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> LA THÈSE A ÉTÉ MICROFILMÉE TELLE QUE NOUS L'AVONS REQUE

# THE UNIVERSITY OF ALBERTA THE FOUR-DAY WEEK IN EDUCATION

Ву

ALVIN K. J. SOLINSKI

#### A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, Alberta

SPRING, 1978

# UNIVERSITY OF ALBERTA FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "The Four-Day Week in Education" submitted by Alvin K. J. Solinski in partial fulfilment of the requirements for the degree of Master of Education.

James 14 Carall Supervisor

K. Quand...

Date December 15, 1977

The purpose of this study was to examine the R.J. Scott Elementary School proposal for the implementation of a four-day work week. Examination of the literature tended to show some historical trends towards a shortened week in business, industry, government and education.

These trends, which have as their present focus the four-day work week, were examined in order to produce a frame of reference which detailed the changes that could be expected from the implementation of a four-day work week in an educational setting. A primary source for this frame of reference was the experiment being conducted in Unity, Maine where the school district was utilizing a four-day work week for the students.

This Frame of Reference was then used in the development of an opinionnaire which was administered to the parents of children attending R.J. Scott/Elementary School. The opinionnaire was divided into six parts which were demographic data, perceived effects on family life and routines if the concept were implemented, the anticipated activities of children on their extra day off from school if the concept were implemented, the mechanics of implementation, overall opinion towards the concept, and an area for any comments. The opinionnaire was responded to by 130 families for a return rate of 89.6%. Data from these opinionnaires were analysed primarily in terms of frequency distribution, percentages, one-way analysis of variance, chi-square, the t test, and the Scheffe multiple comparison

of means.

The data indicated that the respondents were approximately evenly divided between those who were in favor of the concept and those who were not in favor of the concept, while a significant group were ambivalent. The primary reason for the resistance to the concept seems to have been the lack of activities away from home for the children if they were at school only four days per week.

The review of the literature and the resulting frame of reference indicated that the modified work week could be used as a motivating factor in the recruitment of teachers for hard-to-staff schools. It was shown it could also be used to cut costs in both rural and urban schools, primarily through reductions in the cost of transportation. The modified work week in schools could be used to make available a work-experience day in pre-vocational courses. The final area the four-day work week would affect would be family life and routines. Family activities could in some cases be conducted more easily on a work day if the student were not at school.

This study revealed that the concept of a four-day work week in education, though rejected at the R.J. Scott Elementary School, may be a viable alternative to current school patterns, and has distinct advantages in resolving some of the problems that the school system faces in a changing society.

#### ACKNOWLEDGEMENTS

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The work of Mrs. C. Prokop in programming the data for computer analysis is greatly appropriate.

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#### Chapter 1

#### INTRODUCTION

#### Statement of the Problem

increasingly gaining in favor in recent years. The implementation of this concept has been at least moderately successful in business and government, however, it has not received much attention in the field of education. An interest in examining the relevance of the concept to education was aroused by a recent case in Edmonton involving a public elementary school. The staff and administration of this school became interested in the modified work week, particularly as it might apply to their school. Because of this, they explained the proposal to the parents of the pupils attending the school and held a parent-teacher conference to discuss it fully. This was followed up by a mailed referendum. The parents were not in favor of its being implemented at that time so the matter was pursued no further.

Following this contact between the staff and parents an article was published in the city newspaper. This article aroused the investigator's interest and promoted this study.

It is the purpose of this study to examine the feasibility and implications of the adoption of a four-day school week at the elementary level. This will include a review of the history of formal education, and of the changing concept of a work week especially as it applies to education, and a survey of the response

of the parents and teachers of the R. J. Scott Elementary School, Edmonton, to the proposal. With a knowledge of the history of this concept and information from a survey of a group of informed parents, it should be possible to assess the value of a four-day school week, and the problems that must be faced if this change is to be contemplated.

#### Approach to the Problem

In this study the problem has been approached in three stages:

(1) the development of a frame of reference to identify key questions and issues; (2) the use of this frame of reference to prepare and conduct a survey into a particular case, that of the proposal by the teachers of R. J. Scott Elementary School to introduce a four-day school week, and (3) the presentation and analysis of data concerning the R. J. Scott Elementary School proposal, drawing from it conclusions about the viability of the concept.

#### Sub-problems

With reference to the case which is the main source of data for this study, a number of questions arose from the frame of reference; these may be considered to be the sub-problems under investigation:

- A) How did the R. J. Scott Elementary School propose the modified school week?
- B) What were the parents' preferences regarding administrative arrangements for introducing the four-day work week?
- C) What effects did the parents think the four-day work week would have on family routines and relationships?

- D) What was the outcome of the R. J. Scott Elementary School proposal?
- E) What relationships existed between the perceptions of parents and their support of the proposal?
- F) What relationships existed between demographic characteristics of parents and their support of the proposal?

## Significance of the Study

The modified work week has been well received in business and industry, but little thought has been given to its applicability in education. If the move towards a four-day work week is a persistent trend which might some day reach the schools, educators should be cognizant of its advantages and disadvantages, so that reason shall prevail in any decision concerning its adoption. It is imperative to recognize that any change in the school week will have implications for family life far beyond those brought about by changes in business and industry.

## Explanation of Terms

Down time. The daily time required by the employees of any organization to attain a level of working efficiency acceptable to the employer was considered down time. In some organizations down time was depent on the need to allow machines to operate for a specific period of time before they were operating efficiently. In other organizations, such as education, where the work is not dependent so much on machines but on personal expertise, the down time is a human variable related to the daily time required to organize the learning environment.

Hours of work. The number of hours per day or the number of hours per week each employee was expected to spend in activities for which he will receive remuneration from the employer are termed hours of work.

Modified work week. This was also referred to as the compressed work week. It was a result of an employee working the same number of hours, but fewer days per week. This was accomplished through increasing the number of hours worked per day. Thus the four-day work week is an example of a modified work week.

Nork week. This was also referred to as the forty hour week since the number of hours traditionally worked was thought to be forty. It referred to those days from Sunday to Saturday inclusive on which an employee was engaged in activities for which his employer would offer remuneration.

#### Assumptions

An assumption underlying this study is that it is possible, by means of a pencil and paper test, to ascertain the actual considered opinion of the respondents. Another is that the respondents had all the information necessary to correctly complete the survey. It is also assumed that the research instrument provided a valid and reliable measure of the variables involved in this study.

#### Delimitations

Specific borders were established within which this investigation was conducted.

1) The questionnaire survey was confined to the parents

2) The study involved only one set of interviews with the staff at R. J. Scott Elementary School.

#### Limitations

One limitation of this study is born of the fact that there is such a wealth of related literature to be examined. This abundance has made an exhaustive survey of original documents physically impossible; therefore, only library material and readily available selected sources have been dealt with in the review of literature, and in the construction of the frame of reference.

There are limitations arising from the research methodology which must be considered. Examples of these are as follows:

- 1) The opinionnaire was administered only once, and does not reflect any possible change in the respondents' opinions since the survey.
- 2) The responses were anonymous, therefore no follow-up study could be conducted, to ensure that all the respondents fully understood the questions.
- 3) The responses may not accurately indicate the opinion of the population at large; because the opinionnaire was voluntary and some segments of the population may have chosen not to respond.
- 4). The perceptions of the respondents are possibly subject to a variety of perceptual distortions that are common to survey research (Kapplan, 1964:131-134). Therefore, where an opinion is sought on the activities of another group, the response may not actually indicate the activities or intentions of that group.

- 5) The children attending R.J. Scott Elementary School were not surveyed, because of the obvious problems associated with administering an opinionnaire to young children.
- 6) The specific results of the survey are applicable only to the case which has been studied, that of R.J. Scott Elementary School.

#### Overview of the Study

Chapter 2 contains a review of the work patterns of the civilizations of ancient Greece and Rome through the European.

Renaissance and the Industrial Revolution to the present.

Following that is an overview of formal education attendance.

patterns also beginning with the ancients, and continuing through the beginning of the modern world to the twentieth century.

Chapter 3 examines the literature now available on the modified work week, surveys the experiences of business, industry, and government in this area, and establishes those factors which are pertinent to education.

Chapter 4 details the questions brought to bear on the R.J. Scott Elementary School proposal. In the examination of whether or not the plan is feasible, considerations are made of the legal and structural implications, and the traditional assumptions and expectations of the population at large. Regarding the effect of the changes, the areas questioned are costs, and the effect on students, employees and the school curriculum.

Chapter 5 explains the methodology of the survey, the research instrument, data gathering and analysis.

Chapter 6 details the circumstances leading to the

proposal to modify school hours at R. J. Scott Elementary School, Edmonton, and the outcomes of the proposal. Chapter 6 also contains the results and the analyses of the data of the R. J. Scott Elementary School survey.

Chapter 7 returns to a broader view of the modification of the school week, synthesizing what can be learned from the experiences of other organizations with the information yielded by the specific survey, in order to assess the value of the concept, and to reach at least a tentative conclusion about its future application.

