Latham, A. S. (1998). Teacher satisfaction. *Educational Leadership*, 55, 82-83.
- Leaf, J. (1997). Rotten apples: When it comes to teaching teachers how to teach, America's schools of education are failing miserably. *National Review*, 49(23), 40-42.
- LeCompte, M. D., & Dworkin, A. G. (1991). *Giving up on school: Student dropouts and teacher burnouts*. Newbury Park, CA: Corwin.
- Lester, P. (1990). Fifty ways to improve teacher morale. *The Clearing House*, 63, 274-275.
- Lindsay, J. (2001). The case against block scheduling. <http://www.jefflindsay.com/Block.shtml>
- Litt, M. D., & Turk, D. C. (1985). Sources of stress and dissatisfaction in experienced high school teachers. *Journal of Educational Research*, 78(3), 178-185.

- Liu, J., & Dye, J. F. (1998). Teacher and student attitudes toward block scheduling in a rural school district. *American Secondary Education* 26(3), 1-7.
- Loberg, M. K. (1998). High school block scheduling and teacher satisfaction. (Doctoral dissertation, University of Minnesota, 1998). *Dissertations Abstracts International*, 59-10A, AA19909720.
- Lockwood, S. L. (1995). Semesterizing the high school schedule: The impact on student achievement in algebra and geometry. *National Association of Secondary School Principals Bulletin*, 79(575), 102-108.
- Luckert, R. (1999). Student rights should dictate class size. *English Journal*, 88(5), 18-20.
- Lumsden, L. (1998). *Teacher morale* (Report No. EDO-EA-98-4). Eugene, OR: ERIC Clearinghouse on Educational Management. (ERIC Document Reproduction Service No. ED 422 601)
- Ma, X., & MacMillan, R. B. (1999). Influences of workplace conditions on teachers' job satisfaction. *Journal of Educational Research*, 93(1), 39-47.
- Martinez, S. (Ed.). (2001). *Yearbook 2001: The state of America's children*. (2001). Washington, DC: The Children's Defense Fund.
- Maslach, C. (1982). *Burnout—The cost of caring*. Englewood Cliffs, NJ: Prentice-Hall.
- Maslach, C., & Jackson, S. E. (1981). *Maslach burnout inventory manual*. Palo Alto, CA: Consulting Psychologists.
- Maslach, C., & Jackson, S. E. (1986). *Maslach burnout inventory manual* (2<sup>nd</sup> ed.). Palo Alto, CA: Consulting Psychologists.

- Maslow, A. H. (1954). *Motivation and personality*. New York: Harper and Row.
- McCormick, J. (1997). Occupational stress of teachers: Biographical differences in a large school system. *Journal of Educational Administration* 35, 18-38.
- McCormick, J., & Solman, R. (1992). Teachers' attributions of responsibility for occupational stress and satisfaction: An organisational perspective. *Educational Studies*, 18, 201-222.
- McIntyre, T. (1982). *Factors related to burnout: A review of research*. Paper presented at the Annual International Convention of the Council for Exceptional Children, Houston, TX.
- McNeil, L. (1986). *Contradictions of control: School structure and school knowledge*. New York: Routledge & Kegan Paul.
- Miller, M. D., Brownell, M. T., & Smith, S. W. (1999). Factors that predict teachers staying in, leaving, or transferring from the special education classroom. *Exceptional Children*, 65(2), 201-218.
- Moracco, J. C., D'Areinso, R. V., Danford, D. (1983). Comparison of perceived occupational stress between teachers who are contented and discontented in their career choice. *The Vocational Guidance Quarterly*, 38(2), 44-51.
- Murnane, R. J., & Vegas, E. (1997). The nation's teaching force. *Teachers College Record*, 99, 36-40.
- National Education Commission on Time and Learning. (1994). *Prisoners of time* (Report No. EAO25787). Washington, DC: U. S. Government Printing Office. (ERIC No. ED 366 115)
- Phillips, I. D. (1997). On the block. *Techniques*, 72(6), 32-35.



- Quaglia, R., Marion, S. F., & McIntyre, W. G. (1991). The relationship of teacher satisfaction to perceptions of school organization, teacher empowerment, work conditions, and community status. *Education, 112*(2), 206-216.
- Queen, J. A., Algozzine, B., & Eaddy, M. (1996). The success of 4 X 4 block scheduling in the social studies. *The Social Studies, 87*, 249-253.
- Reid, W. M. (1996). The administrative challenges of block scheduling. *The School Administrator, 53*(8), 26-30.
- Reid, W. M., Hierck, T., & Veregin, L. (1994). Measurable gains of block scheduling. *The School Administrator, 51*, 32-33.
- Rettig, M. D., & Canady, R. L. (1996). All around the block: The benefits and challenges of a non-traditional school schedule. *School Administrator, 53*(8), 8-144.
- Rettig, M. D., & Canady, R. L. (1998). High failure rates in required mathematics courses: Can a modified block schedule be part of the cure? *National Association of Secondary School Principals Bulletin, 82*(596), 56-65.
- Rettig, M. D., & Canady, R. L. (1999). The effects of block scheduling. *The School Administrator, 56*(3), 14-16, 18-20.
- Rettig, M. D., & Colbert, C. K. (1995). Redesigning the school day: A user-friendly schedule. *Perspectives in Education and Deafness, 13*(4), 2-3, 9.
- Rice, A. W. (1978). Individual and work variables associated with principal job satisfaction. Unpublished doctoral dissertation, University of Alberta.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs, 880*(1), 1-28.

