

A DESCRIPTIVE STUDY OF TEACHER TIME USAGE AND ALLOCATION IN
FAIRFAX COUNTY PUBLIC SCHOOLS, VIRGINIA

by

Brad S. Draeger

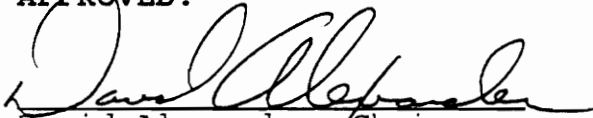
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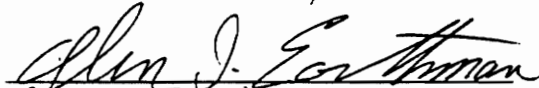
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Brad S. Draeger

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Educational Administration

(ABSTRACT)

The purpose of this study is to document how much time teachers in a large suburban school district expend on their professional responsibilities at home and at school. The study also documents the time usage and allocation through the relationships of teaching experience and teaching grade level assignment. Fairfax County Public Schools and all school systems are facing increasing demands for educational reform. Teacher responsibilities have continued to increase with many current reform initiatives. Consequently the associated time for reform implementation, with increased demands is not limitless. Current time usage documentation is important data needed in future educational reform decisions.

Two hundred and thirty-one randomly selected teachers completed a questionnaire regarding the time spent working in an average week for Fairfax County Public Schools. The results of this study are reported in total time spent on tasks associated with their professional responsibility both at home and school; and time spent specifically on; individual planning, group/team planning, assessment, instructional contact, career and staff development and parent communication.

The mean hours per week reported in this survey was fifty-nine hours per week. T-Tests comparisons revealed significant differences in three categories at the .10 level of confidence; first year teachers spend less time in staff development, middle school teachers spend more time in team planning and elementary teachers spend less time in team planning. There were no significant findings in any other areas of data analysis. T-Tests were utilized to examine significant differences in time distribution between means in the following demographic areas; years of teaching experience and grade level assignment.

Reviews of literature reveal a few studies of teacher time documentation exist in England and West Germany. This study is one of the first in the United States documenting teacher time usage in a large suburban school district. The interpretive results from this study provide data for strategic planning for educational reform and suggest areas for further research in teacher time usage.

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CHAPTER I

Background and Introduction

A National Perspective

Teachers in American schools need more time--not to do more of the same, but to use time in new, different, and more productive ways. Over the last generation, American life has changed profoundly. Changes in the family structure, the work force, a more diverse and economically unequal society are all making increasing demands on public education and the professional teacher. Yet, the national reports, the public, and the school administrations know precious little about how teachers currently expend their time.

Contemporary teachers face the demands of designing and implementing curriculum reform, introducing new forms of assessment, and engaging in staff development for updating skills. New technology, new teaching methods, multi-culturalism, integration of English as a Second Language and inclusion of Special Education students add to the growing list of expected tasks for the classroom teacher. There is also an accelerating trend for moral and social responsibilities previously taught by parents, churches and

communities to be transferred to schools further impacting teachers' roles (Campbell & Neill, 1992).

As political pressures quicken the pace of educational reform increase, the inevitable consequences for the demands made on teachers may render them unable to do justice to these range of challenges. Teachers are increasingly voicing concerns about the availability of time. The extension of teachers' roles should form a source of professionalism based on expertise rather than simply additions of ever greater numbers of new responsibilities (Saphier, 1994).

School reform cannot happen without the involvement of the classroom teacher. School systems need to provide time for teachers in bold new ways to maximize student learning. "The problem with our schools is not that they are not what they used to be, but that they are what they used to be" (Goldberg, 1994, p. 21). This sentiment was expressed by a Maine mathematics teacher testifying before the National Commission on Time and Learning (Goldberg, 1994).

Federal, state and local governments are addressing demographic changes and calling for improving public schools through educational reform. *A Nation at Risk* (1983), the Department of Educations' *America 2,000* (1991) and now the Department of Education *Goals 2,000* (1993) are national reports that make educational reform a top priority. Many

of these reports are critical of the current educational institution and call for massive reform. Only the Sandia report, a U.S. Department of Energy (1983) document lacking official publication, says the American schools and American teachers are no worse and sometimes better than schools in other countries. Goals 2,000 by the Department of Education (1993) is the latest mutation of the national reports calling for educational reform. This report states tremendous amounts of professional teacher time are needed to create statewide curriculums and student assessments. Many of these reports call for action and change but offer little in the way of funding or solutions. Absent from these reports is a significant study of the professional teacher and how they currently spend their time.

Our best ideas about improving instruction or restructuring schools will not work unless we improve the working conditions of teachers by making teaching a true profession (Saphier, 1994). Saphier believes the future of education hinges upon the success of making teaching a true profession. He has succinctly identified the nine areas of recognizable attributes of a teaching profession as:

- having an acknowledged set of skills
 - Areas of Performance
 - Repertoire
 - Matching,

- having a rigorous training and certification of teachers,
- having a work place culture of high consulting and collaboration,
- having a systematic inculcation of new members
- having required and continuous learning regularly built into the work cycle,
- having high public accountability,
- having internal maintenance of high standards of practice,
- having responsibility for client results, and
- have members who make autonomous decisions guided by a canon of ethics.

None of these characteristics can be claimed for teaching now according to Saphier, 1994. In fact, Saphier states the lack of teacher time stands as the major obstacle to the professional teacher. If the teaching profession is to prosper and flourish as a profession the reform of teacher preparation and the treatment of teachers is long overdue. Teachers need time to discuss, plan and implement reform. Adding school reform to the list of things' school must accomplish without recognizing that time in the current calendar and teacher's day is a limited resource, trivializes the effort (Saphier, 1994). The National

Education Commission on Time and Learning Report, Prisoners of Time (Goldberg, 1994, p. 19) succinctly says, "It sends a powerful message to teachers: don't take reform too seriously, squeeze it in on your time."

A Local Perspective - Fairfax County, Virginia

Fairfax County Public Schools, the tenth largest school system in the United States with over 140,000 students and 9,000 teachers faces all of the national issues of time and reform. The current Fairfax County Public Schools superintendent, has repeatedly said that "quality education comes from quality teachers." The FCPS future is clouded by complex pressures caused by increased enrollment, demographic change, administrative service demands, technological needs and uncertain fiscal climate (Spillane, 1994).

Fairfax County Public Schools contracted with the consulting firm of Coopers & Lybrand to address these pressures and to specifically address strategic planning with an emphasis on information technology (Appendix E).

The superintendent's tenure in Fairfax County Public Schools has focused on the professionalization of teaching. A rigorous teacher evaluation system linked to performance has been the focal point of his administration. During Phase

I of the Coopers & Lybrand contract, the Fairfax County Public Schools Leadership Team (Area and Assistant Superintendents) created a vision that includes the employees (teachers) as a critical success factor for the future of education in the district:

Fairfax County will develop excellence in each and every student. In an atmosphere that values diversity and human resources, we will be the best school system in the nation at providing students with knowledge, skills, and values they will need to succeed in an ever-changing global society (ESP, 1994).

Critical success factors are benchmarks or goals that must be in place to achieve an enterprise vision. The critical success factors developed by the Fairfax County Public Schools are:

- *Improved models of instruction*
- *Individual student achievement*
- *The best employees*
- *Effective financial management*
- *Community commitment*
- *Responsive support systems*
- *Strategic focus and direction*

Information from the strategic planning sessions with the Superintendent and the Leadership Team, focus groups of parents and staff, interviews with key stakeholders in the community and a business process analysis of the entire school district led to the selection and identification of the following four areas for business process redesign:

- *Student profiles for instructional planning*
- *Career and staff development*
- *Selection and assignment of instructional personnel*
- *Information technology resource management*

The redesign of student profiles for instructional planning is an example of how educational reform can impact teacher time expenditures. The premise of this redesign calls for increased teacher-parent communication and dialogue. The redesign process includes sixty-minute conferences between school staff and parents. These additional conferences and the preparation for the conferences will require substantial time commitments from teachers. The success or failure of a redesign or any teacher reform movement depends upon teachers having enough time to successfully implement a new initiative, such as progression planning conferences.

New teacher inculcation is also an issue. According to

Schlecty and Vance (1981) the teacher's first year is the critical time during which twenty-five percent of new teachers decide to leave the teaching profession. First year teachers in this study are currently provided with three days of staff development. These three days are above and beyond the normal teacher contract and occur three days before the start of all other teachers. Health benefits, photo badges and other administrative tasks consume the teachers time during the greater part of these three days. New teacher orientation for the 1994-1995 school year included three days of orientation. Parent communication, classroom management, student assessment, and student rights and responsibilities were compressed into a two-hour workshop for all beginning Fairfax County Public School teachers. New teachers in this district will be asked to rely on these two hours of professional and career development to garner enough information to assist them to be successful professionals. A mentor teacher is assigned during the first year, but the mentor teacher and the new teacher do not receive release time for collaboration. Mentor teacher programs throughout the United States have documented the lack of effectiveness due to the lack of time for both the new teacher and the mentor. (Auton, 1994).

Issues of increased parent communication, career and staff development, new teacher inculcation, inclusion,

student diversity, student behavior, Family Life Education, are all making demands on teacher time in Fairfax County Public Schools and throughout the nation. As Fairfax County Public Schools redesigns itself for the future and as it and all the nation's schools address reform, they need data documenting the current time expenditures of the professional teacher.

Justification Statement of Need

Documentation of United States teacher time is limited in current literature. Three surveys of teacher time documentation exist in England (Campbell, 1988, 1991, 1992). Similar studies exist in Germany and Asia, but few if any United States school systems have documentation of teacher time. The studies in England confirmed the fears of British educators that the lack of teacher time was a significant factor in England's failure to implement a national curriculum. Over three quarters of British teachers reported working more hours in the two years since the national reform movements' implementation in 1988. Teachers felt it was reasonable to work forty-eight hours per week, but they were working about 22 extra hours per week (Campbell, 1991).

Documentation of how Fairfax County Public Schools

teachers currently expend their time is nonexistent. Fairfax County and other jurisdictions are facing increasing pressures to make strategic decisions that will ultimately affect the classroom teacher. All current and future Fairfax County Public Schools decisions must consider the already numerous demands expected of teachers. Successful process redesigns, school reform and improved instructional methodologies need to consider current allocations teacher of time.

Teachers' self reporting of a lack of time has surfaced as the number one issue in teacher career and staff development self-assessments surveys (Auton, 1993). These surveys indicate that the lack of teacher time is the number one problem concerning teachers attitudes toward career and staff development. Fairfax County teachers ranked the lack of time ahead of availability of courses and funding for reimbursement of tuition as one of the major weaknesses of the current career and staff development program.

Statement of the Problem

School reform issues depend on the ability of teachers to institute change (Saphier, 1994). This study addresses the lack of adequate information about how much and in what activities teachers spend their time. Existing research on

teacher time has addressed specific issues such as time management (Hargreaves, 1990) and time on task (Brophy, 1979). This study will provide relevant data on current teacher time expended in teacher responsibilities, career and staff development, parent communication, and other categories vital to the decisions regarding school reform.

Purpose of the Study

The purpose of this study is to use data collected from the Coopers & Lybrand teacher activity time survey in a large suburban school district in Virginia, Fairfax County Public Schools, to document the relationship between the teacher demographics of grade level and experience in relation to certain professional teacher activities.

This descriptive study of allocated time will guide recommendations for strategic planning and for enhancing the professionalization of teachers for the Fairfax County Public Schools. It also provides important baseline data for any programmatic decision that would include any expected or assigned increased teacher responsibilities.

Research Questions

The following research questions shaped the data

collection and analysis procedures essential to completing this descriptive study:

Research Question No. 1

How much time do Fairfax County Public School teachers currently expend in their professional responsibilities and how do they allocate their time?

Research Question No. 2

Are there significant differences in time allocations between first year teachers, 2nd and 3rd year teachers, and teachers with tenure?

Research Question No. 3

Are there significant differences in time allocations between elementary, middle and high school teachers?

The main research questions include the following sub questions (See Appendix A for actual descriptions and definitions of terms used in the questions):

Research Question No. 4

How many hours do teachers spend working for

Fairfax County Public Schools each week? (This includes all hours at school or at home and hours spent in extra-/co-curricular activities, etc.)

Research Question No. 5

How much time do teachers spend in individual instructional planning?

Research Question No. 6

How much time do teachers spend in group or team planning?

Research Question No. 7

How much time do teachers spend in student assessment/grading?

Research Question No. 8

How much time do teachers spend in non instructional classroom activities?

Research Question No. 9

How much time do teachers allocate to career and staff development

Research Question No. 10

How much time do teachers spend in communication with parents and guardians?

A phone survey of respondents and non-respondents asked the respondents the following question:

Research Question No. 11

Upon completion of the survey, do you feel it accurately captured and portrayed your usage and expenditure of time?

The respondents and the non-respondents were asked the following research questions:

Research Question No. 12

What is the one area where you feel you spend too much of your time during your professional duties?

Research Question No. 13

If you had more time available, where would you use it?

Delimitations

This descriptive study is based upon a questionnaire of

time activity self reported by teachers in Fairfax County Public Schools. The questionnaire used in this survey was constructed and validated by the Fairfax County Public Schools. Terms used in some parts of the questionnaire are unique to Fairfax County Public Schools and would not allow this time activity survey to be used in other localities without modification and validation.

Definitions

For this study the following definitions were used.

Coopers & Lybrand. National management consulting firm contracted by Fairfax County Public Schools to implement strategic planning and provide Business Process Re-engineering and technological strategic planning.

Critical Success Factors. Eight benchmarks defined by Fairfax County Public Schools as critical to achieving the strategic vision of the school division.

Fairfax County Public Schools. Fairfax County Public Schools is the tenth largest public school division in the United States. Over 140,000 students attended Fairfax County Public Schools during 1994-1995.

Fairfax County is divided into four geographic areas for administrative supervision. Each of these areas has an Area Superintendent responsible for all schools located in the Area.

Fairfax County has 131 elementary schools, 20 middle schools, 20 high schools and 3 secondary schools. The three secondary schools in Fairfax County contain middle and high school students in grades seven through twelve.

The average school size by student enrollment in Fairfax County is elementary schools with 550 students, middle schools with 800 students, high schools with 1,800 students and secondary schools of approximately 2,450 students.