Chapter 8 gives a summary of the study, and draws general conclusions about the potential advantages of a four-day school week. Some recommendations for further research are made.

#### Chapter 2

#### ESTABLISHING AN HISTORICAL PERSPECTIVE

In considering the modification of the current forty-hour work week, it should be remembered that even the concept of a "work-week" is, historically speaking, a very recent thing. Pre-historic man certainly had no division between hours of work and those of play; all his energies were devoted to life-maintenance tasks.

Only after a fairly sophisticated system of division of labor had been developed was there anything that could be referred to as "leisure time." For the purpose of clarifying the historical perspective, however, it is not necessary to examine early subsistence societies. Instead, there will follow an examination of specialized urban cultures of Ancient Greece and Rome, where there was a clear separation between labor and relaxation, through the Industrial Revolution to the 20th century.

#### WORK PATTERNS

#### Work Patterns in Ancient Greece and Rome

The Greeks of the city states solved their labor problems by keeping a large number of slaves who were treated, generally speaking, in an appalling manner. Robinson (1933:88) mentioned that "the score or so of slaves whom a well-to-do citizen kept" were generally under the supervision of the women of the household. The slaves were expected to do all the work generated by the up-keep of the residence, as well as that in the fields or mines.

Typical of the conditions of life are those of the slaves at the Attica silver mines who, according to Robinson (1933:88-89) worked underground in ten-hour shifts every day, until they died. The Roman practice was patterned on the Greek. As Mills (1927:318) indicated, Romans living in rural areas worked hard themselves, and saw no reason not to work their slaves harder. Slaves in the cities worked in houses and businesses; according to Mills (1927:349) the better educated sometimes were employed as teachers and doctors.

The life of the citizen of Greece and Rome was of course very different. In Sparta "every man had his share of provisions and business set out, and looked upon himself not so much born to serve his own ends as the interest of the country" (Mills, 1925:88-89). Spartans served as soldiers until the age of sixty, after which time they became civil servants and statesmen. In Athens, life was more relaxed and less rigidly structured. Usually the young men, after their formal education was completed when they were eighteen, served as guards at the temple of Aglaurus for a year (Davis, 1914:55). This was followed by two years military training, after which the youth was given a "deme" (township) by his father, and was expected to be a good citizen. The Romans, like the Athenians, had much leisure time. According to Duggan (1964:78) "when the wealthy and powerful nobles were not actually commanding an army or governing a province, they found it hard to get through the empty days." The average citizen, unlike the nobles, served in the army, and was busy from dawn to dusk, daily. For the common people, life was an unrelieved round of drudgery.

## Work Patterns in Feudal Europe

Europe. Because of the "interdependence" of the lord and the serf, vassals were usually required to spend three days a week working for the landlord (Rouling, 1968:42). Each serf was also expected to devote at least 40 days a year to military service (McClure et al 1938:125). Whatever land the serf held for his own use, he worked when he could; likely, this was a full-time task, allowing only a brief respite on Sundays or holidays. The serfs, were, however, more fortunate than slaves, who could be bought or sold as the absolute property of the lord. Serfs or peasants were bound to the land, and could be bought or sold only with the land they held.

# Work Patterns During the Industrial Revolution

The most significant change in labor patterns came with the Industrial and Agrarian Revolutions of the late eighteenth and early nineteenth centuries. Until this time, most working people were employed in tasks related directly to agriculture, and most non-working people were large landowners. However, with changes in both industry and agriculture, larger and larger proportions of the working population were employed in manufacturing, and removed from the countryside into the towns. According to the division of labor principle on which factories operated, each worker was assigned a single, simple task which he repeated throughout the day (Perret, 1935:211). Each person in the embryonic assembly line worked at the same speed, as each was dependent on those who preceded him. The industrial worker torked the same dismal hours as his agricultural, feudal antecedent. Perret (1935:212) indicated that the

normal work day was from ten to eighteen hours. Women and children generally worked the same hours and in the same conditions as menusually for half pay. The only leisure time was Sunday, which truly would be a day of rest. Perret (1935:218) cited the Factories Regulation Act of 1819, which established the minimum age for factory workers at nine, and the maximum work-day at twelve hours from Monday to Friday, and nine on Saturday. This (maximum) 69-hour work week was adjusted by the Factory and Workshop Act of 1878, which limited the working day for women to ten hours.

# Work Patterns in the Twentieth Century

Continuing improvements in technology since the Industrial Revolution, and pressure from (first) charitable organizations and (later) workers groups have combined to allow for the shortening of the work week. Henry Ford in the late 1920's imposed a five-day work week for all of his employees, thus allowing them two days a week for private use. The Walsh-Healy Act of 1936 in the United States limited the national work week to the current norm, five days and forty hours per week (Howard Coughlin, 1966:46). With the increased amount of free time for workers, arose the necessity of compensating activities to fill their free time. This was one major cause in the rapid rise in attendance at spectator sports. Other " recreational pursuits such as clubs and family visiting became popular with an increasing number of people, who now had free The five-day work week was temporarily disturbed by World weekends. War II, when, due to a sudden shortage of labor, many people worked more than five days a week. However, after the war, with the return of the soldiers and the decreased need for war materials,

the six-day work week was no longer necessary. During the 1950's and 60's, the space race between the U.S.A. and the U.S.S.R. was responsible for further significant developments in technology. The new, post-war techniques have been applicable to civilian as well as military technology, resulting in more and more work being done by machines, faster and more economically than by manual labor. Thus, although the demand for goods has increased since the war, the ability to produce them has increased at a much faster rate. This has allowed for further modifications of the five-day, forty-hour work neek; employers could reduce the number of days worked, the number of hours worked, or both, to allow workers more time to enjoy the products of their labor.

#### FORMAL EDUCATION

# Formal Education in Ancient Greece and Rome

The changes in civilization, whose manifestations in a population's work patterns we have surveyed above, have also caused changes in the education of children. The Athenians placed a premium upon the education of their (male) youth, but considered that the process should not stop at adulthood. Male children lived at home until they were six, at which time they were raised and educated until the age of fourteen, by the state. Their education was both theoretical and practical; thus they studied rhetoric and arithmetic, music, wrestling, dancing, oratory, and skills useful to their future as soldiers, such as living off the land (Robinson, 1933:139-140). At the age of fourteen boys from poor families would return home to help in the family business. The children of

more affluent homes were sent to professional teachers called Sophists or wisdom-mongers (Robinson, 1933:142), with whom they studied until the age of eighteen, at which time they began their year's compulsory military service. The Spartan method of education was, like their work habits, very different from the Athenian. The boys of Sparta entered a state-controlled academy at the age of seven, and stayed all day and every day. Their education until they were old enough for military training was addressed to the task of preparing them to be perfect soldiers (Mills, 1925:84). To this end they endured heat, cold, and deprivation; in Philips' words (1938:56) "the whole course of their education was one continued exercise of a ready and perfect obedience."

According to the Roman custom, there were two educational options; a boy could be educated at home by his father or a slave (usually Greek), who taught him to read, write, do arithmetic and suffer hardships, or he could be sent to a school. The Roman education system operated on a three-tiered structure: the Elementary School was mandatory preparation for the Grammar School, which was in turn the mandatory basis for entrance into the School of Rhetoric. Each was designed with a view to making the Roman boy a useful citizen (Mills, 1927:323-330). The educative process in these schools was continuous; the only respite was holidays, which were devoted to worship of the gods.

#### Formal Education in Feudal Europe

In Feudal Europe education was "designed to fit the child for his appropriate station in life, were he nobleman, cleric or artisan," (Rowling, 1968:136). Thus the education for those who

fought and governed, the nobles, was different than that for those who entered religious orders, or who worked with their hands. The education of a nobleman, his training to be a knight, began at the age of seven when he became a page, servant to a squire. In this position he learned to care for the weapons of a squire, as well as to hunt and to hawk, and to play chess and backgammon. At the age of fourteen the page was monoted to the rank of squire and was taught to fight with a knight's weapons. This training was a daily event, and continued until the boy reached manhood and was knighted. Boys who entered upon a religious life were taught to read and write Latin and to do arithmetic with Roman numerals or an abacus. Their main study, however, was moral; as monks they were expected to strive to drive Satan from their souls (Tappan, 1911:276). Education in the priesthood, which was free, was conducted in the cathedral schools run by monks (Tappan, 1911:278). Manual workers or artisans usually were not educated, except to be taught their duties in religious services. An artisan learned his trade during an apprenticeship, or from his father (Mills, 1935:252).

#### Formal Education in the Nineteenth Century

During and after the Industrial Revolution, as in Feudal times, most of the population was uneducated. Gradual movement towards universal education began early in the nineteenth century, but the goal was very distant of achievement. The Factory Act of 1833 stipulated that children attend school for two hours per day, but since it was, at that time, still possible for a child to work up to forty-eight hours per week, attendance may have been very irregular. However, as child labor laws became more stringent,

attempts to educate all children grew more successful, until today we have mandatory and free education for approximately ten years of a child's life.