- Russell, D., Altmaier, E., & Van Velzen, D. (1987). Job-related stress, social support, and burnout among classroom teachers. *Journal of Applied Psychology, 72*, 269-274.
- Ryan, M. E. (1991). Intensive learning: An answer to the dropout crisis. *National Association of Secondary School Principals Bulletin, 75*(538), 25-30.
- Santos, K. E., & Rettig, M. D. (1999). Going on the block. *The Council for Exceptional Children, 31*(3), 54-59.
- Saros, J. C., & Saros, A. M. (1987). Predictors of teacher burnout. *Journal of Educational Administration, XXV*(2), 216-230.
- Schamer, L. A., & Jackson, M. J. B. (1996). Coping with stress: Common sense about teacher burnout. *Educational Canada, 36*(2), 28-31, 49.
- Schwab, R. L., & Iwanicki, E. F. (1982). Who are our burned out teachers? *Education Research Quarterly 7*(2), 5-16.
- Shortt, T. L., & Thayer, Y. (1995). What can we expect to see in the next generation of block scheduling? *National Association of Secondary School Principals Bulletin, 79*(571), 53-62.
- Shortt, T. L., & Thayer, Y. V. (1997). A vision for block scheduling: Where are we now? *National Association of Secondary School Principals Bulletin, 81*(593), 1-15.
- Shortt, T. L., & Thayer, Y. V. (1999). On the block: How changing time and human-resource management can help students and teachers succeed. *TECHNOS, 8*(4), 29-33.

- Shortt, T. L., & Thayer, Y. V. (2000). The principal factor in block schedule success. *High School Magazine*, 7(9), 10-15.
- Singer, J. (1993). Are special educators' career paths special? Results from a 13-year longitudinal study. *Exceptional Children*, 59, 262-279.
- Skrobarcek, S. A., Chang, H. M, Thompson, C., Johnston, J., Atteberrey, R., & Westbrook, R. (1997). Collaboration for instructional improvement: Analyzing the academic impact of a block scheduling plan. *National Association of Secondary School Principals Bulletin*, 81(589), 104-111.
- Smith, D. L., & McNelis, M. J. (1998). A status report on alternative scheduling in Tennessee high schools. Policy Practice Brief 9602. The University of Memphis: Center for Research in Educational Policy, from <http://www.coe.memphis.edu/coe/crep/news/briefs/scheduling.html>
- Snyder, D. (1997). 4-Block scheduling: A case study of data analysis of one high school after two years. Paper presented Midwestern Educational Research Association Chicago, ILL
- Southworth, S. A. (2000). Wanted: Two million teachers. *Instructor*, 109(5), 25-27.
- Stager, G. S. (2000). The next big problem. *Curriculum Administrator*, 56-59.
- Stanish, B. (1994). Keeping teaching alive. *Gifted Child Today*, 17, 27-28, 30-31.
- Staunton, J. (1997). A study of teacher beliefs on the efficacy of block scheduling. *National Association of Secondary School Principals Bulletin*, 81(593), 73-80.
- Stephenson, D. (1990). Affective consequence of teachers' psychological investments. *Journal of Educational Research*, 84, 53-57.

- Strock, G. E., & Hottenstein, D. S. (1994). The first year experience: A high school restructures through the Copernican plan. *The School Administrator*, 51, 30-31.
- Student numbers boom, more teachers retire. (1997). *State Legislatures*, 23(10), 7.
- Tack, M. W., & Patitu, C. L. (1992). Faculty job satisfaction: Women and minorities (Report No. HE026 293). District of Columbia: ERIC Clearinghouse on higher education. (ERIC Document Reproductive Service No. ED 355 859)
- Thayer, Y. V., & Shortt, T. L. (1999). Block scheduling can enhance school climate. *Educational Leadership*, 56(4), 76-81.
- Ullrich, W. J., & Yeamen, J. T. (1999, September). Using a modified block schedule to create a positive learning environment. *Middle School Journal*, 14-20.
- Veal, W. R. (1999). What could define block scheduling as a fad? *American Secondary Education*, 27(4), 3-12.
- Wadsworth, D. (1997). The public's view of public schools. *Educational Leadership*, 24(5), 44-49.
- Walker, S. (1999). Implementing the 4X4 block schedule: Is it worth it? *Rural Educator*, 20(3), 40-45.
- Wallinger, L. M. (2000). The effect of block scheduling on foreign language learning. *Foreign Language Annals*, 33(1), 36-50.
- Walsh, J. T., Taber, T. D., & Beehr, T. A. (1980). An integrated model of perceived job characteristics. *Organizational Behavior and Human Performance*, 25(2), 252-267.
- Weiss, R. (1974). The provisions of social relationships. In Z. Rubin (Ed.), *Doing unto others*. Englewood Cliffs NJ: Prentice-Hall.

- Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1977). *Manual for Minnesota Satisfaction Questionnaire*. University of Minnesota, Minneapolis, MN: Work Adjustment Project Industrial Relations Center.
- Wilson, C. (1995). The 4 X 4 block system: A workable alternative. *National Association of Secondary School Principals Bulletin*, 79, 63-65.
- Wisniewski, L., & Gargiulo, R. M. (1997). Occupational stress and burnout among special educators: A review of the literature. *The Journal of Special Education*, 31(3), 325-346.
- Wronkovich, M. (1998). Block scheduling: Real reform or another flawed educational fad? *American Secondary Education*, 26(4), 1-6.
- Yee, S. M. (1990). *Careers in the classroom: When teaching is more than a job*. New York: Teachers College Press.
- Zepeda, S. J. (1999). Arrange time into blocks. *National Staff Development Council*, 20(2), 26-30.
- Zigarelli, M. A. (1996). An empirical test of conclusions from effective schools research. *Journal of Educational Research*, 90(2), 103-110.

**APPENDIX A**  
**MINNESOTA SATISFACTION QUESTIONNAIRE**

# minnesota satisfaction questionnaire



**Vocational Psychology Research**  
**UNIVERSITY OF MINNESOTA**

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**CONFIDENTIAL**

Your answers to the questions and all other information you give us will be held in strictest confidence.

1. Check one:  Male  Female
  
2. How old are you? \_\_\_\_\_
  
3. How many years have you taught school? \_\_\_\_\_
  
4. What is your educational background?  
 no college degree  
 bachelors degree  
 masters degree or beyond
  
5. Are you certified in all fields in which you are presently teaching?  
 yes  
 no
  
6. *(Answer only if your school uses some form of block scheduling)* How many years have you taught under block scheduling?  
\_\_\_\_\_

As a fellow teacher, I know your time is valuable. However, this study is an effort to find out more on how to keep you happy! Your responses to this survey will help administrators and teachers to improve conditions for all teachers everywhere. Your participation is valuable and will be greatly appreciated.



# minnesota satisfaction questionnaire

The purpose of this questionnaire is to give you a chance to tell **how you feel about your present job**, what things you are **satisfied** with and what things you are **not satisfied** with.

On the basis of your answers and those of people like you, we hope to get a better understanding of the things people **like and dislike about their jobs**.

On the following pages you will find statements about your **present job**.

- Read each statement carefully.
- Decide **how satisfied you feel about the aspect of your job** described by the statement.

Keeping the statement in mind:

— if you feel that your job gives you **more than you expected**, check the box under **"Very Sat."** (Very Satisfied);

— if you feel that your job gives you **what you expected**, check the box under **"Sat."** (Satisfied);

— if you **cannot make up your mind** whether or not the job gives you what you expected, check the box under **"N"** (Neither Satisfied nor Dissatisfied);

— If you feel that your job gives you **less than you expected**, check the box under **"Dissat."** (Dissatisfied);

— if you feel that your job gives you **much less than you expected**, check the box under **"Very Dissat."** (Very Dissatisfied).

- Remember: Keep the statement in mind when deciding **how satisfied you feel about that aspect of your job**.
- Do this for **all** statements. Please answer **every** item.

**Be frank and honest.** Give a true picture of your feelings about your **present job**.

Ask yourself: How **satisfied** am I with this aspect of my job?

**Very Sat.** means I am very satisfied with this aspect of my job.

**Sat.** means I am satisfied with this aspect of my job.

**N** means I can't decide whether I am satisfied or not with this aspect of my job.

**Dissat.** means I am dissatisfied with this aspect of my job.

**Very Dissat.** means I am very dissatisfied with this aspect of my job.

On my present job, this is how I feel about . . .	Very Dissat.	Dissat.	N	Sat.	Very Sat.
1. The chance to be of service to others.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The chance to try out some of my own ideas.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Being able to do the job without feeling it is morally wrong. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. The chance to work by myself. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. The variety in my work. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. The chance to have other workers look to me for direction. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. The chance to do the kind of work that I do best. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. The social position in the community that goes with the job.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. The policies and practices toward employees of this company.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. The way my supervisor and I understand each other. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. My job security.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. The amount of pay for the work I do.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. The working conditions (heating, lighting, ventilation, etc.) on this job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. The opportunities for advancement on this job.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. The technical "know-how" of my supervisor.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. The spirit of cooperation among my co-workers. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. The chance to be responsible for planning my work. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. The way I am noticed when I do a good job. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Being able to see the results of the work I do. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. The chance to be active much of the time. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. The chance to be of service to people.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. The chance to do new and original things on my own. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Being able to do things that don't go against my religious beliefs. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. The chance to work alone on the job. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. The chance to do different things from time to time. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Very Dissat.	Dissat.	N	Sat.	Very Sat.

Ask yourself: How satisfied am I with this aspect of my job?