Instructional Professional Responsibility (IPR). Fairfax County Public Schools secondary teachers teach five periods, have one period of planning and an IPR period. This time is to be spent in direct contact with students, i.e., tutoring, hall duty, mentoring. Elementary teachers in Fairfax County Public Schools do not have an Instructional Professional Responsibility assignment.

Leadership Team. The division, assistant and area superintendents of the Fairfax County Public School System.

Process Redesign. Complete redesign of a process (as opposed to changing one or a few of its components) to achieve an identified new standard of performance.

Teacher Activity Survey. A self reporting survey instrument developed to record Fairfax County Public School teacher time (Appendix A).

Teacher. Full time teachers - K-12 - General Education, Special Education, English as a Second Language. Teachers in centers and alternative schools were not included in the random sample.

Work. The average number of hours per week expended for teaching. This includes all hours worked at school, at home and hours spent in extracurricular activities. (Appendix A)

Overview of Chapters

This study has been organized into five chapters. Chapter I introduces and states the nature of the study. Specifically, Chapter I states the purpose of this study, the problem of the study, and the significance of the study.

Chapter II reviews those studies and literature that relate to the present problem. Chapter III describes the research procedure and techniques used in this study. Chapter IV will present the results of this study. Chapter V, will summarize the results of the study and offer conclusions and recommendations for further research based upon the findings of this study.

CHAPTER II

Review Of The Literature

Introduction

The issue of school reform and the use of time is a key issue in all current media. Many initiatives of reform for education center on the length of the school year, the length of the school day, and as reported in the National Commission on Education Time Task Force the usage of time in the core academic areas. This emphasis on time, is in conjunction with increasing pressures to expand the roles and responsibilities of education into ethics, sex education, values and character education to address the ills of society. These pressures have all been added to the education agenda with one ingredient lacking--time (Goldberg, 1994). Educational research has addressed time in many different ways; time management, time on task, administrator time, length of school day, length of school year, and time spent on core academic subjects. The key missing element for all of the existing research is studying time from the viewpoint of documenting the current workload

(time) of teachers in the United States.

America 2,000 and Goals 2,000 by the Department of Education (1991, 1993), The National Council on Educational Standards and Testing (1992), The Holmes Groups Study by the Carnegie Corporation (1986), A Nation at Risk (1983), and the Rand Corporation Report (1981), all cite a need for higher standards with teachers teaching more and students learning more. These national commissions and reports all call for massive reform and redesign of the delivery of instruction. Much of the content of these reports is devoted to the classroom teacher. Teacher preparation, certification, competency, morale, salary and other issues are all addressed numerous times and ways in these reports. None of these reports documented the expenditure and usage of teacher time. Several studies (Scans, 1991; Holmes Group, 1986; Carnegie Report, 1986) cite the lack of time in the teachers day as a significant impediment to school reform.

A Nation at Risk (1983) put the nation on notice that the 180-day school calendar begun for the agrarian society of the 1700s' and 1800s' is a detriment to education. This school calendar originally allowed students to remain productive members of the farming community and allowed education to be secondary to the cycle of the farm. Goals 2,000 by the Department of Education (1994) encourages

schools to use and group time in different ways. It would be difficult to find a report on education created in the last ten years that did not cite time as a key factor in the future of the reform movement.

The Carnegie Foundation for the Advancement of Teaching (1992) supported and released a study of the American high school. This report also recommended how school time should be spent. TheodoreSizer (1992) and John Goodlad (1984) both address the usage of time in the existing school and how it plays a key role in their schools of the future. They supported the Holmes Group Report by the Carnegie Corporation (1986) calling for increased standards for teachers along with professionalism and collaboration as key elements of teacher empowerment. Researchers, critics, policy makers, and the public all have a great concern for how time is used.

David Berliner in a 1979 publication and more recently Goldberg in the 1994, Prisoners of Time relied on data provided from other countries showing students in the United States, by comparison, rank very low in time spent on academic core subjects. Even in total time measured by the length of the year or length of the day, the United States is extremely low in comparison to other countries. During the high school years, United States students will spend an average of 1,460 hours in core academic areas. Their

counterparts in Japan, France and Germany will respectively spend; 3,170 hours, 3,280 hours, and 3,528 hours.

This plethora of discussion about school time and the call for higher standards and increased accountability cannot be achieved in the current allocations of teacher responsibilities. The Prisoners of Time Report (Goldberg, 1994) reported two major findings; 1) schools cannot be transformed without giving teachers time to "retool themselves and reorganize their work" and 2) students and teachers cannot meet "world class standards" in the current time-bound school structure.

For too long, time has been an implacable barrier to improving student learning. If this nation is to succeed in changing schools to better serve the needs of students and their families, it must release teachers from the prison of time (Goldberg, 1994).

Time as a central issue in schooling has been recognized by researchers in recent years. Carroll's "A Model of School Learning" (1963), studied the effects and distinctions of "allocated time" and "students' engaged time." Carroll's study of engaged time and time on task has been replicated in countless other studies of classroom time (Fisher, 1985; Ben-Perentz, 1990).

The question is how long do teachers work? And in what areas do they expend their time? If the future of education

hinges upon the teacher work force, then the educational leaders and administrators should have data to help them in changing and modifying the professional responsibilities of teachers.

Peter Senge in the Fifth Discipline (1993) discusses the importance of time in the work place. His writings make a direct comparison of different cultures business work place to the different cultures classrooms. His comparison of American firms to Japanese firms is remarkably similar to the comparison of American schools to Japanese schools. "When a person in a Japanese firm sits quietly, no one will come and interrupt. It is assumed that the person is thinking. On the other hand, when the person is up and moving about, coworkers feel free to interrupt." Senge says, "it is exactly the opposite in an American company? In America, we assume a person sitting quietly isn't doing anything very important" (Senge, 1993, p. 302).

Senge (1990) states that the practice of not valuing reflective time originates in schools, particularly American public education. Donald Schon, in The Reflective Practitioner (1983, p. 303), provides an explanation for the drive for instant action in our society. This drive appears to come from public school classroom learning, where teachers are bound by a bureaucratic organization that discourages time to reflect. "If a teacher must somehow

manage the work of thirty students in a classroom, how can they really listen to any one student?" Thus, in the school room, learning becomes synonymous with absorbing information dished out by an "expert" and everyone, both student and teacher, moves as quickly as possible to absorb as much as possible.

School Reform And The Teacher

Clark and Astuto (1994), believe that the professional teacher is critical to the success of the reform movement. However, increasing confusion exists over the role of the teacher. Are teachers experts or skilled technicians? Are they objects of public trust or targets for suspicion? Are they the main reason for school failures or the best hope for school reform? Clark and Astuto call for collaborative work environments for teachers that promote self direction as opposed to oppressive managerial environments. Clark and Astuto also call for educational leadership training and preparation. Many school administrators cannot or do not know how to provide a collaborative environment for teachers. Astuto and Clark conclude school reform will succeed only if it is a grass roots effort of teacher- and student-centered initiatives.

Time Management

Many types of research are directed at time management tips and practices for teachers and administrators (Weiss, 1993; Harris, 1992; Watts, 1993; Aquila, 1992; Langlois, 1992). Most of these contain standard time management business practices such as: create lists of things to do, handle a piece of paper once, return phone calls in twenty-four hours, etc.

Other time management research, (Mustain, 1990; Watts, 1993; Donahoe, 1993) has addressed teacher time implications of site-based management and other added responsibilities expected of teachers. Restructuring in these studies means formally rearranging time usage to allow schools and teachers to create and sustain an interactive culture and supporting infrastructure for improving student learning. Teachers identify lack of time as one detriment of site-based management (Watts, 1993) and many studies suggest ways to give teachers more time, freeing teachers from scheduling constraints, common time (for teacher planning and preparation), better used time (to replace faculty meetings and professional development activities), and purchased time (hiring additional teachers).

Educational Administration Time Studies

Although very few teacher time studies exist, administrative time allocation in reform and restructuring has been studied in great detail (Hill, 1993; Koru, 1993; Ellem, 1986). Houston assistant principals were shadowed to document time spent in clerical tasks, custodial duties, and discipline. The study found that daily activities were characterized by brevity, variety, and fragmentation. Geoff Ellem (1986) emphasizes the administrator use of the calendar to control time usage in the school. This report analyzed school calendar usage and made recommendations for administrative use of time to maximize student learning.

Other studies of administrator time have included time usage documentation of administrators by mail survey, telephone survey, questionnaire and personal interview (Celusta, 1983; Dempsey, 1990; Norris, 1993; Ghosey, 1988; Gibson, 1986). These studies captured the time administrators spend in specific tasks such as evaluation, supervision, discipline, etc. The studies attempted to document differences in time usage between large schools and small schools, schools with vision and schools perceived to have no vision, and administrative job satisfaction as it relates to time spent in various activities.

The Gibson (1986) survey used structured observations

of elementary principals in Kansas to capture their time usage. Gibson then compared the time documentation to the perceived success of the elementary school. He drew the conclusion that principals of successful schools were involved in more activities that incorporated sharing and parental interaction, and significantly less discipline related activities. One conclusion of the Gibson study is that principals of successful schools were more in control of their work lives than the principals of other schools.

Time And School Reform

Time, or more properly lack of it, is a difficult problem faced by schools and districts engaged in restructuring. The experience with more than a hundred experimental restructuring efforts has demonstrated the frustration associated with lack of time. If restructuring efforts are to succeed, the proper use of time is the most important ingredient for their success (Watts, 1993).

One cultural barrier to time and school reform is a traditional assumption that teachers have to be managed. Teachers have not been trusted to use their non-instructional time wisely and have had virtually no control over their time or its use. However, studies have shown that the managerial model is antithetical to the job

of teaching (Hargreaves, 1990). The increasingly recognized need for teachers to be involved in all parts of the process of school change has put greater pressures on teachers' time. School reform calls for a shift of control from administrators to teachers over the structuring of time. (Watts, 1993).

Mary Anne Raywid (1993) confirms the belief that collaborative time for teachers to undertake and sustain school improvement may be more important than equipment, facilities or even staff development. Some school districts have managed to include pupil-free workdays in their annual calendars, yet others have had to resort to other low cost alternatives such as larger groupings of students or increased use of recess to provide additional teacher time. These lower cost alternatives seem to sacrifice student learning and higher standards for the increase in collaborative teacher time (Raywid, 1993).

Donahue (1993) believes that school improvement (reform) is failing because time is the final, and most worrisome, potential problem with shared decision making. Teachers spend so much time with school management that they actually end up less effective in the classroom, or even burnt out. Donahue cites a few cases of schools immersed in reform that have rearranged teacher and student schedules to increase teacher collaborative time. However, Clark says these

modifications do not provide enough time for the adequate involvement of every staff member and all internal interests. Donahue calls for a complete overhaul of the school year, day and the arrangement of time. The schools and the community should determine how best to reconfigure the school day. Until this concept is adopted, all collective time is ad hoc, vulnerable to shifts in leadership, and most likely through of as an add-on rather than as an integrated activity according to Donahue (1993).

The Kansas City Schools adopted time management and school reform policies as a result of a study by Ida Love (1988). Teacher time was carefully scheduled to address the loss and waste of time involved with starting the day, changing subjects and attending assemblies. Watts (1993) says for school reform to succeed, "it would be helpful to monitor how we're spending our time and to what extent the time is spent. If teachers are given a stronger voice planning the use of time at the school level, might this produce more realistic, sensitive time lines for implementation and improvement? Might it also improve the quality of working conditions and increase teacher professionalism? More time may be necessary for successful school reform, but time alone is not sufficient. Equally important is how the time is used and who has the control of its use."

The time needed for commitment to school reform and improvement is usually added to the already full slate of the professional teachers' lives. The current practice of adding to without subtracting from teacher responsibilities deems school reform efforts to failure. School systems are providing some time, but the time commitment of the individual teacher is the highest cost of school reform (Watts, 1993).

Some districts have set up time strategies to provide teachers with more time for reform. These initiatives include waivers of student contact time, early dismissal, banking time, using specialists' schedules, and buying substitutes (Campbell, 1992).

Hargreaves (1990) also said it would be more helpful to give responsibility and flexibility to teachers in the management and allocation of time. Teachers should also have more control over what is developed within that time . . . the acknowledgement of the importance of what time means for teachers. Hargreaves goes on to say there seems to be a strong case for giving time back to the teacher both quantitatively and qualitatively and for giving the teacher educationally substantial things to do with that time.

Existing Teacher School Reform Surveys

Barth (1990, 1993), Ross (1983) and especially Ashton (1983, 1982) have devoted research and commentary to teacher efficacy. Ashton in particular has surveyed teachers at the middle school level. Her findings indicate teachers with high efficacy attitudes tended to have students with greater student achievement than did students of teachers with low efficacy attitudes. Without mentioning the word time - - Ashton (1983) said that teaming, multi-age grouping and collegial decision-making appeared to be school factors that increase school efficacy. One of the major factors fitting into the higher feelings of self-efficacy was in middle schools practicing interdisciplinary teaming. These groupings allowed teachers to be more creative with time usage and thus increased opportunities for teachers reflective and collaborative use of time.

Barth (1993) believes that good schools cannot happen without being entire communities of learners. The collaborative relationships between administrators and teachers and between teachers and parents must be nourished through frequent dialogue. Limited and highly structured contacts tend to debilitate these relationships and Barth encourages increased informal discussions and meetings between all adults in the learning environment.

Ross (1983) believes teachers must never stop being learners. Her study recommends numerous changes for policy makers to institute, if teachers as researchers are to succeed. Policy makers must provide time and money as incentives for conducting research, they must provide a systematic way for teachers to share ideas with one another, and they must involve teachers in all aspects of decision-making at the school level.

Barth, Ross and Ashton all see the teacher as the key to success in the classroom and success for school reform. But all acknowledge the current school structure does not emphasize this teacher centered emphasis. Barth (1993) may be the most succinct, implying current research puts too much emphasis on the abilities of the building principals. There are not enough "great" principals to go around and the real future of the schools lies in the teachers creating the learning environment in conjunction with the parents and the administrators.