# Formal Education in the Twentieth Century

In the modern world, people of all trades and professions have a greatly increased amount of leisure time. Thus the education of children has turned to not just academic education, but also education in skills and vocations, and education for leisure. The demand, and the opportunities, for life-long education are growing. And as Worth (1972) has indicated, teachers may be expected to accept, possibly to seek, modification of their work week. Thus it is now relevant that we address ourselves to the problems and benefits of adjusting to a four-day work week in the education system.

#### SUMMARY

From the evidence collected in this chapter, it is apparent that the established standards of labor and education are matters of convenience, not of necessity. The school week, like the work week, is flexible, has changed, and will continue to change to meet the demands of a changing society.

#### Chapter 3

#### REVIEW OF RELATED LITERATURE

#### Introduction

appears that adjustments in the work week are practically inevitable. No one can say exactly how those changes will occur, or what they will be. However, there are definite trends towards shortening the work week. Current literature about the changing work week refers to it as the compressed or modified work week. John Schreiner (1972) writing in the Financial Post has defined "compressed work week" as "the term used to describe arrangements where the hours traditionally worked in five days are rearranged over fewer days. The two common examples are four 10-hour days or three 12-hour days each week."

Most of those writing on this subject, accept this definition; for example Wheeler, Gurman and Tarnowieski (1972), referred to employees fulfilling "the work commitment in fewer than the standard five full days."

There is another type of modified work week which is more common in Europe than in America, namely, "flextime." Gordon and Elbing (1971) attributed this system to a German aerospace firm, Messerschmidt-Bolkow-Blohm. This company divided the work day into "fixed time," when an employee's presence was mandatory, and "flexible time" when it was optional. The primary concern was that the employee's total hours, counting those during fixed time and those during optional time, equaled the requisite number of hours

per month. This system was called "Gleitende Arbeitszert (gliding working hours)." According to Gordon and Elbing (1971:67), it was so well received that "it has started a trend throughout Europe."

These two basic types of modified work weeks are found in many diverse organizations. Walter A. Kleinschrod (1971) writing in Administrative Management mentioned that in service industries, hospitals, and police forces the modified work week is under experiment. Riva Poor (1970) in 4 days, 40 hours (Appendix A) detailed the experiments of 27 firms, including businesses, industries, government agencies and public service agencies with the four-day work week. All sources specified three major aspects of the modification of the work week. These were the implementation of a modified work week including the source and purpose of the change, the advantages and disadvantages of the modified work week and the outcomes of experiments with the modified work week. In this chapter, therefore, the review of literature will consider modification of the work week in business and industry, in public o service and government agencies and in education, with particular emphases placed on the method of implementation, the advantages and disadvantages, and the outcomes. Where necessary, distinctions will be made between the different types of modified work weeks.

#### IMPLEMENTATION

Howard Coughlin (1966:46) indicated that when the Walsh-Healy Act in 1936 established the 40-hour week as a standard "it was hailed (and in some corners deplored...) as a milestone along the evolutionary road of workers" benefits. A Time article of

March 1, 1971 stated that "in this century American workers have collected two-thirds of the gains from increased productivity in higher pay and one-third in more leisure time." Thus it can be seen that although the primary concern of the workers have been monetary returns, increased leisure time has accounted for a significant portion of his remuneration.

The Walsh-Healey Act in 1936 was of course drafted partially in response to the Great Depression which, at that time, had choked the country for more than six years. This reduction in the number of hours worked per week reflected an attempt to increase employment while allowing companies to function for 24 hours a day. According to Richard F. Janssen (1962), this seems also to have been the reason why W. K. Kellogg reduced his employees' hours from eight to six in December, 1930. Kellogg, after reducing his employees' work day promptly hired a fourth shift and, in his own words, gave "a paycheck to the breadwinners of 300 more families in Battle Creek." Kellogg's method of implementation was arbitrary, and depended on no impetus from the workers. However, during the Great Depression, when unemployment was approximately twenty-five percent, this did not pose any problem. Of great significance is the fact, as Janssen (1962:18) indicated, that Kellogg did not reduce wages at all; this certainly had a positive effect on employee morale.

In 1940, a few years after the Kellogg experiment started, Gulf Oil also implemented a shortened work week. In 1972 the four-day work week was advocated by the employees of the Imperial Oil Refinery in Winnipeg, Manitoba. They were aware that the modified work week had been used at the Gulf Oil Terminal since 1940, and

they requested the implementation of the same system, primarily because of the benefits of having three days off every week. This procedure seems to be an exception to the general rule, that changes in working hours are initiated by management (Metsaslu and Harrison, 1971). (See also Appendix A, page 5). This trend was noted also by Wheeler, Gurman, and Tarnowieski (1972:12-13) who indicated that "the four-day work week is a management innovation." In their much larger survey of 138 companies using a modified work week it is shown that the initial recommendation has come from management in 127 cases, from employees in eight cases and from the union in three cases. Heron (1971) indicated also that as Director of Training and Development Branch he was responsible for the modified work week in the Edmonton City Hall. He learned of the concept from some psychiatrists in Sweden who were responding to mental illnesses in patients who lacked unstructured leisure time. Heron introduced a seventeen week experiment which utilized a three day and a four-day work week which led to a permanent arrangement of the modified work week in this Department.

Reasons for changing the work week seem also to be employer-centered. Wheeler et al. (1972:12) indicated that the primary reasons for the implementation of a modified work week in the companies they studied were "the desire to increase production; wonter morale, profits; desire to decrease costs and overtime requirements; and desire to reduce absenteeism and employee turnover. Also of prominent concern to management are such considerations as better utilization of equipment (including less frequent starting and stopping of machines);

increased employee productivity, and improved customer service, especially in the case of service companies and retail outlets."

Metsaslu and Harrison (1971:6) also claimed these reasons, but included: "to improve social life; to provide more rest to employees and incentive to recruiting staff."

It is interesting to note that the primary reason in almost all cases is to improve efficiency and productivity. This motivation was clear in the cases of Kyanize Paints Inc., and United Insurance (Plant Operating Management) August, 1969:42-43).

Many authorities emphasize that the actual implementation of a modified work week should follow a concrete plan. For instance, Burrow and Leslie (1972:33-42) claimed that the planned implementation:

- 1) must be mutually beneficial ...
- 2) follow a thorough communication plan...
- 3) consider the timing of the change...
- 4) follow up completely on the results of the trial project...
- 5) consider the nature of the work ...
- 6) consider employees' personal problems...

  Their details conform to many planned implementations of the concept of a modified work week, such as the experiment at the City Hall in Edmonton (Heron, 1972:2).

It has been shown that the primary reason for the implementation of a modified work week was increased efficiency and production. This concept was underscored by Faught, the nationally recognized economist. According to Field, (1969:25-27), the "Faught plan" consisted of two three-day weeks for the nation's

work force. The plan envisaged everyone working three days out of seven in order to allow all organizations to operate six days a week. Faught felt that this pattern would reduce the total amount of money needed by an industry to "tool-up" a company, by allowing it to operate for 60 hours a week instead of 40; this would eliminate the need for more companies. This would also increase efficiency and productivity, primarily by increasing employee morale.

Faught, also saw another effect of his "split-week living."

This was the fact that having the same number of employees split into two work forces working on different days would reduce the strain on public transportation and utilities. Field (1969:26) stated that "the solution...isn't more mass transit but fewer people--'which the three day week would provide'." This idea is echoed by Kleinschrod (1971:18-20), who related the experience of the Port of New York Authority which obtained agreement from 69 firms and government agencies to stagger the arrival times of their employees in order to reduce the congestion at peak hours on the transit system.

Reader's Digest offices in Pleasantville, N. Y., a four-day work week was adopted from May through September--"a good time for long weekends," reasoned Chairman DeWitt Wallace.

The Employee Relations Bulletin Report No. 1202 (July 22, 1970) detailed the cases of some workers, primarily women, who wanted to work five hours per day. The primary reason for this arrangement was to allow the women more time at home with their

families. This desire has been reported also by Janssen (1962), referring to women working at the Kellogg Company Plant in Battle Creek, Michigan.

Another aspect of the implementation of a modified work week concerns the position of most unions. I. W. Abel, President of the United Steelworkers of America, was quoted in an article by Damon Stetson (1969) as proposing a drive to achieve a four-day work week without a reduction in pay. This idea was also presented by the Oil, Chemical and Atomic Workers International Union at their Council Conference (1972). Both of their proposals consisted, however, of a reduction in the work week from five eight-hour days to four eight-hour days—a proposal which was not looked upon favorably by employers and management.

The final aspect of the implementation of a modified work week, as detailed by Downing (1972:19), concerns the legality of introducing a modified work week. Downing indicated that union opposition to the implementation of a modified work week, when the employees in one situation are in favor of the implementation, can be dealt with. One way is by "obtaining from the National Labor Relations Board the decertification of the union. This, of course, is only one alternative and obviously would be met with stiff opposition.

Municipal by-laws do not usually make judgments in areas of hours of work. However, "all is takes is a telephone call to City Hall, to be on the safe side of the law," (Downing, 1972:19). Provincial Labor Laws vary across the country. The prime concern is with their rulings on mandatory overtime pay on a daily or

weekly basis. However, every labor code allows for exceptions.