**Very Sat.** means I am very satisfied with this aspect of my job.

**Sat.** means I am satisfied with this aspect of my job.

**N** means I can't decide whether I am satisfied or not with this aspect of my job.

**Dissat.** means I am dissatisfied with this aspect of my job.

**Very Dissat.** means I am very dissatisfied with this aspect of my job.

<b>On my present job, this is how I feel about . . .</b>	<b>Very Dissat.</b>	<b>Dissat.</b>	<b>N</b>	<b>Sat.</b>	<b>Very Sat.</b>
26. The chance to tell other workers how to do things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. The chance to do work that is well suited to my abilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. The chance to be "somebody" in the community.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Company policies and the way in which they are administered.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. The way my boss handles his/her employees.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. The way my job provides for a secure future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. The chance to make as much money as my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. The physical surroundings where I work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. The chances of getting ahead on this job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. The competence of my supervisor in making decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. The chance to develop close friendships with my co-workers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. The chance to make decisions on my own.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. The way I get full credit for the work I do.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. Being able to take pride in a job well done.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. Being able to do something much of the time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. The chance to help people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. The chance to try something different.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. Being able to do things that don't go against my conscience.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. The chance to be alone on the job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. The routine in my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. The chance to supervise other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47. The chance to make use of my best abilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. The chance to "rub elbows" with important people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49. The way employees are informed about company policies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. The way my boss backs up his/her employees (with top management).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Very Dissat.</b>	<b>Dissat.</b>	<b>N</b>	<b>Sat.</b>	<b>Very Sat.</b>

Ask yourself: How **satisfied** am I with this aspect of my job?

**Very Sat.** means I am very satisfied with this aspect of my job.

**Sat.** means I am satisfied with this aspect of my job.

**N** means I can't decide whether I am satisfied or not with this aspect of my job.

**Dissat.** means I am dissatisfied with this aspect of my job.

**Very Dissat.** means I am very dissatisfied with this aspect of my job.

<b>On my present job, this is how I feel about . . .</b>	<b>Very Dissat.</b>	<b>Dissat.</b>	<b>N</b>	<b>Sat.</b>	<b>Very Sat.</b>
51. The way my job provides for steady employment. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52. How my pay compares with that for similar jobs in other companies. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
53. The pleasantness of the working conditions. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54. The way promotions are given out on this job. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55. The way my boss delegates work to others. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56. The friendliness of my co-workers. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57. The chance to be responsible for the work of others. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58. The recognition I get for the work I do. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59. Being able to do something worthwhile. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60. Being able to stay busy. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61. The chance to do things for other people. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62. The chance to develop new and better ways to do the job. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
63. The chance to do things that don't harm other people. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
64. The chance to work independently of others. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65. The chance to do something different every day. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
66. The chance to tell people what to do. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
67. The chance to do something that makes use of my abilities. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
68. The chance to be important in the eyes of others. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
69. The way company policies are put into practice. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70. The way my boss takes care of the complaints of his/her employees. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
71. How steady my job is. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
72. My pay and the amount of work I do. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
73. The physical working conditions of the job. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
74. The chances for advancement on this job. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
75. The way my boss provides help on hard problems. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Very Dissat.</b>	<b>Dissat.</b>	<b>N</b>	<b>Sat.</b>	<b>Very Sat.</b>

Ask yourself: How **satisfied** am I with this aspect of my job?

**Very Sat.** means I am very satisfied with this aspect of my job.

**Sat.** means I am satisfied with this aspect of my job.

**N** means I can't decide whether I am satisfied or not with this aspect of my job.

**Dissat.** means I am dissatisfied with this aspect of my job.

**Very Dissat.** means I am very dissatisfied with this aspect of my job.

<b>On my present job, this is how I feel about . . .</b>	Very Dissat.	Dissat.	N	Sat.	Very Sat.
76. The way my co-workers are easy to make friends with. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
77. The freedom to use my own judgment. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
78. The way they usually tell me when I do my job well. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
79. The chance to do my best at all times. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
80. The chance to be "on the go" all the time. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
81. The chance to be of some small service to other people. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
82. The chance to try my own methods of doing the job. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
83. The chance to do the job without feeling I am cheating anyone. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
84. The chance to work away from others. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
85. The chance to do many different things on the job. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
86. The chance to tell others what to do. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
87. The chance to make use of my abilities and skills. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
88. The chance to have a definite place in the community. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
89. The way the company treats its employees. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
90. The personal relationship between my boss and his/her employees. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
91. The way layoffs and transfers are avoided in my job. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
92. How my pay compares with that of other workers. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
93. The working conditions. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
94. My chances for advancement. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
95. The way my boss trains his/her employees. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
96. The way my co-workers get along with each other. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
97. The responsibility of my job. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
98. The praise I get for doing a good job. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
99. The feeling of accomplishment I get from the job. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
100. Being able to keep busy all the time. . . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**(Back Cover of Minnesota Satisfaction Questionnaire)**

**APPENDIX B**  
**HUMAN USE CONSENT FORM**  
**For University Approval**

**STUDY/PROJECT INFORMATION FOR HUMAN SUBJECTS COMMITTEE**

**TITLE:** Effects of Block Scheduling on Teacher Job Satisfaction Among Small Secondary Schools in Arkansas

**PROJECT DIRECTORS:** Brenda Holder and Dr. David Gullatt

**DEPARTMENT(S):** Curriculum, Instruction and Leadership

**PURPOSE OF STUDY/PROJECT:** This study will add to present knowledge concerning the effects of block scheduling on teacher job satisfaction.

**SUBJECTS:** Secondary school teachers in Arkansas' division AA schools

**PROCEDURE:** Teachers in division AA schools that use block scheduling and teachers from a stratified sampling of schools in the same division which use traditional scheduling will be asked to complete the long form of the 1977 version of the Minnesota Satisfaction Questionnaire (MSQ). The MSQ is an instrument designed to determine levels of job satisfaction. Participants will also be asked a very few demographic questions. Data will be sent and returned by mail, and confidentiality will be assured.