Existing Teacher Time Management Surveys

Harvey (1993) reports a growing and widespread interest in time in the work place and in the daily lives of the general population. His study examines time use data collection and reporting standards throughout industry and

society. His work examines the history and applications of time use data and was prepared in conjunction with the Multinational Time Use Project (Harvey, 1993). In spite of changing technologies, methodologies and divergent data needs, the Harvey study concluded the different collection methods, (logs, shadowing, self-reporting, surveys) appear to make little difference in the resulting activity and time use estimates at customary levels of reporting. The validity and accuracy of the data were not affected by methodology of collection.

Hua Yang (1993) completed a study of job responsibilities and time usage in middle school teachers in Japan and the U.S. She found through a survey of 137 American and 173 Japanese teachers that American teachers spend a significantly larger proportion of their work time on academic tasks than Japanese teachers. Japanese teachers spend more time on school management and meetings. The study also portrayed the role of teachers in both countries as a "profession" in both countries. The Japanese teacher is regarded as a generalist with diffuse responsibilities while the United States teacher is seen as a specialist. Rarely, is the American teacher engaged in the education of the "whole" child. Japanese teachers assume the role of surrogate parent much more than their American counterparts.

Campbell conducted three separate studies in 1988,

1990, and 1991, on teacher time allocation and usage in England. England attempted to implement a nationwide curriculum and school reform movement through the Education Reform Act of 1988. Few teachers in England incorporated any of the national curriculum into their instructional methodology during the first two years of the Reform Act. The national curriculum standards were not taught. Campbell and the University of Warwick sought to explain that the unsubstantiated reason for the poor curriculum implementation was a lack of teacher time. The University of Warwick conducted three different studies over a five-year period. Volunteer teachers were identified and kept logs of their time usage. The teachers recorded their time in a variety of categories. Weekends and evenings were also logged to capture all time aspects of teacher time responsibilities.

The major findings of the three studies were: (1) teachers were spending more time on their jobs because of the Reform act; (2) lack of time was the most serious obstacle to carrying out the reform; (3) teachers thought it was reasonable to work eight extra hours per week, but were averaging 22 hours of extra work per week (extra work is defined in this study as any time over forty hours per week); (4) teachers' overload was not restricted to the time of the Reform Act, but was typical of other times as well.

Ranges of time recorded were considerable, the lowest being 38 hours per week and the highest being nearly 73 hours per week. The average time reported was 49 hours per week. Overall, teachers spent 35 percent of their time teaching, 31 percent in preparation, 29 percent in administrative activities, 19 percent in inservice training, and 6 percent in other activities.

Extensive research has been done on different groups of teachers to learn the total amount of teachers' non-instructional working time in West Germany (Kischkel, 1990). Teachers spend most of their out-of-classroom working time on lesson preparation and evaluation. Most of the research shows that demographic variables like age and sex have significant impact on teachers' working time. On the average females report less time for out-of-classroom work than male teachers. Young teachers of both sexes use more time for non-lesson work than older ones.

The teacher sample consisted of 1,100 full and part-time teachers of 62 primary, secondary, grammar and comprehensive schools in North-Rhine Westphalia and Hesse. The teachers responded by means of self-administered anonymous questionnaires (Kischkel, 1984, 1987). Teachers were asked to state their time expenditure during school days in a "typical week." No attempt was made to compute the teachers' weekly working time based on a school year.

The results in these German studies show that lesson preparation and evaluation consume the most non instructional time, 12.48 hours per week. Administration time is second at five hours per week. Teachers in West Germany work 40 to 44 hours in an average school week. They are only required to teach 24-28 hours per week. The study clearly showed young teachers are absorbed by preparation while older teachers spend significantly less time in preparation and planning.

Other studies in Israel (Schonmann, 1990) dealt with formal observation and analysis of faculty meeting time. The study concluded that time is an obsessive issue in the working world of the teacher. Most of faculty meeting discussion was devoted to issues of time. The second finding was a very negative attitude toward time. The quotes convey a heavy pessimistic view of the nature of teachers' work. As a result, Schonmann concluded that teachers see themselves as captives of time.

Chinese middle school teachers were compared to middle school teachers in the United States by Paine (1990). She interviewed and observed Chinese teachers over a two year period. Chinese teachers teach only about ten hours a week. In spite of these low teaching hours, Chinese teachers describe their teaching as tiring (lei) and physically difficult to bear (ku). They work long hours, schools open

to students at 6:30 a.m. and students are frequently still at the school at 7:00 p.m.. The teachers frequently take naps at school or go home for lunch and a nap because of the long hours. Many Chinese teachers said they had to arise at 4:00 or 5:00 a.m. to do their domestic chores at home.

Unlike their American counterpart, the Chinese teachers informally take students in cohort groups and remain responsible for the cohort group all the way through their final school examinations. This cohort responsibility involved tutoring, home visits and many other duties far and beyond classroom teaching. This cohort factor could explain the teachers' concern with time although their teaching duties are considered light by world standards.

Different lengths of school days and school years make direct comparisons to United States schools difficult. But unlike their American counterparts, other educational systems are conducting research studies on teacher time.

Overview of Research Methodology

Studies by Bateson (1984) have shown that respondents devote special attention to the activity being measured thus, the researcher runs the risk of measuring and recording altered behavior.

Robinson (1985) carried out comparisons between results obtained from diaries and from interview questions. The diary showed no bias due to social desirability except some under reporting connected with illegal or undesirable activities. Compared with the activity survey, questions asked in an interview process produced overestimation on almost all activities. Robinson (1985) concluded that the time diaries are the only viable method for obtaining valid and reliable data.

In a Finnish Time Use Survey of 1987, people were asked in a questionnaire how many hours per week they worked. The same people were then asked to keep a diary for two consecutive days, recording all their activities in ten-minute intervals. The results show that the direct interview questions yielded approximately one hour more of reported time worked than time reported in a diary.

Whatever type of behavioral measurement used, the validity of the data is driven by the intelligibility and interpretational clarity of the questions, factors of memory, and people's willingness to respond truthfully. The largest threat to validity in time survey measurement is that different population groups "speak different languages," that is, understand the survey in different ways.

Factors of memory are also closely connected with

measurement accuracy. Employment time data of a person working outside the home can be defined more accurately than that of a person working at home. Wage and salary earners have a regulated working time and a clear conception of their actual hours of work (Harvey, 1993).

Summary

Many international studies document teacher time usage and teacher perceptions about their time allocation. All portray the task of teaching as exhausting and time consuming. Frequently the authors of these studies were surprised to report the amount of time teachers spend at their task. It is interesting that other countries have devoted research to teacher time while the United States has focused on classroom time usage. The United States, while studying many aspects of education and time, has limited research in this area.

Charles Fisher, Berliner (1985) and Brophy (1979) extensively studied time on task, instructional time and other aspects of teacher time spent in direct contact with students. It is remarkable that in all of their studies they never looked at teacher performance or total teacher time expended. Their studies isolated teaching only within the context of the classroom. Their documentation of

classroom time is exemplary observing, recording and reporting each minute of classroom activity.

In spite of administrators, politics and parents, the classroom teacher is the foundation of providing the basis of our democratic society. In order for us to succeed as an educated populace, the teachers entrusted with the mission of education of our youth must have sufficient resources--including time--to be successful. Before we assign another task to teachers--let us first document that they are already prisoners of time with no escape.

Chapter III

Methods and Procedures of the Study

The purpose of this chapter is to describe the methods and procedures used in the teacher time activity survey. The chapter is divided into five sections: (1) a description of the population, (2) the research method used in the study, (3) the instrument used to collect the data, (4) a description of the procedures used in collecting data, and (5) the analysis procedure.

Description of the Population

This study consisted of a random sample of all full time teachers in Fairfax County Public Schools employed during the 1993-1994 school year. Teachers not assigned students for a full day were not included in this study. This would include resource teachers, part time teachers, reading specialists, and librarians. Special Education centers and alternative school teachers were also not included in this sample. Only full day teachers, grades K-12 at the 174 elementary, middle, high school and secondary

schools were included in the sample. There were 9,230 teachers in Fairfax County Public Schools who met these criteria. The research methodology and the development of the survey instrument was accomplished in conjunction with Coopers and Lybrand. The questionnaire was mailed to 347 teachers.

Research Methodology

In this study a descriptive survey method was employed. The intent of Coopers & Lybrand was to justify information technology systems solutions through activity based costing methods. This survey of teacher usage of time enabled Coopers & Lybrand to propose expenditures for technology system solutions based upon saving teacher time in areas benefitting from technology automation. A second purpose of the survey was to provide data for process redesign teams addressing student profiles and progression through parent conferences. The current student information system did not support the concept of supporting teacher conferences to share student information with parents. The documentation of teacher time spent in pursuit of student information was used to help justify the need for new and improved student information systems.

The initial response rate from the Coopers & Lybrand

part of the study was seventy percent. This study added follow-up mailings and a phone survey to increase the response rate. The telephone survey used structured questions to provide qualitative data for use in validity assessments of the study.

In this descriptive survey method study the data were analyzed as the relationships between variables. Because the coding used by the respondents was rounded to the nearest thirty minutes, the data were regarded at the interval level.

Instrumentation

A teacher activity survey was selected because it provided the lowest cost of administration and the most expeditious manner for the collection of the data. There are four basic types of time surveys in behavioral measurement; interview, log keeping, shadowing and survey/time diaries. Shadowing is extremely expensive and time consuming. The review of the research in Chapter II, illustrates the equal rates of validity amongst the different methods of survey and even suggests that activity surveys provide the most validity.

In lieu of cost, time and the existing validity literature on time survey studies, the data from the Fairfax County Public School Teacher Activity Survey is as reliable

as if data were collected through actual logs, shadowing or interviews. Validation sessions affirmed the time recorded was consistent with actual behavior. Ambiguity and misunderstanding were not identified as a concern during the validation sessions.

A cover letter from the Fairfax County Public Schools Superintendent, emphasized the importance of the research. The letter also linked the survey to the enterprise strategic planning project and the importance of the data collection to that project (Appendix B).

The initial draft of the instrument was developed based upon interviews with instructional personnel and the study researcher's experience as a teacher and principal. Twelve middle and high school teachers on May 26, 1994, and eleven elementary teachers on June 1, 1994 completed the teacher activity survey in a test validation of the instrument. The teachers received an explanation of the project and were then asked to complete the survey. After the teachers completed the survey, they were asked to participate in a focus group. Finally, the teachers were asked to make comments and suggestions concerning the appropriateness of the categories, format, directions, instrument clarity, response items, bias and length.

Validation groups responded to questions about the impact of a survey administered at the end of the school

year. They were also shown the Superintendents' cover letter and asked if that influenced their completion of the instrument. The teachers acknowledged the end of the year was busy but the letter from the Fairfax County Public Schools Superintendent carried a significant level of importance to convince most teachers to respond to the survey.

Because of the validation sessions, a new section was added to capture time activities that occur on a seasonal basis and not on a weekly basis. An additional category (labeled other) was included in the seasonal and weekly time section to capture any teacher activities not included in the descriptions. The teachers initiated a few changes to the descriptions but expressed satisfaction that the instrument accurately reflected their time usage. The teachers thought the instrument initially looked simple and would take very little time to complete. The validation groups both expressed surprise at the length of time it took them to complete the instrument. Upon completion, the teachers in both focus groups averaged forty-five minutes to complete the instrument.

The first page of the instrument (See Appendix A for the complete instrument) consisted of a short introductory paragraph of the intent and purpose. An addressed envelope for return was included in the mailing.

Section I contained the request: *Estimate the average number of hours you work for Fairfax County Public Schools each week.* It then listed directions for how to complete the survey. The final instruction was to tally the number of hours and compare to the first question. This question was intended to guide the respondents toward an accurate portrayal of their time.

The second page of Section I contains the Teacher Activity Categories. Teachers were asked to report average time per week, in half hour increments, in the following categories:

- Instructional Time
- Non-Instructional Classroom Activities
- Extra/ Co-Curricular Activities
- Non-Classroom Supervision/Duties
- Group or Team Planning
- Production
- Grading Student Work
- Attendance
- Student Counseling/Support
- Career and Staff Development
- Meetings
- Ordering
- Parent Communication
- Community/Public Relations

- Mail
- Miscellaneous
- Other:

Section II contained activities that occur seasonally or sporadically throughout the school year. These activities include:

- Recruit/Interview Instructional Staff
- Interim Grade Reports
- Standardized Testing
- Classroom Inventory
- Developing County-wide Curriculum
- Ensure Federal/State/Local Compliance
- Other:

Section III contained demographic information in the following categories:

Type of School

Area

Teaching Assignment

Size of School

Length in current assignment

Total years as a Teacher

What is your current assignment?

Data Collection

The questionnaire and a cover letter from the Fairfax County Superintendent of schools were distributed through the internal Fairfax County Public School mail system to each school site. (See Appendix A and B for the letter and instrument). No identification coding was attempted to ensure anonymity of the respondents.

A thank you memo accompanied a second request to complete the questionnaire from the study researcher was mailed through Fairfax County Public School internal mail. Because no coding was used, the follow up letters were sent to all teachers in the sample. The follow up letter was written to thank those who had responded and to provide incentive for non-respondents to complete the survey (Appendix C).

A third request documenting the current return rate was mailed directly to the teachers' homes. (Appendix D). This request informed the respondents that 65% of the teachers had responded. Again, this letter was mailed to all of the teachers in the survey sample.

A random telephone survey of one hundred of the original 347 teachers was conducted during the months of August and September, 1995. This telephone survey determined whether the demographic makeup or response

disposition of the non respondents was any different from the 235 respondents.

A second purpose of the telephone survey was to validate the accuracy of the time reported by the 235 teachers who did respond. The respondents and non-respondents were asked the respondents the following question:

- Upon completion of the survey, do you think it accurately captured and portrayed your usage and expenditure of time?

The respondents and the non-respondents were asked the following research questions:

- What is the one area where you feel you spend too much of your time during your professional duties?
- If you had more time available, how would you use it?

Analysis Procedure

Excel, a spreadsheet software with a statistical analysis tool was used to analyze these data. Frequencies and percentages were used to compare data in the seven sub

categorical research questions and the three main research questions. Cross tabulations were used to determine if statistically significant differences existed between levels of teaching experience and grade level assignment.

Total numbers of hours were reported as means and tested for significant differences by T-Test comparisons in the following categories; first year teachers, 2nd and 3rd year teachers, and teachers with tenure. The other level of reporting the main research questions and the subcategories were: elementary, middle and high school teaching assignments.