Many provinces, Downing (1972:19) stated, have laws that specify that

"in the event an employer and his employees agree in writing to work

a four-day week, the Minister of Labor may authorize the employee to

work four ten-hour days per week without the payment of overtime."

In conclusion, it seems that the concept of the modified work week has usually been initiated by the employer or manager, primarily for the management-centered reasons of increased productivity and efficiency. The employees who have accepted the modified work week also see some advantages in it, especially the extra leisure time. Also, most unions would prefer to see the four-day week attained without the necessity of lengthening the working day. There are legal questions involved in the implementation of a modified work week. But because of the diversity of labor laws between provinces, municipalities and cities, each case is unique, and would therefore have to be considered on its merits.

# ADVANTAGES AND DISADVANTAGES

One of the most commonly cited reasons for the implementation of a modified work week is the increase in productivity. Writers such as Wheeler, Gurman, Tarnowieski (1972:14) indicated that this is one of the principal advantages gained from conversion to the modified work week. Some companies, such as the United Insurance Co. of America, have implemented a modified work week primarily for this reason (Personnel Quarterly, February, 1970).

This increase in productivity is usually attributed to one of two basic factors. The increase in production could be the

result of improved employee morale, because of the extra day off per week with no decrease in pay. This is documented by Metsaslu and Harrison (1971:Appendix A, page 10) who indicated that an increase in employee morale has been mentioned by employers, more often than any other advantage. This is also borne out by Wheeler, Gurman, and Tarnowieski (1972:14) who showed that improved morale was mentioned by employers, more often than any other advantage.

The other factor which could lead to an increase in productivity is greater production efficiency. This aspect of work is composed of many factors, almost all of which are affected by the implementation of a modified work week. Earle (1971) stated that employee efficiency increases due to the additional "quiet" hours of work when the plant or business is closed to the public. Wheeler et al. (1972:14) stated that there would be "better equipment utilization," "greater production scheduling flexibility," "decreased employee turnover," "fewer start-ups and shutdowns," "improved employee discipline," and a "better competitive posture," and that all these affect production efficiency. These advantages are mentioned almost universally in literature concerning productivity.

All of these factors seem to work in the case of Edmonton City Hall, outlined by Heron (1971:15), where the implementation of a three-day work week, for some, and four-day work week, for others, resulted in greater productivity. Heron claims that "for the first time in the existence of the Training Branch the staff literally ran completely out of work."

Another advantage which is almost universally acknowledged

is the reduction in employee absenteeism. This is one of the prime reasons why the Chrysler Corporation and the United Steel-workers Union agreed to look into the possibilities of a four-day week. An article in the New York Times, January 20, 1971, stated that "up to 20 percent of the workers fail to report to work in many plants on Mondays and Fridays." It is for this reason that the president of one of the "big three" car manufacturers said that "he 'feels sorry for the guy who buys a car built on a Monday'." Employee absenteeism is a major problem in some areas, and one solution is to introduce three-day weekends every week of the year.

Another common advantage is the increased recruiting opportunities afforded to organizations utilizing a modified work week.
Wheeler (1970:142) termed this a "short-term gain" but does acknowledge its effects. He assumed that it was a short-term gain because he presumed that, very shortly, almost all organizations will have adopted a modified work week, and thus the originality will be lost. The Kyanize Paints, Inc. case, outlined in Plant Operating

Management (1969:43) indicated that with a five-day week the manager had trouble finding help even in the unskilled categories. After the implementation of the modified work week the manager "had more applicants than he has been able to take care of."

Another advantage is that of increased customer service.

Poor (1970) detailed the case of a New Jersey bank which stayed open longer hours per day and one extra day per week by using "split staffing." The original staff was divided into two groups.

Each group worked three days a week and twelve hours a day. This allowed the bank to stay open longer per day because the staff were

there longer and the bank was able to stay open one day more per week because one shift worked Thursday, Friday and Saturday.

The last generally accepted advantage is cited by Coughlin (1966:47) and also by Kleinschrod (1971:18-19); it is the reduction in the use of public utilities, particularly mass transit, at peak times. Kleinschrod detailed the case of Manhattan where staggered scheduling was introduced to reduce the "home-bound transit crush by ... a 16 percent congestion reduction." Coughlin stated that conversion "will help break the increasing bottleneck in the field of services."

The next three aspects of modification of the work week were mentioned in almost all the literature involved. However, some authors claimed these as advantages, and some as disadvantages. These aspects are, opportunities to engage in a second job (which Kleinschrod (1971:20) termed "moonlighting"); opportunities for overtime; and increased time away from work.

Regarding moonlighting, Kleinschrod (1971:20) stated that of those people on a modified work week "some do grumble that longer workdays interfere with moonlighting." However, Stanton (1969) noted some opposite views: "free-lance earnings sometimes exceed... weekly salary," "I wouldn't work here...if it weren't for the extra day off." Thus some people see the extra day off as an opportunity to moonlight while some people see the longer day as inhibiting to moonlighting.

Some firms see the change to a modified work week as a way to increase the number of hours worked per day in order to decrease overtime. Wheeler (1970:143) indicated that "conversion has meant

Damon Stetson (1969) quoted I. W. Abel, as indicating that he would like to see labor achieve a four-day work week without having to increase the length of the working day. This then would not affect overtime partially employer wanted to extend the ours worked per day, in which case he would necessarily have to pay overtime.

The final appert which is seen as both advantageous and disadvantageous is the increased leisure time for workers.

Marc Horton (1971:55) quoted a number of employees at the City Hall, Edmonton, who are employed on a three-day and a four-day work week. The comments are generally enthusiastic: "it's great," "I was enjoying it," "it's terrific," and "it's the best of both worlds to a working mother." However, Stanton (1969) quoted some workers employed on a modified work week as saying: "I think men get restless when they're idle," and "we're just home and quite bored."

There are, also, a number of factors involved in the implementation of a modified work week which are acknowledged to be disadvantageous. Wheeler, Gurman and Tarnowieski (1972:15) listed all of the disadvantages which they encountered in their survey. These are, by order of mention:

More involved scheduling
Problems with working mothers
Fatigue
Employees' dislike of working overtime
Resentment from employees not on four-day week
Inadequate supervision
Absenteeism
Cost increases
Shipping problems
Personnel administration difficulties
Costs on fifth day
More difficulties in management job
Employees resistance to change
Customer confusion about new business hours

### Tardiness

Metsaslu and Harrison (1971:10) also included:

- men not in tip-top shape after so many days off.
- some employees find they spend more because of more time off.

Wheeler (1970:146) also stated that for a company operating 24 hours a day and seven days a week the shortened schedule may make it necessary "to add staff."

In conclusion, it seems that there are numerous advantages and disadvantages to be gained from implementing a modified work week. Also, what is an advantage for one organization could be a disadvantage for another. It is necessary, therefore, to consider the particular objects and requirements of each employer and each occupational group.

# UNITY, MAINE EXPERIMENT

From the previous examination of the literature relevant to the modification of the work week, it should be possible to isolate those factors which are especially pertinent to the system of education. In this process of refining the mass of heterogeneous material, it will be useful to consider the literature generated by the Unity, Maine experiment, where a four-day work week has been introduced in an educational setting. This case established a precedent, and thus provides a pattern against which to measure further attempts to modify the school week.

The Unity, Maine School Administrative District No. 3 adopted a modified school week in 1970. There were two basic reasons for the implementation of a modified school week in this

School District. Both were management-centered; the main thrust towards the implementation seems to have come from Albert J. Brewster, Jr., Superintendent of Schools and from Dr. Horace P. Maxcy, and David Day of the Maine Office of Planning, Evaluation and Research. The first reason was to fulfill the requirements of an ESEA Title III grant for a project entitled "Individualized Learning and Responsibility Development" (Brewster, 1972:1). There was inadequate time for the extensive training program for the teachers, which was needed to accomplish the aims of this project. The second reason was in order to absorb a 10% budget cut. The School District was informed of this cut of 10%, and realized that if action were not taken program budgets would simply have to be reduced by 10% in every area.

For these reasons, a modified work week was proposed to the staff. The modified week which consisted of four school days, each extended by 35 minutes, for the students. According to Brewster and Day (1971), the staff utilized the fifth day voluntarily to "learn more about ways of meeting the individual needs of students, and to plan and develop learning activities and programs that will further individualize or in some other way improve their classrooms."

The State School Board first granted approval to implement the four-day week on an experimental basis, in 1970. This would be followed by extensive surveys to see if the educational needs of the community were being met. The survey and teacher observations focused on certain anticipated results. It was found that increased fatigue, which had been expected as a result of extending the school day, was negligible. Brewster (1972:2) stated that "there was no

appreciable increase in fatigue of youngsters as a result of a thirty-five-minute-longer school day."

The budget cuts of five percent in 1970-71 and ten percent in 1971-72 indicated that the monetary goal was being met. Brewster (1972:3) also indicated that in the next year "the budget this year was approved intact by a vote of almost three to one."