**INSTRUMENTS AND MEASURES TO INSURE PROTECTION OF CONFIDENTIALITY, ANONYMITY:** All initial contact with teachers will be made through the mail. Data will be kept under lock and key. Names will be known only to the researchers. Marked envelopes, to be sealed by a teacher asked to gather the completed surveys, will be provided for return mail. Administrators may be given a copy of the final results, but will not see individual results from their own schools.

**RISKS/ALTERNATIVE TREATMENTS:** If confidentiality were not assured, participants' responses could possibly place them in jeopardy of loss of esteem with their employers and coworkers.

**BENEFITS/COMPENSATION:** Teachers will benefit from the added knowledge of how block scheduling may affect teachers' satisfaction levels. Significant differences in levels of satisfaction between schools using traditional scheduling and schools using block scheduling could lead to positive changes for teachers everywhere.

**SAFEGUARDS OF PHYSICAL AND EMOTIONAL WELL-BEING:** Names and individual survey results, as well as individual school levels of general satisfaction, will be known only to the researchers. Teachers and administrators should gain positive feelings for having contributed to this body of knowledge.

**Note:** use the Human Subjects Consent form to briefly summarize information about the study/project to participants and obtain their permission to participate.



**APPENDIX C**  
**HUMAN USE CONSENT FORM**  
**To Be Signed by Participants**

## HUMAN SUBJECTS CONSENT FORM

The following is a brief summary of the project in which you are asked to participate. Please read this information before signing the statement below.

**TITLE OF PROJECT:** Effects of Block Scheduling on Teacher Job Satisfaction Among Small Secondary Schools in Arkansas

**PURPOSE OF STUDY/PROJECT:** This study will add to present knowledge concerning the effects of block scheduling on teacher job satisfaction.

**PROCEDURE:** Teachers in division AA schools will be asked to complete the long form of the 1977 version of the Minnesota Satisfaction Questionnaire (MSQ). The MSQ is an instrument designed to determine levels of job satisfaction. Participants will also be asked a very few demographic questions. Data will be sent and returned by mail, and confidentiality will be assured.

**INSTRUMENTS:** Minnesota Satisfaction Questionnaire

**RISKS/ALTERNATIVE TREATMENTS:** If confidentiality were not assured, participants' responses could possibly place them in jeopardy of loss of esteem by employers and coworkers.

**BENEFITS/COMPENSATIONS:** Information gleaned from this study could contribute to changes that could help lessen the high rates of job dissatisfaction felt by many teachers.

I, \_\_\_\_\_ attest with my signature that I have read and understood the description of the study, "Teacher Job Satisfaction Among Small Secondary Schools in Arkansas," and its purposes and methods. I understand that my participation in this research is strictly voluntary. Further, I understand that I may withdraw at any time or refuse to answer any questions without penalty. Upon completion of the study, I understand that the results will be freely available to me upon request. I understand that the results of my survey will be anonymous and confidential, accessible only to the principal investigators, myself, or a legally appointed representative. Neither I nor my school will be identified. I have not been requested to waive nor do I waive any of my rights related to participation in this study.

\_\_\_\_\_ Participant Signature \_\_\_\_\_ Date

**CONTACT INFORMATION:** The principal experimenters listed below may be reached to answer question about the research, subjects' rights, or related matters.

Dr. David Gullatt (318. 257.4609)

Mrs. Brenda Holder (870. 862-8131)

Members of the Human Use Committee of Louisiana Tech University may also be contacted if a problem cannot be discussed with the experimenters:

Dr. Terry McConathy	(318.257.2924)
Dr. Mary Livingston	(318.257.4315)
Mrs. Deby Hamm	(318.257.2924)

**APPENDIX D**

**MSQ APPROVAL NOTICE**

**To Be Included in Packets Sent to Schools**

TO: Participating AA schools in Arkansas

FROM: Ray Simon, Director, State Department of Education

RE: Use of Minnesota Satisfaction Questionnaire Survey among teachers in Arkansas schools

DATE: 12-21-01

I approve and authorize the use of this instrument in collecting data for research purposes.

*Ray Simon* 12-21-01  
Ray Simon

Post-It® Fax Note	7671	Date	12/21/01	# of pages	1
To	Brenda Holder	From	Ray Simon		
Co./Dept	So. Ark. Com. Col.	Co.	Ark. Dept. of Ed		
Phone #		Phone #	501-682-4204		
Fax #	870-864-7180	Fax #	501-682-1079		

**APPENDIX E**

**LETTER TO ADMINISTRATOR**

**To Be Included in Packets Sent to Schools**

Brenda Holder  
700 Cedarwood  
El Dorado AR 71730

January 6, 2002

Dear Administrator:

Last October you were contacted by phone and asked (or, in some cases, your *school secretary* was asked!) if you would be willing to let your teachers participate in a survey for a study being done in AA schools across Arkansas. I was so pleased with your gracious consent to participate. We all are aware of the growing problem of attracting and retaining quality teachers. This investigation will let us know some of factors that can help to keep teachers satisfied with their positions and/or factors that can be used to attract teachers. Therefore, the input of your teachers is vital to the success of this study.

So much has happened since last fall! Let me outline my requests for the uniform distribution and collection of these surveys.