Hypothesis were tested statistically at the .10 levels of significance.

CHAPTER IV

Findings

Introduction

The purpose of this study was to use data collected from the Coopers & Lybrand teacher activity time study in a large suburban school district, Fairfax County Public Schools, Virginia, to explain the relationship between the teacher demographics of grade level and teaching experience in relation to certain professional teacher activities.

The purpose of this chapter is to present the research findings. The chapter is divided into three major sections: (a) description of the population under study, (b) findings in relation to the teacher time activity survey, and (c) findings in relation to the telephone survey.

Population, Sample and Response Rate

The population of this study was all full-time teachers in Fairfax County Public Schools. Full-time teachers were those assigned to direct instruction and/or

contact with students for the entire working day. This study excluded resource teachers assigned to central offices, part-time teachers, reading specialists, counselors and librarians. The population of this study consisted of the 9,230 teachers who met the criteria.

A random sample of all full-time Fairfax County Public Schools teachers was calculated to be 347 teachers located at the 174 school sites. These sites included elementary, middle, high and secondary schools. Adult education centers, and other Special Education centers were not included in the sample. The teacher activity questionnaires were mailed in May, 1994 (Appendix A). Two follow-up letters to respondents and non-respondents were mailed during the summer of 1994 (See Appendix C and D). Two hundred and forty-five teachers completed and returned the survey by August 31, 1994.

Ten additional surveys were returned as a result of the telephone survey conducted during the first two weeks of September, 1994. These ten additional surveys brought the total number of surveys returned to two hundred and fifty-five responses.

Twenty-four of the surveys did not satisfy minimum data requirements or had significant data or demographic omissions that did not allow their use in the data analysis. Two hundred and thirty-one surveys were used

in the data analysis of the total time expenditures reported by all teachers and represented a final response rate of sixty-seven per cent.

There were demographic omissions in some of the surveys resulting in subcategory totals of less than two hundred and thirty one responses, i.e., grade level; elementary--73 teachers responded, middle school--64 teachers responded, and high school--79 teachers responded. This demographic subcategory of grade level taught had a total of two hundred and sixteen responses. Fifteen teachers did not designate a grade level but the rest of their data was used in the sample analysis. The total number of responses in each demographic category is indicated at the top of each table (Tables 4-10).

Tables 1 depicts the demographic breakdown of all the teacher responses. The breakdown by grade level depicted in Table 1, Grade Level Taught, was seventy-three elementary teachers, sixty-four middle school teachers and seventy-nine high school teachers. In this study, elementary school is considered kindergarten through sixth grade, middle school is grades seven and eight and high school is the ninth through twelfth grades.

The number of respondents by years of experience depicted in Table 1, Years Teaching Experience, are

fourteen first year teachers with no teaching experience, twenty teachers with two and three years of teaching experience second and one hundred and ninety-one teachers with four or more years of teaching experience.

Table 1, School Type, depicts respondents by the type of school building configuration. Table 1 also depicts the number of respondents by the enrollment/size of the school.

Table 1
Teacher Demographics

NUMBER OF RESPONSES BY GRADE LEVEL TAUGHT

Grade Level	Number of Teacher Respondents
K-6	73
7-8	64
9-12	79
Total	216*

NUMBER OF RESPONSES BY YEARS TEACHING EXPERIENCE

Total Years of Experience	Number of Teacher Respondents
First year	14
More than one less than four	20
Four years or more	191
Total	225*

* This number is less than the 231 teachers in the total sample because of omissions or uncodable entries in these particular demographic categories.

Table 1 Continued
Teacher Demographics

NUMBER OF RESPONSES BY SCHOOL TYPE

School	Number of Teacher Respondents
Elementary	75
Middle	61
High	51
Secondary	34
Total	231

NUMBER OF RESPONSES BY SIZE OF SCHOOL

Number of Students	Number of Teacher Respondents
Less than 200	1
200 to <500	34
500 to <1,000	65
1,000 or more	123
Total	223*

* This number is less than the 231 teachers in the total sample because of omissions or uncodable entries in these particular demographic categories.

Telephone Survey Response Rate

A telephone survey was conducted during the first two weeks of the 1994-1995 school year to increase the sample return rate and obtain additional data from the population. Because of the anonymity of the returned surveys, ninety-one teachers, both respondents and non-respondents were randomly selected from the original sample of 347 teachers. The telephone survey asked a series of questions (Appendix F). "Did you return a survey?" was the first question asked. If there was a negative response to the first question, they were asked if they would participate by filling out a survey. Twenty of the phone contacts requested that a survey be sent to them for their completion. These twenty teachers indicated they would complete the survey and return it within two weeks. Ten of the twenty surveys sent out were completed and returned.

Sixty-nine of the teachers indicated they had returned a survey. These teachers were asked four additional questions (Appendix F). These questions asked whether the survey accurately captured their time. The second question asked if there was any area of the survey that did not accurately capture their time. They were also asked what category consumed too much of their time

and in what category they would like to expend more of their time.

Table 2 depicts the demographic breakdown of the teachers contacted by the telephone. This table also depicts how many teachers had completed a survey, how many teachers had requested a survey, how many teachers had returned the requested survey and the number of teachers who refused to talk on the phone. Seventy-one of the ninety-one teachers had completed and returned the survey or said they remembered taking the survey.

Table 3 depicts that fifty-five teachers affirmatively stated that the survey accurately captured the total amount of time worked for Fairfax County Public Schools both at home and at school. Sixteen of the ninety one teachers could not remember the survey, did not wish to answer any questions, or were too busy to respond to the questions.

Table 2

Breakdown of Teacher Survey Response Demographics

Category	Number
Number of teachers surveyed	347
Number of surveys returned	245
Number of teachers contacted by phone	91
Number of teachers who said they returned or remembered the survey	71
Number of teachers who requested second survey	20
Number of surveys returned from teachers	10
Number who refused to talk on the phone	02

Table 3

Telephone Survey Question Responses
by Teachers Who Had Returned a Survey

Question	Yes	No	No Response
Did the survey accurately capture the total amount of time you work for FCPS at home and at school?	55	0	16
Were there any areas where the survey did not capture your time accurately?	0	10	61

Note: Total responses 71

Analysis of Data

All time expenditures on the survey were reported in half hour increments and these were then tabulated and analyzed at the .90 confidence level.

Tables 4-10 depict the number of respondents by demographic group in each time category. These tables depict the mean number of hours reported in each time category, the percentage that mean represents out of a total of 100 per cent, the low and high range of hours reported in that category and the standard deviation for that category.

All teachers did not respond to each category. Each category of data in Tables 4-10 is reported in pair wise deletion. This pair wise deletion includes the responses of any survey with a recorded time in that particular category. If there was no response, it was not included in the data analysis of that category.

Research Question No. 1 How much time do Fairfax County Public School teachers currently expend in their professional responsibilities and how do they allocate their time?

Table 4 depicts teacher responses by time categories of means, standard deviations, percentages and ranges of number of hours reported by all respondents. Respondents categorized by years of teaching experience and grade levels taught are depicted in Tables 5-10 showing categories of time allocation in means of hours reported by category, standard deviations, percentages and ranges within those categories.

Two hundred and six teachers (89%) recorded time in parent communication and one hundred and one teachers (44%) recorded time in community and public relations. Although 214 teachers did respond to the category of grading student work is a note of interest that seventeen teachers recorded no time in grading student work.

The largest standard deviations were recorded in extra- and co-curricular activities, career and staff development and grading student work. This could be due to extra- and co-curricular activities and will be discussed in more detail in Chapter V.

The activities with the smallest ranges were miscellaneous, ordering, and parent communication. The activities with the largest ranges were career and staff development (.5-48 hours), instruction (2-50 hours), and extracurricular activities (.5-30 hours). The largest

expenditures of time reported as means were in instruction, instructional planning, and grading student work. The lowest means were reported in parent communication, community public relations, mail, miscellaneous and ordering.

All categories of teachers expended more than forty percent of their time in instructional activities. When instructional time, planning, student counseling, classroom activities and student counseling are combined, all teachers expend 70.6% of their time in contact with students or planning for contact with students. Adding the category of grading student work to this total accounts for over 80% of a teachers day.

Two areas of frequent concern expressed by teachers is the amount of time spent reproducing classroom materials and the time involved in attendance. Both of these areas account for less than 5% of a teachers time. Two hundred and twenty-three (97%) teachers did record time in production. This was the third highest response rate of any activity category.

Table 4

Activity Hours Reported by
All Teachers

N=231	Number of Responses	Mean of Hours Reported	Percent	Range	S.D.
Instructional time	225	26.1	43.5	2.50	8.31
Non-instructional classroom activities	197	2.0	2.9	.5-20	2.72
Extra-/co curricular Activities	147	3.4	3.8	5-30	5.02
Non-classroom supervision/duties	167	2.5	3.1	.5-15	2.27
Group or team planning	188	2.4	3.3	.5-15	2.04
Instructional planning	227	6.9	11.6	1-30	4.43
Production	223	1.8	2.9	.5-12	1.43
Grading student work	214	5.7	9.1	.5-22.5	4.24
Attendance	193	1.3	1.8	.5-10	1.27
Student counseling/ support	182	1.8	2.4	.5-10	1.56
Career and staff development	214	3.0	4.8	.5-48	4.08
Meetings	215	1.7	2.7	.5-12	1.48
Ordering	143	1.0	1.0	.5-12.5	0.86
Parent communications	206	1.4	2.1	.5-8	1.16
Community/public relations	101	1.4	1.1	.5-12.5	1.80
Mail	186	1.2	1.7	.5-25	2.04
Miscellaneous	113	1.1	0.9	.5-5	0.80
Other	50	3.9	1.5	.5-20	3.99

Table 5 presents data for teachers with one year or less of teaching experience. There were fourteen teachers in this category. One area of note and discussed in Chapter V is the low mean number of hours reported by teachers in parent communication. Only five (36%) of the fourteen respondents reported time spent in community and public relations. Grading student work at a mean of just over four hours was the smallest of the three categories of teaching experience.

Table 5

Activity Hours Reported by
Teachers With One Year Or Less Teaching Experience

N=14	Number of Responses	Mean of Hours Reported	Percent	Range	S.D.
Instructional time	13	25.8	45.1	6-33	7.30
Non-instructional Classroom activities	12	3.2	5.2	.5-12	4.36
Extra-/co curricular Activities	10	2.9	3.9	1-10	2.64
Non-classroom supervision/duties	10	1.7	2.3	.5-5	1.77
Group or team planning	11	2.2	3.3	.5-5	1.37
Instructional planning	13	7.3	12.8	.5-15	4.53
Production	13	2.3	4.4	.5-12	2.91
Grading student work	14	4.4	8.2	1-10	3.05
Attendance	14	0.8	1.4	.5-2	0.47
Student counseling/ support	11	1.8	2.7	.5-5	1.66
Career and staff development	13	1.9	3.4	.5-5	1.61
Meetings	11	1.4	2.1	.5-1	0.19
Ordering	7		0.6	0.5	.5-12.5
Parent communications	14	1.3	2.4	.5-5	1.25
Community/public relations	5	1.0	0.7	.5-1.5	0.35
Mail	12	0.7	1.1	.5-1	0.25
Miscellaneous	3	1.3	0.5	.5-1.5	0.29
Other	1	1.5	0.2	1.5-1.5	

The first year teachers were the only demographic group to have all fourteen respondents (100%) report time in the parent communication category.

Table 6 depicts data for teachers with more than one year to less than four years teaching experience. There were sixty teachers in this category. They reported a mean of sixty hours for total hours per week. Nineteen of the twenty respondents (95%) recorded time in parent communication. Grading student work was reported at just over five hours per week. Only six respondents (30%) recorded time in community and public relations.

Table 6

Activity Hours Reported by
Teachers With More Than One Year To Less Than Four Years
Teaching Experience

N=60	Number of Responses	Mean of Hours Reported	Percent	Range	S.D.
Instructional time	19	25.6	40.6	4-37.5	8.47
Non-instructional classroom activities	16	2.0	2.7	.5-5	1.50
Extra-/co curricular activities	15	5.0	6.3	.5-20	6.26
Non-classroom supervision/duties	15	3.4	4.2	.5-10	3.19
Group or team planning	15	2.9	3.6	.5-15	3.51
Instructional planning	20	7.0	11.6	2-14	3.49
Production	20	2.1	3.4	.5-12	2.91
Grading student work	20	5.2	8.7	1-10	3.29
Attendance	18	1.7	2.5	.5-5	1.51
Student counseling/ support	15	2.6	3.2	.5-8	2.20
Career and staff development	18	3.1	4.7	.5-7	2.43
Meetings	20	1.3	2.1	.5-4.5	0.97
Ordering	7	0.6	0.5	.5-12.5	0.86
Parent communications	19	1.4	2.2	.5-5	1.01
Community/public relations	6	0.8	0.4	.5-1	0.26
Mail	18	0.8	1.2	.5-2	0.49
Miscellaneous	10	1.4	1.1	.5-5	1.36
Other	1	5.0	0.4	5-5	

Table 7 depicts data for teachers with four or more years of teaching experience. There were one hundred and ninety-one teachers in this category. They reported a mean of fifty-nine hours for total hours per week. One hundred and sixty-nine teachers (88%) recorded time in parent communication. These experienced teachers reported the most time grading student work at just under six hours per week. Eighty-six of the teachers (45%) recorded time in community and public relations.