The final concern dealt with the educational achievement of students on the four-day school week. Drummond (1972) indicated that "the students in the district scored higher in 1972 than in 1971." "The median increase in terms of grade equivalent scores was decimal four." Finally, Maxcy (1971) indicated that a significant number of parents (57%) and patrons (29%) felt that the schools were improving. Also, "students were positive about their school experience." This indicated that parents and students both felt that the new work week was effective in meeting its objectives.

In conclusion, this educational organization has implemented a modified work week in order to reduce expenditures and also to improve service to their clients through increasingly individualized instruction. The results indicate that they have met both of these aims and that their secondary clients (parents) are generally satisfied with the results.

### OUTCOMES

Many instances of the implementation of a modified work
week examined in the early parts of this chapter were seen to be
very often on an experimental basis. Those companies whose change
to a modified work week was considered permanent still have the

option of reverting to their old systems. It is necessary therefore to investigage the results, conclusions and recommendations of these first attempts at utilizing a modified work week, in order more fully to assess the value of the concept.

Most of the organizations utilizing a modified work week have recommended that the modified work week become permanent. The report from Heron (1972:20) typified this, as his first two recommendations were: "(1) That the Training and Development Branch discontinue the extended hours on an experimental basis: (2) That the Training and Development Branch go onto the extended work week as a permanent basis." Wheeler, Gurman, and Tarnowieski (1972:2) also concurred in this; their figures show that only six companies in their study have discontinued a four-day work week, whereas forty-three still have the four-day week in operation.

One of the major results seemed to be the increase in employee morale. Metsaslu and Harrison (1971) indicated that thirteen companies out of seventeen found employee morale to be improved; this compared with three who found no change and only one where morale deteriorated, because of "less take-home pay." This trend is reflected in the United Insurance Co. of America case, where "employee morale has improved noticeably."

one index of employee morale is production and possibly efficiency. Wheeler, Gurman, Tarnowieski (1972:5) indicated that in the companies they polled "production increased in sixty-two percent of the one hundred forty-three four-day companies" and "efficiency increased in sixty-six percent of the four-day companies." Reductions in both areas were found to be three percent.

Metsaslu and Harrison (1971:7) also indicated improvement in the area of personnel management. In most cases absenteeism and staff turnover decreased due to the implementation of the modified work week. As Wheeler (1970) noted, this may be a short-term gain but only further and longer experiments will confirm whether or not the advantages of the modified work week continue over the longer term.

#### CONCLUSION

In this presentation of the literature on the modified work week, certain concerns appear to have arisen persistently. For instance, many organizations have found that there are legal and structural barriers to be overcome, and the affects of the change on costs and services have to be considered. These elements can be organized into interrelated groups, and depicted schematically as the components of a model. This model can then provide the basis for a frame of reference within which to examine the implementation of the four-day work week in an educational situation. The composition of the frame of reference and its applicability to education are discussed in Chapter 4.

Chapter 4

FRAME OF REFERENCE

### Introduction

The conventional five-day, forty-hour work week has now held sway long enough to have become a thoroughly estalished norm. However, as explained in Chapter 2, this custom is of recent origin, and is in actuality just another step in a continuously changing series of work patterns. Recently, much study has been done on modifications of this work week, and businesses and governments all over the world have experimented with various, and often more flexible systems. Chapter 3 has examined literature relevant to the operation of a modified work week in business, industry, and government. This chapter will seek to establish the limits within which the concept can be applied to education. This point of view will of necessity be concerned with administrative problems, for this is one common ground between education and business. However, because of the special nature of education, factors must also be considered which are not especially relevant to business, namely the effects of a modified school week on the child, the family and the community. From business and governmental precedents for the modified work week, it should be possible to delineate the various factors relevant to a modified school week.

In order to be able to construct a Frame of Reference it is necessary to look at two different aspects of the concept of a four-day work week. These two aspects are the feasibility and the

anticipated effects of the implementation of this concept. Most of the factors relevant to the feasibility of the proposal can be inferred from the experiments of organizations which have adopted a modified work week. Some of the effects of its implementation can also be assumed from the literature; others can be determined only by a survey of public opinion. However, the review of literature will provide a frame of reference to guide in the assembling of a research instrument with which to measure public opinion.

Modification of the work week has been a major concern in business for several years, and as is evident from the information in Chapter 3, much literature now exists on the subject. Of the areas of interest to business, six are pertinent to education: 1) legal implications, 2) structural implications, 3) traditions, 4) effect on employees, 5) effect on clients, and 6) cost. Within the category of cost can be isolated four aspects which are applicable to education: salaries, plant (school) operation, transportation, and facilities and equipment. One aspect of the administration of this concept in education which cannot be anticipated from a business model is that which deals with the effect on the curriculum of the school. Generally speaking, however, these factors provide the frame of reference within which the problem will be examined, and on which the practical tests, the opinionnaire presented to the parents involved in the R. J. Scott Elementary School proposal, will be based. These elements are arranged diagrammatically in Figure 1.

Extra Curriculum Offerings Effect on Curriculum Basic Subjects Anticipated Effects Effect on . Family Life Att1tude Effect on Employees FRAME OF REFERENCE FOR MODIFIED SCHOOL WORK WEEK Services Offered Effect on Clients Achievement Modified School Work Week 0 Facilities and Equipment Rental Cost | Plant Operation Salaries Traditions Down Time Implications Feasibility Structural Number Hours o. 3 Leaves Implications Legal Distribution Hours

Figure 1

#### FEASIBILITY

## Legal Implications

It seems that it is reasonable to suggest alterations of the school week. In view of this, it is advisable that school administrators examine the legal barriers that may now exist, and the changes that would have to be made in the administrative structure of schools.

The significant laws are The Alberta Labour Act and The School Act, both of which restrict the hours per day and days per week that a teacher works. The School Act also specifies the number of days worked per year. The questions suggested are: (1) what are these restrictions; (2) would the conversion to a four-day work week contravene these, restrictions, and if so, how, and; (3) what must be done in order both to obey the law and to effect the desired changes. Closely allied to this is the problem of leaves; the question that arises is (4) whether or not leaves and holidays would be pro-rated on an hourly basis or directly substituted from the old system to the new one.

The first consideration is the Revised Statutes of Alberta, Chapter 196, The Alberta Labour Act, Section 13.1 and 13.2 which states that employees shall not be required to work for more than nine hours a day. However, by an Order in Council of the Provincial Legislature (1776/72) the Alberta government has empowered the Department of Manpower and Labour, through its Board of Industrial Relations, "to make orders confining weekly hours of work by extending daily hours of work" (9:154). This the Department can do upon

receipt of a written request from a majority of the employees, and the employer, to change working hours; the Department can then grant an exemption to the Alberta Labour Act, Section 16.1. In the education system, the teachers are the employees and the School Board is the employer. Those most directly affected are, of course, the students. However, especially in elementary and junior high schools the students' interests would be represented by the parents, who are among the voting population of the area. It is, therefore, important that the parents be involved in the decision to change the school week.

The Provincial government has opened up an avenue by which most groups in society can change their hours of work. However, in education, not only the Labour Act but also the School Act governs the hours and conditions of work. The School Board, and school administrators, would have to be cognizant of those clauses in the School Act which have a bearing on the implementation of a four-day school week. The Alberta School Act, Section 74, paragraph 2, clauses (a) and (b) states that: "A Board may not require a teacher to instruct pupils: (a) for more than 330 minutes a day, or (b) for less than 190 or more than 200 days in a school year."

If the four-day school week were implemented, and if the amount of instructional time did not change, teachers would be required to work for more than 330 minutes a day, and less than 190 days in the school year. This, then, is one of the major legal barriers to the adoption of this concept. However, the School Act.

also contains provisions for waiving these requirements. Section 74, paragraph 2 of the School Act begins with the qualifing phrase, "Where a teacher agrees." Furthermore, Section 74, paragraph 3 states, clause (a), that a contract between the School Board and a teacher shall be in accordance with the terms and conditions of the Alberta Labour Act, and, clause (b), that a contract shall be in accordance with Sections 74-81 of the Alberta School Act, which detail procedures for hiring and releasing a teacher. This paragraph concludes with the phrase "any contract excluding or purporting to exclude the provisions of clauses (a) and (b) is void." That is, because a teacher's terms of employment are referable, under the Alberta School Act, to the Alberta Labour Act, and because the Labour Act contains provisions for the implementation of a four-day work week, it should be possible to modify the school week, to four days. If the teachers agree to the changes in working hours that would be necessitated by a four-day school week, and if application for change is made to the Board of Industrial Relations by the teachers and the School Board, the modified school week could, legally, be adopted. It is only necessary that each teacher in the school be willing to accept the adjustment of his hours.

The Alberta School Act, Section 139, paragraph 1, clause (b), (c) and (d), states that:

### A Board shall:

- (b) specify the number and days of school operation
- (c) specify the length of the school day and the number of minutes of school operation, and
- (d) specify the number of minutes of classroom instruction and the number and length of recesses.