1. **Please distribute and collect these surveys during a (routine) faculty meeting** during the next two weeks, if possible. We know how individual handouts tend to get mislaid under stacks of papers, and a survey can seem a low priority to teachers feeling swamped with other demands on their time. Too, we need as close to 100% participation as possible to adequately reflect teachers' true beliefs. The entire survey should take no more than ten to fifteen minutes for most teachers.

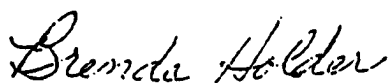
2. **Pass out questionnaires and individual envelopes** so that teachers can complete their surveys and then immediately seal them in the envelopes, marking across the seal, if they wish. We want teachers to feel quite secure in their ability to be candid on the questionnaires.

3. **Have a teacher or secretary** (not an administrator, please) **collect the envelopes** in the self-addressed, stamped mailing package provided. As the questionnaires are being collected, please **have each participant sign one of the Human Consent forms** provided. (*This is just a safeguard required by the universities conducting the investigation to ensure that each teacher participates freely and feels no fear of reprisals for revealing unpopular opinions, etc.*) **It is important that these forms be signed AFTER the questionnaire is completed**, to avoid the chance that information gleaned from the form might influence a participant's responses on the questionnaire. These forms should then be included in the package with the completed, sealed questionnaires, and the package returned as soon as possible.

As a fellow teacher, I know how incredibly busy teachers and administrators are! So, in case I have not received your package after three weeks, I will contact you as a reminder of the need for your help.

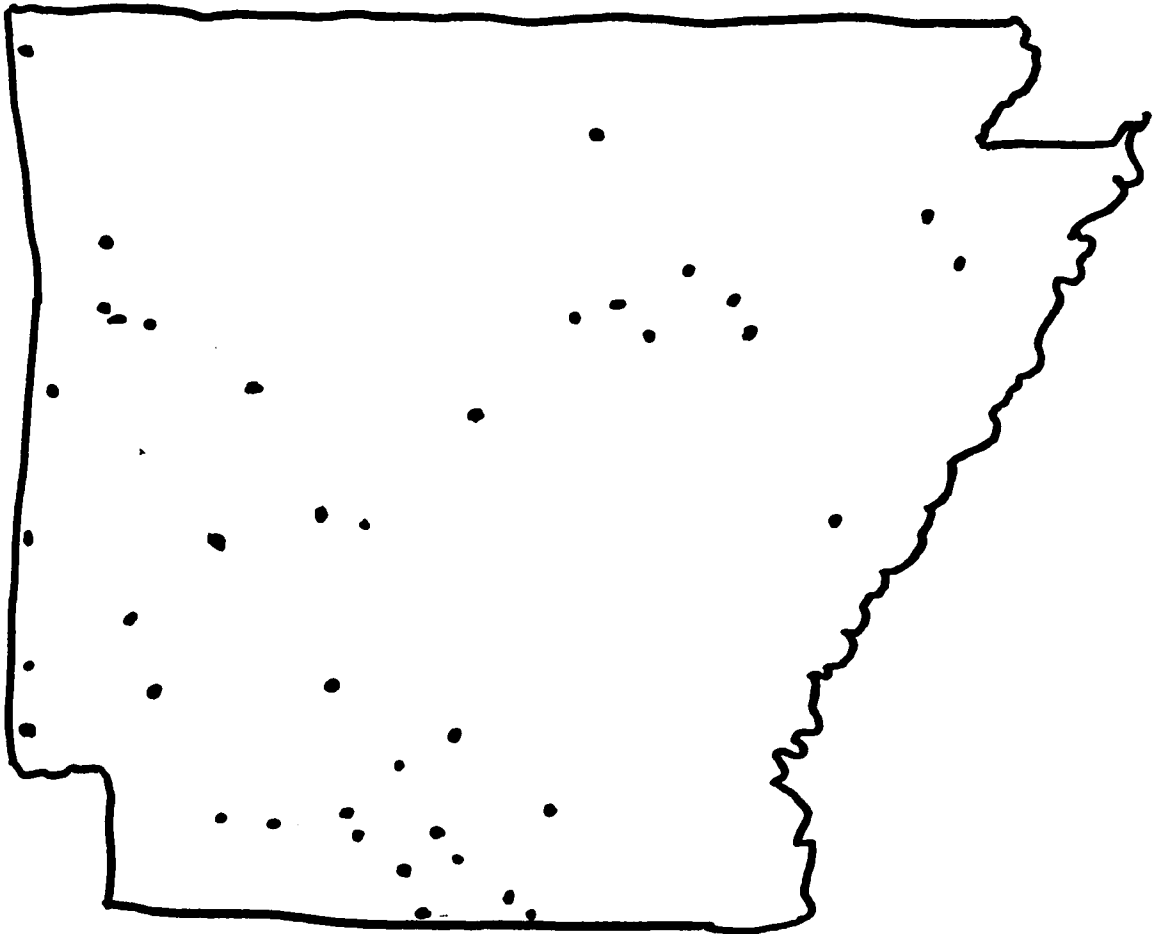
I cannot express how grateful I am for your cooperation in this study. Your participation will give us knowledge that will help teachers and administrators everywhere.