Table 7

Activity Hours Reported by
Teachers With Four or More Years Teaching Experience

N=191	Number of Responses	Mean of Hours Reported	Percent	Range	S.D.
Instructional time	188	26.1	43.8	2-50	8.40
Non-instructional classroom activities	164	1.9	2.8	.5-20	2.62
Extra-/co curricular activities	119	3.3	3.5	.5-30	5.05
Non-classroom supervision/duties	137	2.4	2.9	.5-15	2.15
Group or team planning	158	2.4	3.3	.5-11	1.92
Instructional planning	189	6.8	11.5	1-30	4.33
Production	184	1.7	2.8	.5-8	1.26
Grading student work	175	5.9	9.2	.5-22.5	4.33
Attendance	156	1.3	1.8	.5-10	1.30
Student counseling/ support	152	1.7	2.3	.5-10	1.48
Career and staff development	178	3.1	4.8	.5-48	4.37
Meetings	179	1.7	2.7	.5-12	1.57
Ordering	123	1.0	1.1	.5-5	0.91
Parent communications	169	1.4	2.1	.5-8	1.18
Community/public relations	86	1.5	1.2	.5-12.5	1.93
Mail	152	1.3	1.7	.5-25	2.23
Miscellaneous	98	1.0	0.9	.5-5	0.74
Other	47	4.0	1.7	.5-20	4.09

Table 8 depicts data for elementary teachers. There were seventy-three teachers in this category. They reported a mean of fifty-six hours for total hours per week. Sixty-seven of the respondents (92%) recorded time in parent communication and twenty-eight respondents (38%) recorded time in community and public relations. Grading student work at just under five hours per week was the lowest recorded mean in any of the categories. Elementary teachers had the lowest standard deviation and the lowest mean in extracurricular activity hours. Elementary teachers also recorded the highest standard deviation in career and staff development of any of the demographic categories.

Table 8

Activity Hours Reported by
Elementary Teachers

N=73	Number of Responses	Mean of Hours Reported	Percent	Range	S.D.
Instructional time	72	26.3	46.0	5.5-50	7.61
Non-instructional classroom activities	61	2.1	3.2	.5-12	2.47
Extra-/co curricular activities	45	1.8	1.9	.5-15	2.54
Non-classroom supervision/duties	48	2.0	2.3	.5-15	2.25
Group or team planning	65	2.0	3.2	.5-5	1.16
Instructional planning	73	7.2	12.8	1-30	4.72
Production	70	1.6	2.8	.5-12	1.57
Grading student work	67	4.9	8.1	.5-22.5	4.24
Attendance	52	0.9	1.2	.5-5	0.92
Student counseling/ support	48	1.4	1.7	.5-5	1.31
Career and staff development	71	3.3	5.7	.5-48	5.74
Meetings	69	1.7	2.9	.5-6	1.32
Ordering	45	0.9	1.0	.5-5	0.88
Parent communications	67	1.4	2.3	.5-8	1.26
Community/public relations	28	1.2	0.8	.5-5	1.18
Mail	59	1.3	1.9	.5-25	3.22
Miscellaneous	35	1.0	0.8	.5-3	0.62
Other	16	3.7	1.4	.5-14	3.93

Table 9 depicts data reported by middle school teachers. There were sixty-four teachers in this category. They reported a mean of fifty-seven hours per week. Fifty-nine of the sixty-four respondents (92%) recorded time in parent communication. The largest standard deviation was recorded in instructional planning. Thirty-four teachers (53%) recorded time in community and public relations. Middle school teachers had three activity hour standard deviations below 1.00 in ordering, attendance and student counseling and support.

Table 9

Activity Hours Reported by
Middle School Teachers

N=64	Number of Responses	Mean of Hours Reported	Percent	Range	S.D.
Instructional time	61	26.8	44.5	2-47.5	9.38
Non-instructional classroom activites	50	2.1	2.9	.5-20	3.28
Extra-/co curricular activities	40	2.5	2.7	.5-15	2.86
Non-classroom supervision/duties	56	2.2	3.4	.5-10	2.00
Group or team planning	58	2.9	4.7	.5-15	2.33
Instructional planning	61	6.7	11.1	1-25	4.61
Production	62	1.9	8.3	1-15	3.43
Attendance	54	1.1	1.6	.5-5	0.95
Student counseling/ support	51	1.3	1.8	.5-5	0.97
Career and staff development	59	2.8	4.5	.5-20	3.15
Meetings	60	1.7	2.8	.5-8	1.42
Ordering	38	1.0	1.1	.5-5	0.94
Parent communications	59	1.5	2.3	.5-7	1.25
Community/public relations	34	1.3	1.2	.5-8	1.43
Mail	50	1.2	1.6	.5-10	1.49
Miscellaneous	32	1.1	1.0	.5-5	0.93
Other	14	4.2	1.6	.5-15	3.88

Table 10 depicts data for all high school teacher activity hours. There were seventy-nine teachers in this category. They reported a mean of sixty-two hours per week. Sixty-seven of the high school teachers (85%) recorded time in parent communication and thirty-two respondents (41%) recorded time in community and public relations. High school teachers had four areas with very low standard deviations; ordering, parent communication, mail, and miscellaneous. High school and middle teachers reported means of two more hours per week than elementary teachers. However, one of the highest standard deviations for high school teachers was in grading student work at 4.26.

Table 10

Activity Hours Reported by
High School Teachers

N=79	Number of Responses	Mean of Hours Reported	Percent	Range	S.D.
Instructional Time	78	25.5	40.8	4-45	8.28
Non-instructional classroom activities	76	1.7	2.7	.5-10	1.70
Extra-/co curricular activities	57	5.5	6.4	.5-30	6.87
Non-classroom supervision/duties	52	3.3	3.5	.5-12	2.39
Group or team planning	53	2.2	2.4	.5-11	2.54
Instructional planning	79	6.8	11.0	1-15	3.66
Production	78	1.9	3.0	.5-8	1.42
Grading student work	78	6.6	10.6	.5-20	4.26
Attendance	76	1.6	2.5	.5-6	1.28
Student counseling/support	72	2.4	3.5	.5-10	1.93
Career and staff development	71	2.8	4.1	.5-16	2.94
Meetings	73	1.5	2.2	.5-6	1.26
Ordering	49	0.9	0.9	.5-3	0.65
Parent communications	67	1.2	1.6	.5-5	0.87
Community/public relations	32	1.9	1.3	.5-12.5	2.56
Mail	66	1.1	1.4	.5-5	0.73
Miscellaneous	40	1.1	0.9	.5-5	0.80
Other	14	3.9	1.1	1-20	3.88

Research Question No. 2 Are there significant differences in time allocations between first year teachers, 2nd and 3rd year teachers, and teacher with tenure?

Table 11 depicts no significance difference in all activity categories between the different years of experience for all teachers. The mean for total hours expended by years of experience is; first year teachers at fifty-three hours, second and third year teachers at sixty hours and teachers with four or more years experience at fifty-nine hours per week.

Table 11

Total Teacher Activity Hours Reported by Category

	Number of Respondents	Mean of Hours Reported	S.D.	Range	Prob.
All respondents	231	58	12	17.5-110	
1st year teachers	14	53	16	17.5-85	.346
More than 1 but less than 4 year teachers	20	60	14	43-90	.749
4 or more year teachers	191	59	12	23-99	.710
Elementary	73	56	14	39.5-75	.189
Middle school	64	57	19	17.5-92	.903
High school	79	62	17	38-97	.134

Research Question No. 3 Are there significant differences in time allocations between elementary, middle and high school teachers?

Table 11, which depicts probability at .10 level of significance in all activity categories between the different years of experience for all teachers, also depicts no significant difference in all activity categories between elementary, middle and high school teachers. The mean number of total hours for each the grade level groupings is; elementary at fifty-six hours, middle school at fifty-seven hours and high school at sixty hours.

Research Question No. 4 How many hours do teachers spend working for Fairfax County Public Schools each week?

Table 11 depicts the fifty-eight hours per week as the mean number of hours spent by all teachers performing their job responsibilities for Fairfax County Public Schools. The range was from seventeen and one half hours to one hundred and ten hours per week.

There were fourteen first year teachers in the sample and they reported a mean of fifty-three hours per

week performing the duties associated with their job responsibilities.

Twenty teachers in the sample had more than one year, but less than four years experience in the sample. The mean for this group of teachers was sixty hours per week.

The one hundred and ninety-one teachers who had four or more years teaching reported a mean of fifty-nine hours per week.

Research Question No. 5 How much time do teachers spend in individual instructional planning?

All teachers spend an average of 6.9 hours per week in instructional planning with a standard deviation of 4.42 (Table 12). First year teachers spend a mean of 7.3 hours and a standard deviation of 4.53. The second and third year teachers mean of 7.0 hours is reported in Table 10 with a standard deviation of 3.49. Tenured teachers, or teachers with four or more years experience had a mean of 6.8 hours and a standard deviation of 4.33. There were no significant differences found between any of the demographic categories and the overall teacher respondents.

Elementary, middle and high school teachers had a mean of 7.2, 6.7, and 6.8 hours respectively in instructional planning. The standard deviation for each group was 4.72 elementary, 4.61 middle school and 3.66 high school.

The range for all teachers in instructional planning was one to thirty hours per week.

Table 12

Teacher Activity Hours Reported by Category
Instructional Planning

	Number of Responses	Mean of Hours Reported	S.D.	Range	Prob.
All respondents	231	6.9	4.42	1-30	
1st year teachers	14	7.3	4.53	1.5-15	.960
More than 1 but less than 4 year teachers	20	7.0	3.49	2-14	.958
4 or more year teachers	191	6.8	4.33	1-30	.834
Elementary	73	7.2	4.72	1-30	.664
Middle school	64	6.7	4.61	1-25	.715
High school	79	6.8	3.66	1-15	.851

Research Question No. 6 How much time do teachers spend in group or team planning?

All teacher respondents reported a mean of 2.4 hours and a standard deviation of 2.04 in group or team planning (Table 13). First year teachers spend a mean of 2.2 hours in group or team planning with a standard deviation of 1.37. The second and third year teachers reports resulted in a mean of 2.9 hours and a standard deviation of 3.51. Tenured teachers with four or more years experience had a mean of 2.4 hours and a standard deviation of 1.92 in group or team planning.

At the probability level of significance of .10, elementary teachers spent significantly less time in group or team planning than the overall sample. The middle school at the same level of confidence, reported significantly more hours in group or team planning than the overall sample. There was no significant difference in high school teachers group or team planning.

Elementary, middle and high school teacher had a mean of 2.0, 2.9, and 2.2 hours respectively in group or team planning. The standard deviation for each of the grade level groups was 1.16 for elementary, 2.33 for middle school and 2.54 for high school.

The range for all teachers in instructional planning was one half hour to fifteen hours per week in group and team planning.

When the two activities of instructional planning and group or team planning are combined, all teacher respondents have a mean of 9.3 hours.

Table 13

Teacher Activity Hours Reported by Category
Group or Team Planning

	Number of Responses	Mean of Hours Reported	S.D.	Range	Prob.
All respondents	231	2.4	2.04	.5-15	
1st year teachers	14	2.2	1.37	.5-5	.737
More than 1 but less than 4 year teachers	20	2.9	3.51	.5-15	.578
4 or more year teachers	191	2.4	1.92	.5-11	.902
Elementary	73	2.0	1.16	.5-5	.096*
Middle school	64	2.9	2.33	.5-15	.097*
High school	79	2.2	2.54	.5-11	.673

* $P < .10$

Research Question No. 7 How much time do teachers spend in student assessment/grading?

There were no significant differences reported in student assessment/grading by demographic category. All teacher respondents mean reported was 5.7 hours and a standard deviation of 4.24 hours in student assessment/grading (Table 14).

The mean of the first year teachers was 4.4 hours with a standard deviation of 3.05. Second and third year teachers had a mean of 5.2 hours with a standard deviation of 3.29. Tenured teachers reported a mean in student assessment/grading of 5.9 hours with a standard deviation of 4.33.

Elementary, middle and high school teacher had a mean of 4.9, 5.3, and 6.6 hours respectively in student assessment/grading. The standard deviation for these three grade level groupings is 4.24 in elementary school, 3.42 in middle school and 4.26 in high school.

The range for all teachers was one half hour to twenty two and one half hours per week in student assessment/grading.

Table 14

Teacher Activity Hours Reported by Category
Grading Student Work

	Number of Responses	Mean of Hours Reported	S.D.	Range	Prob.
All respondents	231	5.7	4.24	5-22.5	
1st year teachers	14	4.4	3.05	1-10	.130
More than 1 but less than 4 year teachers	20	5.2	3.29	1-10	.524
4 or more year teachers	191	5.9	4.33	.5-22.5	.703
Elementary	73	4.9	4.24	.5-22.5	.182
Middle school	64	5.3	3.43	1-15	.366
High school	79	6.6	4.26	.5-20	.120

Research Question No. 8 How much time do teachers spend in non-instructional classroom activities?

All teacher respondents reported hours resulting in a mean of 2.0 hours and a standard deviation of 2.72. in non instructional classroom activities (Table 15).

First year teachers spend a mean of 3.2 hours with a standard deviation of 4.36. Second and third year teachers expend a mean of 2.0 hours with a standard deviation of 1.50 and tenured teachers expend a mean of 1.9 hours with a standard deviation of 2.62 in non-instructional classroom activities. Elementary and middle school teacher expend a mean of 2.1 hours with standard deviations of 2.47 and 3.28. High school teachers expend the lowest mean of 1.7 hours and the smallest standard deviation of 1.70 in non-instructional classroom activities.

The range for all teachers in non-instructional planning classroom activities was one half hour to twenty hours per week in non-instructional classroom activities. Second and third year teachers and high school teachers reported the smallest ranges with .5-20 hours and .5 to 10 hours in non-instructional activities.

Table 15

Teacher Activity Hours Reported by Category
Non-Instructional Classroom Activities

	Number of Responses	Mean of Hours Reported	S.D.	Range	Prob.
All respondents	231	2.0	2.72	.5-20	
1st year teachers	14	3.2	4.36	.5-12	.361
More than 1 but less than 4 year teachers	20	2.0	1.50	.5-5	.937
4 or more year teachers	191	1.9	2.62	.5-5	.696
Elementary	73	2.1	2.47	.5-12	.736
Middle school	64	2.1	3.28	.5-20	.839
High school	79	1.7	1.70	.5-10	.309

Research Question No. 9 How much time do teachers allocate to career and staff development?

Teachers in this study are expected to delineate their career and staff development activities on a yearly basis for recertification purposes. The definition of this activity asked teachers to consider their yearly career and staff development activities and allocate those hours on a weekly basis. All teacher respondents had a mean of 3.0 hours and a standard deviation of 3.0 hours in career and staff development with a standard deviation of 4.08 (Table 16).

One group, elementary teachers had a significantly lower amount of time reported in career and staff development at the 90% confidence level.

First year teachers had a mean of 1.9 hours with a standard deviation of 1.61. Second and third year teachers reported in hours that resulted in a mean of 3.1 hours with a standard deviation of 2.43. Tenured teachers had a mean of 3.1 hours in career and staff development activities with a standard deviation of 4.37.