However, these matters are not decided by a Board fiat. These aspects are considered to be part of working conditions, and as

and the employees. And as could easily be demonstrated by a review of contract negotiations, this has been the case historically. Thus, since these matters are determined by employer-employee negotiations, and since the employee and employer can apply jointly to the Board of Industrial Relations to change their statutory working conditions, there are no legal impediments to the implementation of a four-day school week, if all parties are agreeable.

Included with the employer-employee application to the Board of Industrial Relations there must be an outline of a re-structured work week which has the approval of both parties. Since the school day is divided into class periods, the change from a five to a four-day week would be affected in one of two ways. The re-structured school week could consist of longer days with more class periods, in which case the lost periods from the fifth day would be spread evenly over the remaining days. Or, the existing number of periods per day could be maintained, and each could be lengthened to fill the longer school day. The method that is to be adopted, and the times of beginning and ending the longer school day, would have to be outlined in the joint application to the Board of Industrial Relations.

Number of hours. Obviously, the first concern when the work week is modified to four days is to ensure that the total number of hours worked does not change. In most industries whose work week is similar to a school week, the change is effected by dividing the total hours-per-week by four. When applied to schools, the longer days may contain more, or longer, class periods. When the

four-day week was implemented in Unity, Maine, it was decided that only half of the class time from the fifth day would be spread over the remaining four days. The justification for this was that the increase in individualization, as well as increased teacher efficiency, would more than compensate for a minor loss in structional time. It must also be remembered that some time is spent daily in assemblies and dismissals. On a four-day school week, the total time spent on these occurances will decrease by 20% the amount of time currently spent during a five-day week. Thus, the addition on to the four days of the time lost on the fifth day will result in an acutal increase in instructional time. Because the time formerly used for assembling and dismissing students will not be used for work, some reduction in production time could be allowed during a four-day school week, without actual loss of instruction time. In Unity, the remaining day was used by the teachers for inservice training.

Leaves due to illness and statutory holidays. The change to a four-day week would create many new situations for the administration to handle, however, if these changes were anticipated and prepared for, they would not present undue problems. For instance, provision for leaves due to illness or statutory holidays would be different. Most businesses which use a modified work week consider every sick day from a four-day week to be equal to one and one-fifth sick days from a five-day week. Thus it is not difficult to calculate pay deductions for sick days, or accumulated sick time

that is used during extended illnesses.

## Structural Implications

The second aspect of the feasibility of the proposed change is structural implications. Problems could arise if only one school of a total system were on a four-day work week. The question then is what accommodations would have to be made in order to allow the school using a four-day work week to function within a system generally on a five-day work week. These accommodations would include such things as deliveries to the school on working days.

Distribution of hours. The change to a four-day week is sometimes brought about at the insistence of the employees, who feel that the extra day off per week justifies their working extralong days, during hours for which they normally would receive overtime. Thus they willingly adapted five days' production time into four days. And employers, because there has been no decrease in production time, have not suggested decreasing wages. There are also, further benefits which accrue to the employer, and which will be discussed later.

Day chosen as extra day off. The problem of a long weekend must also be anticipated. Usually in industry, if a statutory holiday falls on a working day, that day is taken off; if it falls on a day that is already a day off, an extra day off is determined at some time that is suitable to both employer and employee.

When the four-day school week was adopted in Unity, it was decided that there would be no school Friday (although the staff worked, or participated in on-the-job training programs, for a half

day on Friday). Since most long weekends are created by a Monday holiday, this was not changed by the four-day week. The decision not to have school on Friday was, no doubt, based partly on the findings of many industries, notably automobile manufacturing, and confirmed by the experience of educators and administrators, that Fridays show higher rates of employee absenteeism and poor quality work.

In adjusting the school week to four days, there are reasons for taking off Monday, Wednesday or Friday. The administrators and School Board of Unity decided to close on Fridays, for reasons that have been discussed. Monday would, for the same reasons, be a suitable day off; being next to the weekend, it also scores fairly high in terms of employee absenteeism. However, this would create extra problems in the case of statutory holidays, which are often on Mondays. Wednesday closing was recommended in order to create two short (two-day) work weeks within each calendar week. This could, conceivably, alleviate the problems currently associated with the first and last days of a five-day work week. Generally, however, opinion favors a Monday or Friday closing; because of the problems created by a statutory holiday falling on a Monday, Friday seems the best day for schools to close.

#### Traditions

The last aspect of feasibility is traditions. This factor could have the greatest effect on the feasibility of implementing a four-day work week, and it is certainly one of the most difficult to measure or to change. The questions in this area would have to include an appraisal of the attitudes to the concept of the people

affected, as well as, the determination of what conditions or changes would be necessary in order to make the concept more acceptable to those who were initially scentical.

# ANTICIPATED EFFECTS

The effects of implementation, is more easily evaluated quantitatively, because the four-day work week has already been implemented in various organizations and the results are readily transferrable.

### Cost

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The first area in which there would be changes due to the implementation of a four-day work week is costs. These changes can usually be objectively measured in terms of time and money. The questions in this area include: (1) are there any reductions in transportation costs of the pupils or teachers, and, (2) are there any reductions in plant operation costs and the cost of custodial services resulting from the reduction of working hours, and (3) would there be any increase in the amount of money generated from rent, if the equipment and facilities of the school were available for rental for one more day per week. A reciprocal question is (4) would the community be able to utilize the facilities and equipment to a greater extent. Finally, it is necessary to inquire about the effect of a shortened work week on the over-all amount of down time experienced by the organization.

Down time. Down time is time that is completely wasted in the preparation to begin and to finish work or class periods. In

schools this time is occupied by such activities as the taking of attendance, and the students finding their seats, and finding the desired place in their books, etc. The comparable situation occurs in industry because workers often require a certain length of time to obtain their working materials before they attain an acceptable level of operating efficiency, and many machines need to be thoroughly warmed up before they operate smoothly. The four-day work week actually can reduce the total number of hours per week lost in down time. Since the operation is started and stopped four times a week instead of five, the time wasted by these activities is reduced by one-fifth. This is directly applicable to the case of education. Not only would the number of hours lost in lunches and recesses be decreased, but the down time that occurs before and after these breaks would be lessened by twenty percent. In education, a further reduction in down time could be accomplished through the use of longer class periods, instead of more periods, to compensate for the loss of the fifth day. Since the amount of down time per period is constant, that is, independent on the length of the period, reduction by this means is a real possibility. And, as we have seen, longer class periods in a longer school day are feasible.

Salaries. Salaries for instructional and administrative staff would not change, since the total number of working hours normally does not change when the work week is modified. However, there could be a reduction in the salaries of maintenance staff. Whether the school is maintained on a contractual basis or by staff employed at an hourly rate, the total cost should decrease by twenty percent, because maintenance would only be required for four,

instead of five days a week. The salaries of school bus drivers would also be reduced. Most often drivers are paid by the mile, and since they would drive the same number of miles per day for four and not five days a week, their salaries would be decreased by twenty percent. It should be noted that this reduction should not present a severe hardship to the drivers and their families, since in most cases the income from driving is supplemental, and not the economic mainstay of the family.

School operation. The cost of operating a school building for instructional purposes is directly related to the number of days when the school is open. The major expenses in opening the building are lighting, heating fuel, school lunches if there is a cafeteria, and miscellaneous supplies. Theoretically, all of these expenses would be reduced by twenty percent, if the school were operating on a four, instead of a five-day week.

Transportation. The final area of costs is that of transportation. In rural districts, this represents a sizeable proportion of the total budget; in city schools, this factor is less relevant. However, there are a large number of rural school districts in Alberta, and transportation is an important cost factor. School districts may operate their own buses, or they may tender a contract for busing. Where transportation of students is done by contract, the change to a four-day week should cause a twenty percent drop in mileage and therefore in total cost. However, in schools which operate their own buses the case is rather more complex. In a school district which owns its buses, the total capital cost, the

cost of purchasing buses and storage and maintenance facilities would not decrease. However, because each bus would clock fewer miles per year, the annual depreciation of the machine would be less; thus, the resale value after a given number of years would likely be slightly higher than if the bus had been used five days a week.

Ordinary maintenance costs such as those of gas, tires, oil, filter, and minor repairs should also decrease proportionate to the decrease in mileage, that is, by twenty percent.

Facilities and equipment rental. Besides the area of cost, there is another economic concern in the operation of schools: income from the rental of facilities and equipment. It is fairly common for a school to rent its gymnasium, sports equipment, or buses to various public groups. In a four-day school week, there would be one extra day when these straight equild be rented, thus the income of the school could increase.

Another factor that is of interest to administrators is the motivation of teachers and support staff to look for a school that operates on a four-day week, when the community at large is still on a five-day week. Those who feel that the benefits of a modified work week outweigh the disadvantages will be moved to join a school or organization that uses such a system. This motivation could be used to attract employees to school districts which normally have staffing problems.