Sincerely,



Brenda Holder

**APPENDIX F**  
**MAP OF PARTICIPATING ARKANSAS SCHOOLS**





**APPENDIX G**  
**ANOVA OF SATISFACTION LEVELS OF BLOCK SCHEDULE TEACHERS**  
**AND TRADITIONAL SCHEDULE TEACHERS**

Table 15

*ANOVA of Satisfaction Levels of Block Schedule Teachers and Traditional Schedule Teachers*

Source	<i>Df</i>	<i>F</i>	$\eta^2$	<i>P</i>
Between subjects				
Ability utilization	14	.863	.111	.600
Achievement	12	.526	.061	.893
Activity	11	1.074	.109	.390
Advancement	20	.791	.140	.719
Authority	13	.625	.077	.828
Company policies & practices	20	.734	.131	.782
Compensation	20	1.051	.178	.413
Coworkers	16	.574	.806	.897
Creativity	14	.888	.114	.573
Independence	12	.502	.058	.909
Moral values	11	1.295	.128	.239
Recognition	19	.510	.091	.952
Responsibilities	12	.539	.063	.884
Security	16	.789	.115	.695
Social service	10	.838	.079	.594
Social status	17	1.052	.156	.412
Supervision – human relations	20	.634	.116	.878
Supervision – technical	20	.797	.141	.711
Variety	13	.998	.118	.459
Working conditions	18	1.213	.184	.266
General Satisfaction	45	.671	.237	.931
Error	97			
Total	480			
Corrected total	479			

*Note.* R Squared = .777 (Adjusted R Squared = -.101)  
 $p < .05$

**APPENDIX H**  
**ANOVA OF TEACHER JOB SATISFACTION AND GENDER**

Table 16

*ANOVA of Teacher Job Satisfaction and Gender*

Source	<i>df</i>	<i>F</i>	$\eta^2$	<i>P</i>
Between Subjects				
Ability utilization	13	1.251	.132	.254
Achievement	12	1.673	.158	.083
Activity	11	.711	.068	.726
Advancement	20	.925	.147	.558
Authority	13	.356	.041	.98
Company policies & practices	20	1.240	.188	.237
Compensation	20	.567	.096	.927
Coworkers	16	1.187	.151	.290
Creativity	14	1.343	.149	.195
Independence	12	.850	.087	.599
Moral values	11	.595	.058	.829
Recognition	19	1.378	.197	.154
Responsibilities	11	.875	.082	.567
Security	16	.602	.083	.876
Social service	10	1.188	.100	.307
Social status	17	.839	.118	.645
Supervision – human relations	20	.736	.121	.781
Supervision – technical	20	1.183	.181	.283
Variety	14	1.366	.152	.182
Working conditions	18	1.120	.159	.343
General Satisfaction	44	.954	.282	.559
Error	107			
Total	490			
Corrected total	189			

*Note.* R Squared = .809 (Adjusted R Squared = .127)  
 $p < .05$

**APPENDIX I**  
**ANOVA OF GENERAL SATISFACTION LEVELS AMONG AGES OF**  
**TEACHERS SURVEYED**

Table 17

*ANOVA of General Satisfaction Levels Among Ages of Teachers Surveyed*

Source	<i>Df</i>	<i>F</i>	$\eta^2$	<i>P</i>
Between Subjects				
Ability utilization	13	.985	.104	.471
Achievement	12	.782	.079	.668
Activity	11	.735	.068	.703
Advancement	20	.633	.103	.880
Authority	13	1.391	.141	.175
Company policies & practices	20	.739	.119	.778
Compensation	20	.734	.118	.784
Coworkers	16	.803	.105	.679
Creativity	14	.995	.112	.464
Independence	12	1.637	.152	.092
Moral values	11	.390	.038	.957
Recognition	18	.744	.109	.759
Responsibilities	11	.946	.086	.500
Security	15	.709	.088	.771
Social service	10	.671	.057	.749
Social status	17	1.041	.139	.421
Supervision – human relations	20	.739	.118	.778
Supervision – technical	19	1.280	.181	.211
Variety	13	.541	.060	.894
Working conditions	18	.487	.074	.959
General Satisfaction	44	.971	.280	.532
Error	110			
Total	493			
Corrected total	492			

*Note.* R Squared = .755 (Adjusted R Squared = -.094)

$p < .05$

**APPENDIX J**  
**ANOVA OF TEACHER JOB SATISFACTION AND**  
**EXPERIENCE LEVELS**

TABLE 18

*ANOVA of Teacher Job Satisfaction and Experience Levels*

Source	<i>Df</i>	<i>F</i>	$\eta^2$	<i>P</i>
Between Subjects				
Ability utilization	13	1.725	.179	.066
Achievement	12	.883	.093	.566
Activity	11	1.066	.102	.396
Advancement	20	.958	.157	.518
Authority	13	1.256	.137	.252
Company policies & practices	20	.813	.136	.693
Compensation	20	.792	.133	.718
Coworkers	16	.926	.126	.543
Creativity	14	1.232	.143	.264
Independence	12	1.469	.146	.148
Moral values	11	.606	.061	.820
Recognition	19	.991	.155	.478
Responsibilities	11	.725	.072	.713
Security	16	.864	.118	.611
Social service	10	1.086	.095	.380
Social status	17	1.315	.178	.198
Supervision – human relations	20	.743	.126	.733
Supervision – technical	20	1.163	.184	.301
Variety	14	.940	.113	.519
Working conditions	18	.702	.109	.802
General Satisfaction	44	.989	.297	.504
Error	103			
Total	486			
Corrected total	485			