Groupings of elementary, middle and high school teachers resulted in means of 3.3, 2.8, and 2.8 hours respectively in career and staff development activities. The standard deviation for each of these grade level

groupings is 5.74 in elementary school, 3.15 in middle school and 2.94 in high school.

The range for all teachers was one half hour to forty-eight hours per week in career and staff development activities.

Table 16

Teacher Activity Hours Reported by Category
Career and Staff Development

	Number of Responses	Mean of Hours Reported	S.D.	Range	Prob.
All respondents	231	3.0	4.08	.5-48	
1st year teachers	14	1.9	1.61	.5-5	.053*
More than 1 but less than 4 year teachers	20	3.1	2.43	.5-7	.855
4 or more year teachers	191	3.1	4.37	.5-48	.888
Elementary	73	3.3	5.74	.5-48	.661
Middle school	64	1.3	3.15	.5-20	.656
High school	79	2.8	2.94	.5-16	.706

* $p < .01$

Research Question No. 10 How much time do teachers spend in communication with parents/guardians?

All teacher respondents reported a mean of 1.4 hours per week and a standard deviation of 1.15 hours in parent and guardian communication (Table 17).

First year teacher reported time equaling a mean of 1.3 hours with a standard deviation of 1.25. Second and third year teachers time reported times resulting in a mean of 1.4 hours with a standard deviation of 1.01. Tenured teachers had a mean of 1.4 hours in parent and guardian communication with a standard deviation of 1.18.

Elementary, middle and high school teacher reported time expended which resulted in means of 1.4, 1.5, and 1.2 hours respectively in communication with parents and guardians. The standard deviation for each of the grade level groupings is 1.26 for elementary school, 1.25 for middle school and .87 for high school teachers.

The range for all teachers in parent and guardian communication was one half hour to eight hours per week.

Table 17

Teacher Activity Hours Reported by Category
Parent Communication

	Number of Responses	Mean of Hours Reported	S.D.	Range	Prob.
All respondents	231	1.4	1.16	.5-8	
1st year teachers	14	1.3	1.25	.5-5	.750
More than 1 but than 4 year teachers	20	1.4	1.01	.5-5	.894
4 or more year teachers	191	1.4	1.18	.5-8	.927
Elementary	73	1.4	1.26	.5-8	.683
Middle school	64	1.5	1.25	.5-7	.599
High school	79	1.2	0.87	.5-5	.193

CHAPTER V

Conclusions, Implications, Recommendations, Discussion and Researcher's Commentary

Introduction

The purpose of this study was to use data collected from the Coopers & Lybrand management consulting engagement in a large suburban school district in Virginia, Fairfax County Public Schools, to explain the relationship between the teacher demographics of grade level and years experience in relation to certain professional teacher activities.

Summary of Conclusions

Research Question No. 1 How much time do Fairfax County Public School teachers currently expend in their professional responsibilities and how do they allocate their time?

The fifty-eight hour mean reported by the entire sample of teachers had a standard deviation of twelve hours. The lowest range was seventeen and half hours with a high range of 110 hours. The low and the high

ranges were recognized as outliers by the researcher. The low range could be the result of a full-time teacher performing special duties assigned by the principal. This would result in the teacher having only part of a teaching day and the other part of the day spent in a non-teaching activity. This is one possible conjecture for the extreme low range of seventeen and one-half hours. The high range may be attributable to the normal over reporting of hours that occurs in time usage surveys.

The teachers in this study are expected by their contract to work a thirty-seven and a half hour week. These results indicate FCPS teachers are exceeding their contracted work week by over twenty hours. Ninety-six percent of the teacher respondents reported time expenditures for their professional responsibilities between thirty-four and eighty-two hours per week. The survey did not discriminate between hours at home and hours at school but clearly the teachers in this study are devoting an average of eleven hours per week day to their professional responsibilities.

Twenty-four of the surveys excluded from the data analysis contained wide variance of hours reported to the initial question about overall hours, or contained data omissions or inconsistent hours.

Research Question No. 2 Are there significant differences in time allocations between first year teachers, 2nd and 3rd year teachers, and teacher with tenure?

No significant differences were found between the three categories of teaching experience. Tenured teachers had the highest mean with fifty-nine hours, and the smallest standard deviation--twelve. The tenured teachers had the second largest range. The fourteen first year teachers had the lowest mean at fifty-three hours and the highest standard deviation of sixteen hours.

Second and third year teachers had the highest mean-- sixty hours--and the middle position of standard deviation at fourteen. They also had the smallest range of hours reported with a low range reported of forty-three hours and a high range reported of ninety hours for a total range of forty-six hours.(Table 11).

Research Question No. 3 Are there significant differences in time allocations between elementary, middle and high school teachers?

There were no significant differences between the subcategories of grade level among the sample group.

Elementary teachers had the lowest mean at fifty-six hours, the smallest standard deviation at fourteen hours and the smallest range; thirty-nine and half hours to seventy-five hours.

The middle school teachers mean number of hours was one hour higher than the elementary teachers at fifty six hours. The middle school teachers had the highest standard deviation and the largest range.

The high school teachers had the highest mean of all categories at sixty hours. Much of this time is recorded in extra-curricular activities.

Research question No. 5 also reveals that all of the high school time is not in extra-curricular events. Much of the extra high school time is spent in the grading and assessment of student work category.

Research Question No. 4 How many hours do teachers spend working for Fairfax County Public Schools each week?

There were no significant differences between any of the categories of teachers at the .10 level of significance. Table 11 depicts the overall work week by the mean number of hours per week, the standard deviation, the range and the probability results comparing the subcategories to the overall mean of the

entire sample. The high school teachers have the largest mean and elementary teachers have the lowest mean, but neither are significantly different.

Research Question No. 5 How much time do teachers spend in individual instructional planning?

There were no significant differences in any of the demographic categories at the .10 level. High school teachers reported the highest mean of time in instructional planning. These differences are reported in Table 12. Although the standard deviations are rather large--3.5 to 4.75--the means for all categories range from 6.8 hours to 7.3 hours. The highest means reported in the category of instructional planning hours belong to elementary teachers and tenured teachers. Each of these groups reported a mean of thirty hours. No teacher in any category responded with less than one hour per week. Only two categories, first year teachers and second and third year teachers had low ranges of one and a half hours planning and two hours planning respectively.

First year teachers with a reported mean of 7.3 hours spent the most time planning. Elementary teachers reported the second highest mean at 7.2 hours. Middle school teachers recorded the least time devoted to individual planning at 6.7 hours but this might be

attributed to their teaming situations and the greater number of hours they spend in group and team planning.

Research Question No. 6 How much time do teachers spend in group or team planning?

Table 13 depicts the means of group and team planning. Significant differences were reported for middle school and elementary teachers. Middle school teachers spend significantly more time planning, a mean of 2.9 hours, than other teachers. This is an expected result since the emphasis of teaming and collaborative teacher teams has been instituted at all Fairfax County middle schools. At the .05 level of confidence this would not have been a significant difference. In spite of the increased emphasis on middle school teaming in this district, this category only had significance at the .10 level of confidence. Middle school teachers did not have significantly less time expended in individual planning. Therefore, the significant difference in group planning is additional time to overall planning efforts that middle school teachers are adding to their total hours of reported time.

Elementary teachers reported the lowest mean in group and team planning with a mean of 2.0 hours and the smallest standard deviation of 1.16 hours. At the .10

level of confidence this is significantly less than other teachers in the sample. Elementary teachers spend much of their day isolated from their peers. However, FCPS has early release of students on Monday afternoons and grades four, five and six often use or are assigned teams of teachers working together and sharing teaching responsibilities. These results reflect that the Monday afternoon time and the groupings of the upper grades do not appear to result in group or team planning time. It is also important to note that this would not have been a significant finding at the .05 level of confidence.

Research Question No. 7 How much time do teachers spend in student assessment/grading?

There were no significant differences in any of the demographic categories. First year teachers spend less time grading than other teachers with a recorded mean of 4.4 hours and standard deviation of 3.05. High school teachers reported the highest mean of time grading than other teachers with a mean of 6.6 hours and a standard deviation of 4.26 hours.

First year teachers frequently work with mentor teachers and they reportedly use the existing assessments of mentor teachers. Middle school teachers had the lowest standard deviation of any of the grade level

categories. High school teachers in core areas of English, Social Studies, Science, Math, and Foreign Language had the highest means in student assessment of all categories of teachers.

Research Question No. 8 How much time do teachers spend in non-instructional classroom activities?

There were no significant differences between any of means of the number of hours reported by the demographic categories used in this survey. First year teachers have the highest reported mean at 3.2 hours and the largest standard deviation at 4.86. The activities associated with this category--collecting fees, announcements, assemblies, pep rallies, fire drills, fund raising coordination, etc.--should perceivably be the same regardless of the years of experience. The means for this category decline with years of experience. Second and third year teachers at 2.0 hours and tenured teachers at 1.9 hours seem to indicate that more teaching experience allows you to devote less time or more efficient use of time to these non-instructional classroom activities.

Research Question No. 9 How much time do teachers allocate to career and staff development?

First year teachers, usually recent college graduates, reported the lowest means of time devoted to career and staff development at 1.9 hours and the smallest standard deviation at 1.61 hours. This was a significantly smaller difference at the .10 level of probability. This finding may be a result of recent graduation or completion of college work. But the finding also supports the teacher culture of immediate immersion into the teaching profession with no time devoted to continued learning or staff and career development. First year teachers may be so absorbed by the full time teaching responsibilities that they have little time or opportunity to continue professional growth through staff development.

Elementary teachers had the highest mean at 3.3 hours when the data were analyzed by grade level. Middle school teachers had the lowest mean of time devoted to career and staff development at 1.3 hours, lower than any other demographic category of teacher.

Research Question No. 10 How much time do teachers spend in communication with parents/guardians?

There were no significant differences between the means in the category of communication with parents/guardians. Small means, small standard deviations and small ranges depict the amount of communication with parents and guardians by all categories of teachers in this study. The means range from 1.2 to 1.5 hours, the standard deviations range from .87 to 1.26 and the ranges are from .5 to 8 hours per week. The standard deviation of .87 for high school teachers is the smallest reported in any question in any category. The high school teachers also share the smallest range of hours reported in parent communication with .5 to 5 hours, a distinction they share with first, and second and third year teachers.

Teachers with the lowest ranges of hours reported in parent communication are spending a mean of five minutes a day in contact with parents.

Telephone Survey

Ninety-one of the 347 teachers surveyed were contacted by telephone survey. The absence of any affirmative teacher response questioning the accuracy of

the survey instrument is documented in Table 3. Ten of the phone respondents volunteered that the accuracy of the survey was very good. One teacher claimed, "It was thorough and well constructed, When I completed it, I was amazed that it had captured my time so well."

The telephone survey included a question that asked, "Which area of your professional responsibilities takes too much of your time?" Eleven responses were obtained from that question. None of the responses were repetitive. Meetings, cafeteria supervision, copying, paperwork, special education, paperwork, referrals were comments made by individual teachers in response to this question.

When asked the area of professional responsibility where they wished they had more time, teachers overwhelmingly responded "planning". This response is a request for additional time in above and beyond the mean of 9.3 hours reported by all teachers in group, team and individual planning. Twenty-two of the respondents wanted more time for planning and preparation. Six teachers wanted more time to read professionally and three teachers wanted more time with students. The following are individual comments:

more time to contact parents

more time to observe colleagues

more time at home
more time for computer training
more time for grading papers

One teacher said, "The survey was extremely accurate and upsetting. I did not know how much time I was spending at my job. It made me realize I needed to put my life in perspective. When I started school this fall-I made a conscious effort (as a result of the survey) to cut back my hours." More than one teacher indicated this survey made them, for the first time in their career, cognizant and reflective of the number of hours they expend in their job.

Conclusions

Teachers in this study currently expend a sizable number of hours to fulfill their professional duties with mean of fifty-eight hours per week for teachers as a large baseline. Any new school initiative that requires teacher time would expand that baseline even further. Many teachers in the phone survey indicated they felt they were already working too many hours at the current time.

Many observers questioned the validity of the survey findings from the teacher time activity surveys. The

telephone survey data confirmed that teachers participating in the survey felt that the survey accurately captured time expenditures.

The findings of statistical significance in group and team planning could have positive implications for the middle school educational reform that has been sweeping the United States. The emphasis of the middle school reform movement has been to assign teams of teachers to teams of students. This team concept would increase interdisciplinary teaching and provide a more collaborative caring team of teachers for middle school students social well-being. Group and team planning has been a strong emphasis of this reform movement and these results confirm that the teachers in this study, all of whom are involved in middle schools that team, are spending significantly more hours in that category than peers at other grade levels.

The finding of statistical significance for first year teachers in career and staff development may be attributed to their recent matriculation through college. However, it is meaningful for educational administrators in recognizing that for whatever reason, district initiated or self-initiated these first year teachers are not engaged in career and staff development activities at the level of their peers. Mentoring and inculcation

programs may need to be increased to engage first year teachers in career and staff development activities on the same level as their peers.

Elementary teachers having statistically significant less time in group and team planning should be of interest to elementary educators in curriculum and school reform at the elementary level. Although many elementary schools in this district are treating all fourth grade teachers in an elementary school as a team, etc., these groupings are not resulting in equal or increased levels of group and team planning. The analysis from this study seem to portray elementary teachers as a rather isolated group in regards to group and team planning.

The lack of statistically significant findings in all of the other areas is also excellent baseline data for further research. First, second and third year teachers expend the same number of hours as the experienced teachers in overall time and in each subcategory. Grade level analysis also depict these same insignificant differences.

The high school teachers had the highest mean of all categories at sixty hours. Much of this time is recorded in extra-curricular activities. High school extra-curricular activities may be a reason for the overall mean of fifty eight hours (Table 11). The time studies

in England (Campbell, 1988, 1990, and 1991) each had lower overall means, in the high forties and low fifties. But schools in England, especially schools with grades equivalent to 9-12, do not have the extensive arrays of extracurricular coaching assignments and club sponsorships for teachers as do the United States high schools.