## Effect on Clients

Businesses and industries which convert to a four-day work week have also to consider the problem of customer service. In

some cases, the operation is simply closed on the fifth day. However, some businesses prefer to remain bpen six days a week, and solve their staffing problems by using two complete three-day shifts. "Customer service" in education means student service. In some cases it is desireable to provide for some alternate activity on the extra day when school is closed. It is possible to maintain staff at the school, so that the children may use the recreational facilities. However, another fruitful possibility is to have activities arranged for the children by the local Parks and Recreation authority. The Parks and Recreation Department of the City of Edmonton has indicated its willingness to organize a program of activities for students on the fifth day. This program could be run by the staff of the Parks and Recreation Department, with assistance from senior high school students who also have a day off. The recreation program could require mandatory attendance, so that the children would be under supervision for approximately the hours of a school day; or, it could operate on the basis of optional attendance, as determined by the students and their parents. In Unity, it was found that significant proportions of the extra time were devoted to a work-experience program and the regular, voluntary, community recreational activities. The Community Survey in Unity indicated that "the Friday away from school caused less inconvenience than initially anticipated and many families indicated they injoyed having more time together, students found the Fridays to be productive, and many high school students were able to work frequently. Thus it appears that an extra day of unstructured time for the students would not present a problem, and only a minimal program of alternate occupations would be

necessary.

Many industries have found that on a four-day work week. because they operate for longer hours each day, they can actually provide better customer service. In schools, however, where attendance is mandatory this would not really be significant. But it does have some bearing on those educational activities that take the students away from the school. On any out-trip, much time is lost in organization and travelling. With a longer school day, the amount of time lost would not decrease, but it would represent a smaller proportion of the school day, thus there would be more actual time spent at the destination. Industries also report that the four-day work week is beneficial in that, by starting earlier and leaving later, workers often miss the hours of heaviest traffic. Furthermore, if the work week is changed from five days to four, fewer hours per week are lost in travelling to and from work. Both of these considerations are obviously applicable to education, and affect both students and teachers.

The change in the working day caused by simply lengthening it is possibly best for businesses with adult employees, but not necessarily the best thing for schools with very young children. Besides the fact that a lengthened school day might be unnecessarily tiring to a young child is the concern about children leaving for school while it is still dark. Many people, no doubt, would dismiss the whole problem as minor. However, by seriously considering the validity of these objections, solutions can be suggested. It is possible to start school only slightly earlier in the winter months, when it is dark, and somewhat earlier in summer. Or, the time lost

on the fifth day can be compensated for by lessening the time usually spent for recesses or lunch breaks. Of course, both of these methods may be used.

In education, as in business, industry, or government, a lengthened working day may be more fatiguing, and this possibility must be taken into account. Education, as a mental activity, is likely to be especially tiring. However, this problem could be overcome by a specific arrangement of classes each day. The staff and administration of R. J. Scott Elementary School, in their proposal to change their hours of work, developed a timetable that would minimize the fatigue that may be expected from a longer day. The students, parents, and teachers of Unity did not find undue fatigue to be a problem, although no precautions were taken to guard against this eventuality.

## Effect on Employees

The effects of the implementation of a four-day work week will also be seen in the employees. The questions seem to be (1) what changes will there be and (2) how will this affect the employee's ability to fulfil his obligations to the employer and (3) how will these changes affect the employee's attitude towards his position.

Usually, in a family where only one parent is employed, the family's routines are determined to some extent by that parent's working schedule. The areas of study in terms of the effect of such a change on family life are eating and sleeping patterns, recreational activities, and personal appointments; there are, of course, miscellaneous other routines which may or may not change as the hours of work are changed.

Esting habits. Of necessity, in a shorter work week there is found a longer work day. This could cause an adjustment in the eating habits of a family, since an employee must leave the home earlier or return later or both. This could result in an earlier breakfast and a later supper in many cases. And, as has been explained in a Time article, "On the Way to a Four-Day Week," sleeping patterns may also be different. People may have to sleep longer to regain the energy lost in a longer working day. And, of course, an extra day off work is an extra day on which one can sleep later in the morning.

Recreation habits. According to Riva Poor, investigations into the recreation habits of people working during modified hours have revealed that these habits remain substantially unchanged. But, although the activities engaged in do not change, the times and frequencies of these activities are often different than before. Gertain recreational facilities are not much used from Monday to Friday, and are very busy on the weekend, when most people have days off. There are advantages, then, in giving more people time off on normal working days. This could encourage a more regular and evenly divided use of many facilities, and would generally benefit the public.

Personal appointments. One aspect of family life that is likely to change significantly, according to Riva Poor, is that of personal appointments. Many businesses operate only during the "normal" working days of Monday to Friday. Thus people who normally work on those days are disadvantaged. People employed on a four-day

week could arrange appointments with doctors, dentists and other professionals on their extra day off, without losing time from work. Businesses that are open on the weekends are generally busiest at that time, because of the large segment of the population who have only weekends off. Thus it would be most convenient for both parties if more people had an extra day off during the week.

## Effect on Curriculum

Finally, the effect of the implementation on the school's daily and yearly curriculum is to be considered. The curriculum may be affected directly by the removal of one day and lengthening of the school day. The first question here is how are the time requirements of specific subjects to be met; the alternative situations are lengthening the daily periods or increasing the number of periods per day. The other question is what modifications to the present curriculum can or must be made to enhance the special virtues of the four-day work week.

### Other Considerations

There are two further aspects of the change in business which may or may not be applicable to education. First, is the possibility of part-time jobs, or moonlighting, for people who work four days or less from Monday to Friday. On a four-day school week, senior students could more likely find part-time employment. Second is work habits. In the City Hall experiment, for instance, it was found that the busiest times of the day were during "normal" business hours.

After these hours, the staff was interrupted less often, and could therefore accomplish more work per hour. However, this is not readily

translatable into terms of education, since the situation is controlled from within, and not susceptible to interruptions from the public at large.

One aspect of work habits, however, when applied to education is homework. It is likely that what homework the students have could be done more easily on the extra day off than on the normal days off, which are often crowded with weekend activities.

### SUMMARY

This chapter commenced with the development and presentation of a frame of reference, derived from the literature, upon which to base an examination of the four-day work week in education. The two main divisions of the model were comprised of questions related to feasibility considerations and to anticipated effects. Each set of questions were then briefly discussed in the light of information from experiences reported in the literature. It was shown that the four-day work week in education cannot be ruled out on feasibility grounds, nor can it be dismissed because of any obvious deleterious effects, although it was noted that the implications are by no means fully understood. Although a complete examination of the implications is beyond the scope of this study the frame of reference provides a way of identifying questions which should be addressed. Those which deal with family life implications were examined in the survey and placed in the context of the total issue.

The methodology used in surveying the opinions of parents about the merits of the four-day school week and how it might affect their family routines is reported in the next chapter.

### Chapter 5

### METHODOLOGY

The information synthesized in Chapters 3 and 4 formed the basis for the specific study which is delineated in this chapter. The research involved a survey of the attitudes and opinions of the parents of the children attending R.J. Scott Elementary School, in Edmonton, where a proposal to implement a modified school week was initiated by the teachers, and finally rejected by the parents. The chief research instrument was an opinionnaire which was distributed to the parents. This chapter deals with the descriptive investigation of the R.J. Scott Elementary School proposal, the development and distribution of the opinionnaire, and a description of the analysis of the results. The questions on the opinionnaire, and the types of analyses of data, were determined as a result of the investigation, outlined in Chapter 3 and Chapter 4, of the most important aspects of a modified work week as it can be applied to education.

### DATA GATHERING PROCEDURES

Data were obtained from interviews with the principal and each teacher and from an opinionnaire administered to teachers and parents of all pupils attending the school.

Two versions of the opinionnaire were constructed. One was administered to the parents and another to the teachers involved. The one for the teachers was administered prior to the distribution

of the opinionnaire to the parents. Each teacher responded to the opinionnaire, and then the investigator and the teachers discussed the concept, and the opinionnaire. The opinionnaires to the parents were then collected, and Mr. L. Hubick, the principal, was interviewed.

# OPINIONNAIRE DEVELOPMENT

The research instrument, the "Opinionnaire to Parents" was constructed on the basis of the Frame of Reference devised from experiments with a modified work week in business, industry and government, and adjusted to the particular needs of education. It was intended to ascertain the parents' attitudes toward certain aspects of a four-day school week, and their opinions on the advantages and disadvantages of such a change in education. The questionnaire could be completed by either parent on behalf of the family. The opinionnaire also contained questions relating to some demographic factors, so that it could be determined if there was a correlation between the parents' response and these factors. The format of the questionnaire was arrived at after consultation with other researchers using similar methods in different areas of study, and reference to the research methods used in pass theses, and to the questionnaires used in the Community Survey of School Administrative District Number Three, Unity, Maine. The face validity of the individual questionnaire items was checked through discussion with Mr. Hubick, who made several suggestions for improvements which were included in the final format of the questionnaire. It was also necessary to consider the requirements of the Edmonton Public School District before the opinionnaire could be delivered to the parents.

Enclosed with the opinionnaire was an introductory letter to the

parents, explaining the study and the questionnaire (Appendix A).