*Note.* R Squared = .784 (Adjusted R Squared = -.017)

$p < .05$



**APPENDIX K**  
**ANOVA OF TEACHER JOB SATISFACTION AND**  
**EDUCATIONAL BACKGROUND**

Table 19

*ANOVA of Teacher Job Satisfaction and Educational Background*

Source	<i>df</i>	<i>F</i>	$\eta^2$	<i>P</i>
Between Subjects				
Ability utilization	13	2.060	.200	.022*
Achievement	12	1.081	.108	.383
Activity	11	.890	.084	.552
Advancement	20	.802	.130	.706
Authority	13	1.388	.144	.177
Company policies & practices	20	.856	.138	.641
Compensation	20	1.434	.211	.122
Coworkers	16	.436	.062	.968
Creativity	14	.593	.072	.866
Independence	12	.518	.055	.899
Moral values	11	1.127	.104	.348
Recognition	19	.541	.088	.937
Responsibilities	11	.784	.075	.655
Security	16	.933	.122	.534
Social service	10	.384	.035	.951
Social status	17	.767	.109	.727
Supervision – human relations	20	1.126	.174	.335
Supervision – technical	20	.872	.140	.622
Variety	14	1.058	.122	.404
Working conditions	18	.831	.123	.661
General Satisfaction	44	1.0661	.305	.387
Error	107			
Total	490			
Corrected total	489			

*Note.* R Squared = .799 (Adjusted R Squared = -.010)

\**p* < .05

**APPENDIX L**  
**ANOVA OF JOB SATISFACTION AND**  
**FIELD(S) OF CERTIFICATION**

Table 20

*Job Satisfaction and Field(s) of Certification*

Source	<i>df</i>	<i>F</i>	$\eta^2$	<i>P</i>
Between Subjects				
Ability utilization	13	.928	.100	.527
Achievement	12	1.298	.126	.230
Activity	11	1.323	.119	.222
Advancement	20	1.278	.191	.210
Authority	13	1.166	.123	.314
Company policies & practices	20	1.105	.170	.356
Compensation	20	1.096	.169	.364
Coworkers	16	1.368	.168	.172
Creativity	14	1.157	.130	.319
Independence	12	1.960	.179	.035*
Moral values	11	.417	.041	.946
Recognition	19	.565	.090	.923
Responsibilities	11	1.392	.124	.187
Security	16	1.471	.179	.124
Social service	10	.758	.066	.668
Social status	17	.809	.113	.679
Supervision – human relations	20	1.188	.180	.278
Supervision – technical	20	.894	.142	.595
Variety	14	1.684	.179	.069
Working conditions	18	.809	.119	.686
General Satisfaction	44	.978	.285	.520
Error	108			
Total	491			
Corrected total	490			

*Note.* R Squared = .802 (Adjusted R Squared = .100)

\*p < .05

**APPENDIX M**  
**ANOVA OF TEACHER JOB SATISFACTION AND YEARS OF**  
**TEACHING UNDER BLOCK SCHEDULING**

Table 21  
*Job Satisfaction and Years of Teaching Under Block Scheduling*

<i>Source</i>	<i>df</i>	<i>F</i>	<i>Partial <math>\eta^2</math></i>	<i>P</i>
Between Subjects				
Ability utilization	14	.798	.089	.670
Achievement	12	2.136	.182	.020*
Activity	11	1.018	.089	.435
Advancement	20	1.052	.155	.409
Authority	13	1.182	.118	.302
Company policies & practices	20	.972	.145	.501
Compensation	20	1.182	.170	.283
Coworkers	16	.857	.106	.620
Creativity	14	1.280	.135	.230
Independence	12	.540	.053	.884
Moral values	11	.451	.041	.929
Recognition	19	1.343	.182	.171
Responsibilities	12	.635	.062	.809
Security	16	.837	.104	.641
Social service	10	1.315	.103	.231
Social status	17	.751	.100	.744
Supervision – human relations	20	1.280	.182	.207
Supervision – technical	20	1.494	.206	.097
Variety	14	.778	.087	.691
Working conditions	18	.755	.106	.748
General Satisfaction	45	.871	.254	.696
Error	115			
Total	499			
Corrected total	498			

*Note.* R Squared = .755 (Adjusted R Squared = -.059)

\* $p < .05$

## VITA

Brenda Holder received a bachelors degree in Vocational Home Economics from Louisiana Tech University in 1976 and received a Masters degree in Vocational Home Economics Education in 1977. She taught in public schools and in private preschools in South Arkansas for over 14 years before becoming Director of Early Childhood Education at South Arkansas Community College in El Dorado, Arkansas, in 2000. As SouthArk's first Director of Early Childhood Education, she established the program, developed the curriculum, taught classes, recruited students, and networked with other institutions of higher education across Arkansas. She held this post for two years before resigning the position to become Executive Director of Families and Children Together, Inc. (FACT, Inc.). FACT, Inc., is a private, nonprofit agency that administers Head Start classes and other government-sponsored preschool programs within a five-county area. As Executive Director, Holder oversees thirty-seven classrooms in fifteen centers, employs a staff of 135, and manages an annual budget of almost 4 million dollars.

Holder has been married to Larry D. Holder, a self-employed Certified Public Accountant, for over 28 years, and is the mother of three sons and one daughter. She is involved in multitudinous church and community activities.