The other interpretation of note in this research is the even distribution of teacher time in the non-classroom, non-instructional duties. Many prior perceptions and anecdotal teacher comments indicate that teachers spend enormous amounts of time grading papers and in production of classroom materials. The small standard deviations noted in production, attendance, meetings, ordering, etc., indicate relatively equal and small allocations of time to these activities. This survey also confirms that the teachers in this study devote the majority of their time to the delivery and planning of student instruction.

The only category that may dismay both educators and the public at large is the small percentage of time teachers allocated to communication with parents. In spite of the resurgence of collaborative initiatives to involve parents in the education of their child, teachers in this study spend less than two per cent of their time

talking with parents. During the telephone survey, when asked where they need more time or where they would expend more time, only one response was allocated to increasing the time spent in communication with parents.

This study provides the necessary baseline data and a current analysis for any school reform initiatives taken on a division wide or school site basis that require teacher time. New initiatives and reforms are frequently additive to teacher time. There are two choices for educators with new initiatives. They must either eliminate or reorganize the current expenditures of teacher time or add additional hours to the already large number of hours worked by teachers as documented in this study. Successful school reform may be more determined by the impact on teacher time than by the merit of the reform initiative.

Discussion

One of the purposes of this study was to identify where large expenditures of time were expended and reported. One of the hypothesis was that large areas of time would be reported in grading, attendance, production or other non-instructional categories. If this had been a conclusion of this study, it would have been the task

of this suburban school district to attempt to minimize those unproductive non-instructional hours. The survey countered these expectations by depicting that teachers spend over seventy per cent of their time in instructional activities, group and individual planning, grading student work and student counseling and support.

The non-instructional activities (production, mail, meetings, other, miscellaneous) consume less than twenty percent of teachers time. Non-instructional categories do not exceed three percent of teacher time in any single category. The largest non-classroom expenditures of time are in extra-curricular activities and career and staff development. Overall, the survey result confirms the dedication of the teachers of this study through their commitment of time to their professional responsibilities of direct contact with students.

The converse of the data reflects the lack of any hope for restructuring, or for schools to increase the amount of parent contact if it means additional responsibilities--time--added to the teacher day. Certainly, little can be added to the studied teachers responsibilities without something being taken away. Identifying or reclassifying the current expenditures of time await further study and research. School reform success and failure may hinge more on the available

minutes and hours in a teachers day than in the value of the reform.

Recommendations for Further Study

Based upon information provided in this chapter and the findings in Chapter IV, the following recommendations are being made for future research:

1. A second study documenting teacher time expenditures should be made in Fairfax County Public Schools. The instrument could be a log of teacher time, recorded by the teacher over a one or two week period. These data could be compared to the data from this study to further validate and document teacher use of time.

2. Another similar teacher time expenditure study should be conducted of other large, medium and small school systems to compare with the results of this study.

3. Further qualitative research is needed to document teachers perspectives and attitudes towards their use and expenditures of time.

4. Any new school reform initiatives added to teacher responsibilities would benefit from documenting teacher time expenditures before and after the new initiative is implemented. This methodology would

document the actual activity based time expended towards the new initiative.

5. Since this is one of the first United States descriptive studies of teacher time, it should be replicated in many different United State school districts, utilizing different methods of survey instruments, i.e., teacher logs, direct observation or teacher activity dictionaries.

6. Each of the research questions can be expanded to further research and studies, i.e., do teachers who expend more time in parent communication have higher achieving students.

7. Another study linking time expenditures by activity area to teacher evaluation ratings would show if correlations exist between time expended and successful evaluations.

8. A study to delineate between time spent at school and time spent at home would depict how many of the fifty-eight average hours are spent at home, at school, on weekdays or on weekends. This survey could also be specific to exclude extra-curricular activities. Extra-curricular activities are an extremely important part of the United States educational culture but may be causing extremely long hours for the professional staff.

9. A study of principals should be conducted to depict how many of their hours are expended in instruction versus hours expended for social, extracurricular and ceremonial duties and responsibilities.

Researcher's Commentary

Many predisposed suppositions of the researcher and his colleagues about teacher time were nullified by this study. Two frequent assumptions are that first year teachers expend extraordinary amounts of time during their first year to survive. In fact, the mean for this group was lower, but not significantly than for other teachers.

A second assumption is from teacher and parent comments is that elementary teachers put in longer hours than secondary teachers. This survey, again without a finding of significance reported a lower mean of total hours for elementary teachers than their secondary counterparts.

There is always a question of validity with any reporting of hours worked by any means of collection or reporting. The significance of this study may not be in

the total number of hours reported by the teachers in this study but rather the relationship of the hours.

The lack of hours spent in parent communication should be a red flag to all educators of this district. It is a cause for a study in itself. It could be based in the treatment of teachers or the morale of the teachers. Phones are limited and there are no formal expectations for communication with parents. More importantly, communication skills with parents is a skill that is acquired through necessity rather than an expected and trained competency.

Finally, this survey represents a very small part of a much larger issue. Special incidents impacting teacher time frequently occur only once or twice a year. These incidents could include breaking up a fight, stopping a bloody nose, or working with a grieving family. These types of time occurrences were not captured and yet can significantly impact teacher time. It is this researchers hope that this study plays a role in discussions and examinations of the expectations and limitations of teacher time in relation to their performance and the achievement of students.

BIBLIOGRAPHY

- Appalachia Educational Lab. (1993). Finding Time for School Reform: Obstacles and Answers AEL Distribution Center, Charlestown, WV: Author
- Aquila, F. (1992, March-April). Twelve time-management tips for teachers. Clearing House, pp. 201-203.
- Ashton, P. (1982). A Study of Teachers' Sense of Efficacy, Final Report, Volume I. University of Florida, Gainesville, Florida. (ERIC Document Reproduction Service No. ED 231 833)
- Ashton, P. (1981). Middle School Organization, Teacher Job Satisfaction, and School Climate. Paper included in Middle School Research, Gainesville, Florida. (ERIC Document Reproduction Service No. EA 014 544)
- Auton, S., & G. Bowman. (1993). Professional Development Survey Report. Fairfax, VA: Fairfax County Public Schools, Continuing Education Board.
- Barth, R. (1993). Coming to a vision. Journal of Staff Development, 14, 6-11.
- Barth, R. (1990). Improving Schools from Within: Teachers, Parents, and Principals Can Make the Difference. San Francisco, CA: Jossey-Bass Inc.
- Bateson, N. (1984). Data Construction in Social Surveys. Contemporary Social Research Series: 10, London: Allen & Ewin.
- Ben-Perentz, M., & R. Bromme. (1990). The Nature of Time in Schools. New York, NY: Teachers College Press.
- Berliner, D.C. (1979). Tempus Educare. In P. Peterson & H. Walber (Eds.), Research on teaching: Concepts, findings, and implications. Berkeley, Calif.: McCutchan.
- Boyer, E. L. (1983). The High School Study. Carnegie Foundation for the Advancement of Teaching. New York, NY: Harper and Row.

- Brophy, J. (1979). Teacher behavior and its effects. Journal of Educational Psychology. 733-750.
- Brown, S. (1991). The Role of Time in Teachers' Perceptions of Their Own teaching. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Campbell, R.J. (1985). Developing Primary Curriculum. Eastbourne, Australia: Cassells.
- Campbell, R.J. (1991). Workloads, Achievement and Stress: Two follow-up Studies of Teacher Time in Key Stage I Coventry, England: Warwick University, Policy Analysis Unit. (ERIC Document Reproduction Service No. ED358036)
- Campbell, R.J. & S. Neill. (1988). The Use and Management of Secondary Teachers Time after the Education Reform Act Coventry, England: Warwick University, Policy Analysis Unit. (ERIC Document Reproduction Service No. ED358044)
- Campbell, R.J. & S. Neill. (1990). Thirteen Hundred and Thirty days. A Pilot Study of Teacher Time in Key Stage I. Final Report Coventry, England: Warwick University, Policy Analysis Unit. (ERIC Document Reproduction Service No. ED358035)
- Carnegie Corporation. (1986). Nation Prepared: Teachers for the 21st Century. Report by the Task Force on Teaching as a Profession. New York, NY.
- Carnegie Corporation. (1986). Tomorrow's Teachers: A Report of the Holmes Group Report by the Holmes Group. New York, NY. (Holmes Group, Inc., East Lansing, Michigan: Clearing House No. SP027831)
- Carnegie Foundation for the Advancement of Teaching. (1988) Report Card on School Reform: The Teachers Speak. New York: Author.
- Celusta, W. R. (1983). Factors that affected change efforts in selected school systems. Dissertation Abstracts International, 44, 969. (University Microfilms No. AAC8319316)
- Clark, D., & T. Astuto. (1993, March). Redirecting reform: challenges to popular assumptions about teachers and students. Phi Delta Kappan, 75, 512-520.

- Coopers & Lybrand. (1993). Proposal to Develop the Fairfax County Public Schools Enterprise System Strategy Plan (RFP No. 40003020). Arlington, VA: Author.
- Dempsey, R. (1990). Time management and selected demographic factors of secondary school principals in connecticut as predictors of job satisfaction. Dissertation Abstracts International, 52, 754. (University Microfilms No. AAC 9119511)
- Department of Education. (1991). America 2,000: An Education Strategy. Washington D.C: U.S. Government Printing Office.
- Department of Education. (1993). Goals 2,000: An Education Strategy. Washington D.C: U.S. Government Printing Office.
- Department of Education. (1992). World Class Standards for American Education Washington, DC: U.S. Government Printing Office.
- Department of Energy. (1991). Sandia Report: Perspectives on Education in America. Unpublished Study (National Technical Information Service of the U.S. Department of Commerce)
- Department of Labor. (1991). Skills and Tasks for Jobs, A Scans Report for American 2,000 Report by the Secretary's Commission on Achieving Necessary Skills. Washington, D.C: U.S. Government Printing Office (No. 029-000-00437-4)
- Dismuke, D. (1991, December). It's about time. NEA Today, 10, 11.
- Donahoe, T. (1993, December). Finding the way: structure, time, and culture in school improvement. Phi Delta Kappan, 75, 298-305.
- Ellem, G. (1993, Winter). A timetable analysis: a tool for school administrators. Journal of Educational Administration, 24, 18-37.
- Enterprise System Planning. (1994). Phase I and Phase II Report. Fairfax County Public Schools: Fairfax, Virginia.

- Evertson, C., & A. Harris. (1992, April). What we know about managing classrooms. Educational Leadership, 49, 74-78.
- Finnish Mass Media. (1989). Central Statistical Office of Finland. Culture and Media 1990: Helsinki.
- Fisher, C. W., & D. Berliner. (Eds.). (1985). Perspectives on Instructional Time. New York, NY: Longman.
- Ghosey, L. (1987). Actual, estimated, and ideal time use by principals of the sixty-four largest high schools in Kansas. Dissertation Abstract International, 48, 2497. (University Microfilms No. AAC 8727558)
- Gibson, I.W. (1986). The work activity of principals in successful elementary schools (structured observations). Dissertation Abstract International, 47, 1947 (University Microfilms No. AAC 8619899)
- Geiger, K. (1994, June 12). Rethinking school time. The Washington Post, p. 12.
- Goldberg, M. (1994). Prisoners of Time (Report of the National Education Commission on Time and Learning). Washington, DC: U.S. Government Printing Office.
- Goodlad, J.I. (1984). A Place Called School. New York: McGraw-Hill Book Company.
- Hargreaves, A. (1990). Teachers's work and the politics of time and space. Qualitative Studies in Education, 3, 303-320.
- Harvey, A. (1993, November). Guidelines for time use data collection. Social Indicators Research, 30, 197-229.
- Hill, J. (1993, Fall). Effects of structural complexity of school principals in California. Rural Educator, 15, 6-10.
- Hua, Y. (1993). The teacher's job: a comparison of U.S. and Japanese middle school teachers. Dissertation Abstracts International, 54, 2112 (University Microfilms No. AAC9326580)
- Kischkel, K.H. (1984). Zur Arbeitssituation Von Lehrern. Frankfurt A. M.: Lang.

- Kischkel, K.H. (1987). "Zum Einfluss situativer und Einstellungsfaktoren auf die Arbeitsplatzperzeptionen und die Arbeits- und Lebenszufriedenheit von Lehrern. In H.G. Schonwalder (Ed.), Lehrerarbeit: Eine vergessene Dimension der Padagogik. (pp. 135-67). Freiburg: Dreisam.
- Kischkel, K.H. (1990). Determinants of West German teachers' disposable working time. In M. Ben-Perentz & R. Bromme (1990). The Nature of Time in Schools. (pp. 116-137). New York, NY: Teachers College Press.
- Koru, J. (1993, November). The assistant principal: crisis manager, custodian, or visionary?. NASSP Bulletin, 77, 67-71.
- Langlois, D. (1992, January). Anatomy of a top teacher. Education Digest, 57, 31-34.
- Love, I. (1988, March). Getting the most out of the school day. Educational Leadership, 45, 82.
- Nation at Risk. (1983). The Imperative for Educational Reform. Report by the National Commission on Excellence in Education. Washington, D.C. (U.S. Government Printing Office No. 065-000-00177-2)
- Neimi, I. (1993). Systematic error in behavioral measurement: comparing results from interview and time budget studies. Social Indicators Research, 30, 229-334.
- Norris, C. (1993). Vision as a factor in principals' time allotment. Dissertation Abstracts International, 53, 3768 (University Microfilms No. AAC 9308505)
- Oppenheim, L. (1989, April). We've got to stop meeting like this--and here's why. Executive Educator, 11, 21-22.
- Paine, L. W. (1990). Chinese Teachers' Views of Time. In M. Ben-Perentz & R. Bromme (1990). The Nature of Time in Schools. (pp. 116-137). New York, NY: Teachers College Press.
- Purnell, S. (1992). Time for Reform. Santa Monica, CA: Rand Corporation.

- Raising Standards for American Education. (1992, January). National Council on Education Standards and Testing, Washington, DC: U.S. Government Printing Office.
- Raywid, M. A. (1993, September). Finding time for collaboration. Educational Leadership, 51, 30-34.
- Robinson, J.P. (1983, October). Time Budget Studies in Various Countries. Unpublished manuscript.
- Ross, D. (1983, April). Action Research in a University Laboratory School: An Interview Study. Montreal, Quebec: American Educational Research Association. (ERIC Document Reproduction Service No. ED 230 613)
- Schlechy, P.C. & Vance, V.S. (1981). Do Academically Able Teachers Leave Education? The North Carolina Case. Phi Delta Kappan, 55, 15.
- Schonmann, S. (1990). Israeli Teachers' Metaphors about Time. In M. Ben-Perentz & R. Bromme (1990). The Nature of Time in Schools. (pp. 116-137). New York, NY: Teachers College Press.
- Schon, D. (1983). The Reflective Practitioner: How Professionals Think in Action. New York, NY: Basic Books.
- Senge, P.M. (1990). The Fifth Discipline. New York, NY: Doubleday.
- Sizer, T. (1992). Horace's School. New York, NY: Houghton-Mifflin.
- Slobojan, A. (1984, April). Assessing teacher effectiveness minute by minute. NASSP Bulletin, 68, 152.
- Spillane, R. (Speaker). (1994). One Vision, One Voice Management Conference Speech. Fairfax, VA: Fairfax County Public Schools, Department of Communications.
- Watts, G., & S. Castle. (1993, December). The time dilemma in school restructuring. Phi Delta Kappan, 75, 306-319.
- Weiss, S. (1993, September). It's about time!. NEA Today, p. 4.

Willower, D. (1991, October). School reform and schools as organizations. Journal of School Leadership, 1, 305-315.

Department of Education. (1992). World Class Standards for American Education Washington, DC: U.S. Government Printing Office.

APPENDIX A

TEACHER DICTIONARY OF ACTIVITIES

This survey is intended to gather information on tasks that you perform throughout an average workweek during the school year, and how many hours each task usually takes. For the information to be useful, it is important that you respond thoughtfully and honestly. Your responses will remain confidential and will not be reported individually.

**PLEASE MAIL YOUR COMPLETED SURVEY IN THE ENCLOSED ENVELOPE
TO BURKHOLDER CENTER BY JUNE 17**

SECTION I

_____ **Estimate the average number of hours you work for FCPS each week. Include all hours you are working either at school or your home, hours spent in extra-/co-curricular activities, etc.**

1. Read through all the activities listed on the attached pages. Feel free to make notes as you read each activity, but do not begin to fill in hours for the activities until you have read the entire list. You might want to place check marks next to those activities you routinely perform each week. Using a pencil will make completing the survey easier.
2. Now, re-read the activity descriptions for those tasks that you noted you perform. In the space provided to the left of the activity, note the average number of hours per week you spend performing each task. (Round to the nearest half hour.) Consider your average workweek during the year. You do not need to have time listed for every activity.

Do not record the same hours in more than one activity. For example, do not include the same half hour you spend performing administrative classroom activities such as collecting fees, making announcements, etc. under both "Instruction" and "Classroom Administrative Routines." This time should be recorded only under classroom administrative routines because that best describes your actual activities.

Secondary teachers should allocate IPR time according to the particular activities they perform during that time. For example, if you use your IPR time to mentor students, allocate that time to "Student Support."

3. Account for the same number of hours that you filled in as "Average Hours Worked per Week."

TEACHER ACTIVITIES

Hours per Week
(round to the nearest half hour)

- _____ **Instructional Time:** Includes any instructional contact with students including lecture, group work, teams, individual, and remediation before, during or after school
- _____ **Non-Instructional Classroom Activities:** Includes collecting fees, announcements, assemblies, pep rallies, fire drills, fundraising coordination, etc.
- _____ **Extra-/Co-curricular Activities:** Includes time spent outside of classroom time with athletics, marching band, clubs, SCA, yearbook, "Just Say No," plays, etc.
- _____ **Non-Classroom Supervision/Duties:** Includes non-classroom student supervision, hall, bus, cafeteria, during normal school hours. (If your IPR time is spent in this activity, record that time here.)
- _____ **Group or Team Planning:** Includes school planning activities, team planning, writing grants for the school, etc.
- _____ **Instructional Planning:** Includes any activities in preparation for instruction such as daily lesson plans: creating tests, handouts, syllabi; facility planning/scheduling, etc. (Do not include time spent actually duplicating the created documents.)
- _____ **Production:** Duplicating instructional and other materials, preparing transparencies, etc.
- _____ **Grading Student Work:** Includes homework, quizzes, tests, projects, etc.
- _____ **Attendance:** Includes recording, reporting, auditing attendance, including communication with parents regarding absences
- _____ **Student Counseling/Support:** Includes any non-classroom time spent counseling or mentoring students (and their families); writing recommendations; arranging for/transporting to doctor appointments; buying clothes; addressing problems with attendance, suspensions, expulsions, appeals, crises, pranks; and paperwork/reports associated with disciplinary procedures
- _____ **Career and Staff Development:** Includes all tasks related to your personal professional development including conferences, courses, seminars, inservices, keeping current through professional reading, etc. (Courses you take during the academic year and/or the summer should be included by determining the approximate hours you spend in courses and averaging that over the course of the year to determine weekly hours.)
- _____ **Meetings:** Includes department, faculty, county meetings and other meetings outside the building, etc. (If meeting is for instructional planning purposes, record time under "Group Planning" category.)

ACTIVITIES CONTINUED ON FOLLOWING PAGE

TEACHER ACTIVITIES

Hours per Week
(round to the nearest half hour)

- _____ **Ordering:** Includes ordering supplies, textbooks, equipment, etc., including any maintenance or repair activities
- _____ **Parent Communication:** Any and all miscellaneous communication (via telephone, facsimile, written communication, face-to-face, etc.) with parents not associated with any of the already mentioned activities. For example, if you communicate with parents regarding a student's attendance, that time should be included under "Attendance."
- _____ **Community/Public Relations:** Includes speeches, representing school at community events, business partnerships, community/volunteer involvement, etc.
- _____ **Mail:** Opening and processing mail, reading memos, etc.
- _____ **Miscellaneous:** Includes finance, miscellaneous reports, etc.
- _____ **Other:** (please specify) _____

SECTION II

Complete the following table for those activities which occur sporadically throughout the school year.

Approximate Number of Occurrences per Year	Avg Number of Hours per each Occurrence	Activity
		Recruit/interview instructional staff
		Interim grade reports
		Quarterly/final grades
		Standardized testing
		Classroom inventory
		Developing County-wide curriculum
		Ensure federal/state/local compliance with GT, IEPs, timelines, audits, etc.
		Other (specify): _____

CONTINUED ON NEXT PAGE WITH SECTION III

SECTION III

For each of the following questions, select the option that best describes you and write the number corresponding to that selection in the blank provided.

- | | |
|---|---|
| <p>_____ 1. Type of school
1 = Elementary
2 = Middle
3 = High
4 = Secondary
5 = Center School (Elem)
6 = Center School (Secondary)</p> <p>_____ 2. Area
1 = Area I
2 = Area II
3 = Area III
4 = Area IV</p> <p>_____ 3. Your job
1 = Teacher
2 = Principal
3 = Assistant Principal
4 = Director of Guidance
5 = Counselor
6 = Director of Student Activities
7 = Secretary</p> <p>_____ 4. Grade level(s) (teachers only)</p> | <p>_____ 5. Primary teaching area (teachers only)
1 = Elementary: K-6
Secondary: Math/English/
Social Studies/Science/
Foreign Language
2 = Special Ed/ESL
3 = Other</p> <p>_____ 6. Size of School
1 = Less than 200 students
2 = 200 to < 500 students
3 = 500 to < 1000 students
4 = 1000 or more students</p> <p>_____ 7. Length of time in current assignment
1 = 1 year or less
2 = More than 1 to less than 4 years
3 = 4 to less than 10 years
4 = 10 or more years</p> <p>_____ 8. Total years as teacher
1 = 1 year or less
2 = More than 1 to less than 4 years
3 = 4 to less than 10 years
4 = 10 or more years</p> |
|---|---|

What is (are) your current assignment(s)? _____

Please mail your completed survey by June 17

If you have misplaced the return envelope, send your survey via the Pony to:

**Burkholder Administrative Center
Amy Weber
Coopers & Lybrand**

THANK YOU IN ADVANCE FOR YOUR PARTICIPATION

APPENDIX B

June 3, 1994

TO: Survey Participants
FROM: Robert R. Spillane
SUBJECT: Activities Survey

Fairfax County Public Schools is currently engaged in a system wide analysis of our key business processes, and the redesign of those processes to improve services provided to students and the schools. As part of that analysis, randomly selected principals, teachers, counselors and secretaries are needed to validate the types of daily activities they perform and the time required to perform those activities. The information will be used to help reduce paperwork requirements and find new ways to improve services to students and schools through the use of technology.

You are one of fewer than 1,000 principals, teachers, counselors and secretaries selected system wide to complete the enclosed survey on the activities you perform. Statistical procedures allow us to minimize the overall impact on the organization during this very busy time of the year, but it requires a response from those few of you randomly selected. Please take the 20 to 30 minutes needed to complete and return the survey in the envelope provided. We are dependent on a response from each and every one of you selected.

Please mail you completed survey, using the enclosed envelope by June 17, 1994. Your response to the survey will be kept confidential and will be directed through the Pony top the consulting firm of Coopers & Lybrand.

Thank you for your willingness to participate. If you have any question regarding the survey, please the Enterprise System Planning office at 246-3880.

APPENDIX C

June 16, 1994

TO: Survey Participants
FROM: Brad Draeger, Project Manager
Enterprise System Planning
SUBJECT: ESP Survey

Recently you received a survey from the ESP Team and the consulting firm of Coopers & Lybrand. I want to thank you for taking the time to respond during this busy and demanding period associated with ending the school year. Using the information you have provided, FCPS employees will work during the summer months to prepare redesign recommendations for the improvement of current FCPS processes affecting service to students and schools. Your input will ensure that any changes reflect the concerns and suggestions of the people who work daily with the students and parents of Fairfax County.

If you have not had a chance to respond, please take the time to assist in this important aspect of the redesign process. Surveys should be returned to Amy Weber, Coopers & Lybrand, Burkholder Center. If you have any question, please call 246-3880.

APPENDIX D

July 12, 1994

Dear FCPS Teacher,

At the end of the school year, you were mailed an anonymous survey from the Enterprise System Planning office along with a return envelope addressed to Amy Weber, Coopers & Lybrand, Burkholder Center. I want to thank the 65% of you who responded to the survey. Due to the limited number of teachers included in the survey study, a high return rate of surveys is crucial to the project. If you still have your survey, please fill it out and return it to Amy Weber at the Burkholder Center. If you no longer have your survey, please call the ESP office at 246-3880 to request a new one. Your participation in this project is essential.

Thank you for your assistance,

Brad Draeger
Project Manager

APPENDIX E

Coopers & Lybrand Project Methodology

Fairfax County Public Schools contracted with the consulting firm of Coopers & Lybrand (C&L) to address the complex pressures of increased enrollment, demographic change, increasing administrative service demands, and changing technology. These challenges coupled with severe reductions in operating funds led to the issuance of a contract for outside consulting services.

Fairfax County Public Schools had an Instructional Systems Plan and an Information Systems Technology plan. Neither of these plans addressed resource allocation, prioritization, technology or systems solutions through an enterprise approach. What was needed was a plan based on an enterprise-wide view of the processes, independent of the organization.

FCPS engaged in this consulting project to use data modeling, process modeling and strategic planning to improve current and future decisions to maintain academic excellence for all students. Coopers and Lybrand incorporates the principles of Total Quality Management and business process

redesign. Customer service and the implementation of performance measurements of service are characteristic of Total Quality Management. This Total Quality Management methodology relies on creating teams of employees to reengineer existing processes under a shared vision for the enterprise.

The Coopers and Lybrand contract consisted of three phases:

- Phase I: Identify opportunities to radically improve Fairfax County Public School's core business and select processes for redesign

- Phase II: Develop the systems architecture and implement business process redesign teams to the selected processes.

- Phase III: Implement the redesign process, including the technology aspects of the redesign.

Reengineering or process redesign is a methodology of documenting current business practice, examining "best in business practice, and having a team of people redesign the process to achieve the enterprise's critical success factors and vision. The Phase I activities of strategic planning,

data modeling, process modeling, and surveys of constituents and employees led to the identification of four processes for redesign:

- *Student profiles for instructional planning*
- *Career and staff development*
- *Selection and assignment of instructional personnel*
- *Information technology resource management*

Process redesign teams during Phase II of the project within the FCPS system have created new processes to achieve the FCPS vision by the year 2,000. Current practice in these four areas compared to "future visions" requires enormous commitments of time and change management. Issues of increased parent communication, career and staff development, inclusion, student diversity, violence, Family Life Education, and the redesigned processes are all making demands on teacher time in Fairfax County Public Schools. A teacher, clerical and administrator survey collected quantitative data to support the design, planning and decision making associated the process redesigns.

Surveys that elicit employee attitudes and opinions about an organization and its policies, and about their work. In addition, quantitative surveys were included in the project

and use to Assist the Fairfax County Public School Leadership Team to understand cultural factors that may aid or inhibit the implementation of the redesigns.

Coopers and Lybrand provided the design and development of the survey instruments along with Fairfax County Public School employees. The data collected from this survey was used by Coopers & Lybrand in implementation planning of the process for student progression (Coopers and Lybrand, 1993).

APPENDIX F

Telephone Survey Questions

Name _____

School _____

Teachers who returned their survey

1. Did the survey accurately capture the total amount of time you work for FCPS both at home and at school?

Yes _____ No _____

2. Were there any areas where you felt the questions and categories did not accurately capture or portray your time expenditures?

3. Which area of your professional responsibilities takes too much of your time?

4. In what area of your professional responsibilities do you wish you had more time?

Teachers who did not return a survey

Would you please let us mail you a survey and return it to the Burkholder Center? Yes _____ No _____

VITA

Brad Draeger received his both his bachelor of Music Education in 1975, and his Masters of Music Education Degree in 1979, from the University of Miami. His eleven years of teaching experience as band director included four years at Dunedin High School, Dunedin, Florida and seven years at South Lakes High School, Reston, Virginia.

Mr. Draeger received his administrative certification in 1985 and served seven years, four as an assistant principal and three years as principal at Oakton High School, Vienna Virginia. His most recent position is as Project Manager, of an Enterprise System Planning project with Fairfax County Public Schools.

Mr. Draeger is an accomplished bassoon player and was principal bassoon of the Fairfax Symphony Orchestra from 1979 until 1990.



Brad S. Draeger