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The opinionnaire that was finally sent home with school children for their parents consisted of six parts. The first sought family demographic data. These questions referred to age, employment and marital status, to the ages of other children, to how pre-school children were cared for during the day and to how interested the family was in the original proposal. The second part was derived from the questionnaires used in the study at Unity; it anticipated new situations which were likely to occur as a result of the modified school week, and sought the parents' reactions to them. This part of the opinionnaire mentioned many of the changes in family life that could be expected, changes in appointments, eating and sleeping habits, and the amount of time the family would spend together, and asked whether the parents' felt these changes would occur in their family life, and whether or not they would be advantageous. The third part was constructed with reference to the out-of-school activities of school-age children; it questioned the parents' attitudes towards each activity. Because it was necessary that the respondent differentiate between those activities that would occupy only a minimal amount of time, and those that would engage a substantial amount of the child's time it was decided that answers in this section should be expressed in a percentage. That is, the percentage was intended to indicate that proportion of the free day which the children (in the parents' opinion) would devote to each specified activity. The fourth and fifth parts of the survey were

based on the questionnaires used in Unity, and the staff bulletin to the teachers of R. J. Scott Elementary School; these dealt with questions the answers for which were distinct opinions. In all but Part 3 the method of responding was by circling the letter preceding the statement closest to the truth; this was chosen for its simplicity. The sixth part of the opinionnaire was a blank space on which the parents were urged to write any further comments or questions that arose, which had not explicitly been handled in the opinionnaire.

When the Edmonton Public School Board gave the final approval, the opinionnaire was copied and taken to R. J. Scott Elementary School. Each teacher completed an opinionnaire, and distributed one per family to the students. The parents were asked to complete their opinionnaire and return it to the school as soon as possible. One hundred fifty opinionnaires were distributed by the teachers; one week later the investigator received one hundred nineteen completed forms. Within the next week, eleven more completed forms were returned to the school. Thus the total response was one hundred thirty out of one hundred fifty, or 86.6% of the parents.

# ANALYSIS OF THE DATA

The data from the completed questionnaires were given a descriptive analysis, to determine frequencies, percentages and means. The analysis of the data was done using parametric and nonparametric statistics. Each question from the questionnaire was analysed as to its frequency of response; this frequency was

expressed in raw figures as well as percent. It was decided that Part 4 question 10, which asked whether the respondent favored most, some, or none of the aspects of a modified work week, was a key question.

This was treated as one variable and was correlated with data on certain demographic details (collected in Part 1), using frequency distribution and the chi-square test.

The demographic information referred to (1) age of the older parent; (2) marital status; (3) number of pre-school age children; (4) number of elementary school age children; (5) number of junior high school age children; (6) number of senior high school age children; (7) parents' employment status; (8) type of care the pre-school age children get during the day.

The key question was also correlated with questions from Parts 4 and 5. The respondents were divided into three groups, depending on the answer to Part 4, question 10; from this position an analysis of variance was done to see if there was a statistically significant difference between each group when questioned on what activities the parents thought their children would engage in on their extra free day.

Analysis of variance was also used to compare means in order to determine whether there was a significant correlation between a respondent's favoring most, some or none of the aspects of a modified school week, and his opinion on (1) whether the concept is a passing fad or one that will gain wide acceptance; (2) how long it will take for implementation of this concept; (3) whether the change is practical and useful or impractical and useless; (4)

whether the change would be advantageous, disadvantageous or inconsequential; (5) whether the concept will cause an increase, decrease, or no change in the quality of education; and (6) which parent answered the questionnaire.

A one-way analysis of variance was used to test the significance of the means of responses to the inquiry whether the changes resulting from a four-day school week would be advantageous, disadvantageous, or inconsequential.

The Scheffe multiple comparison and test was used when the probability of the F ratio for the way analysis of variance was found to be significant.

For the analysis of data, the responses to all questionnaire items were punched onto data cards, which also included a three-digit identification number which was assigned to each questionnaire after it had been completed and returned. The data were analyzed by four computer programs developed by the Division of Education Research: NONPIØ, DESTØ2, ANOVIØ and ANOVI5.

#### SUMMARY

This chapter dealt with a descriptive investigation of the case of the R. J. Scott Elementary School proposal for the implementation of a four-day work week. It also outlined the development of the instrument used to appraise the opinions of the parents who decided whether or not the proposal should be pursued. The final area consisted of a presentation of the statistical treatment to be used in analyzing the data obtained from the research instrument.



## THE DATA PRESENTED

The R.J. Scott Elementary School proposal for a four-day work week is analyzed utilizing the Trame of Reference which was developed in Chapter 4.

Following this analysis the data obtained from the opinionnaire is surveyed from a statistical point of view.

### HISTORY OR THE PROPOSAL

During the 1972-73 school year, the teachers of R.J. Scott Elementary School began to consider the possibilities of a four-day school week. The staff drew up a list of changes that could be expected, changes listed in random order and not revealing a system of priorities. This list was printed as a bulletin and on January 12, 1973 was distributed among the students, who were asked to pass it on to their parents. With the bulletin was a notice of a Home and School meeting at which the matter would be discussed, to be held on Monday, January 15, 1973 at 7:30 p.m. (Appendix C). The pumpose of this meeting was to enable the parents and teachers to meet one another and to express their views on the suggested change. The meeting was opened by Mr. L. Hubick, principal of R.J. Scott Elementary School, and Maddressed by Mr. Brian Plesuk of the Edmonton Parks and Recreation Department, who detailed the recreational services that the City was prepared to offer on the

random, into small informal groups of parents and at least one teacher which discussed various aspects of the proposal.

The comments of the entire meeting were recorded when the discussion groups reconvened. These comments were printed in a second bulletin, which was sent to the parents on January 16, 1973 (Appendix E).

Mr. Hubick and his staff decided that the proposal would not be taken to the School Board unless it was approved by a 2/3 majority of the parents of the students affected. The second bulletin, then, contained the list of concerns of the January 15th meeting, a report of the meeting including a brief summary of Mr. Plesuk's remarks, a forward by Mr. Hubick explaining the procedure that would be followed if the proposal passed by 66 2/3% or more, and a ballot with voting instructions (Appendix F). The parents were asked to return their marked ballots with school children by 1:00 p.m. on Wednesday, January 17, 1973. Approximately 48% of the parents who voted favored the proposal. Since the a priori minimum of 66 2/3% parent approval was not attained, the matter was not pursued further.

# The Revised Timetable

The first bulletin to the parents mentioned specific changes which would have occurred in the school timetable. The proposal was to lengthen each of the four school days by two thirty-five minute periods. To accomodate these extra periods it was suggested that school begin at 8:25 a.m. and end at 4:10 p.m. Between these hours there would be two fifteen minute recesses, and a lunch break from

12:10 to 1:35 p.m. The major consideration in planning the change was the effect on students. With this in mind, it was suggested that the morning periods would be devoted almost exclusively to the academic program; in the afternoon would be fine arts, physical education, music and such. The teachers agreed that this scheduling would work against the fatigue that might be expected from a longer school day.

#### FINDINGS

## Interview Results

The idea for the implementation of a four-day school week originated with the staff of R.J. Scott Elementary School.

Unanimity among the staff had been reached before the proposal was presented to the parents. In the noon-hour meeting and interviews with Mr. Hubick it was ascertained that all twelve teachers and the one secretary were in favor of implementing the concept. Mr. Hubick indicated that one part-time teacher was concerned about her situation but was in favor of the concept as long as her remuneration was not changed.

The teachers indicated that they felt that student performance would not deteriorate. They indicated that with proper scheduling (primarily academic subjects in the earlier part of the day and manual and gross motor activities at the end of the day). student achievement would probably not lessen. In fact, it seemed to them that the increased number of periods per day would facilitate less repetition of lessons and would therefore enable them to accomplish the same results as previously in less time.

This would provide extra time for the presentation of new material.

The teachers, therefore, felt that the change might actually improve student achievement.

The teachers agreed that their family routines like those of the students' families would be affected. Some teachers lived in that area, and their children attended R.J. Scott Elementary School. Thus, they expected to feel the change as both employees and parents. On the other hand, they saw the advantage of their being at home from work with their children.

The teachers also felt that they would be able to accomplish many personal tasks on their day off during the week. They generally agreed that, although it was not obligatory, they would utilize their day off during the week to help prepare themselves for the days when they were working. They indicated that activities which they might be engaged in would range from preparing and marking assignments to preparing for and pre-visiting the sites of future field trips.

Thus, it can be seen that the teachers favored the four-day school week and felt that the advantages out-weighed the disadvantages. Also, they felt that most of the disadvantages could be minimized if not eliminated completely.

## Statistical Results

The most significant results of the examination into the R.J. Scott Elementary School case are those derived from the responses to the Opinionnaire to Parents.

It is necessary first to examine the possible reasons why

the parents affected by the R.J. Scott Elementary School proposal rejected it. Most of the parents (64.3%) approved of the manner in which the concept was proposed at R.J. Scott Elementary School (Table 1). Thus the proposal was not rejected because the presentation was offensive. Less than the required 66 2/3% of the parents approved the concept unequivocally. However, more than 70% of the respondents favored some aspects of the new program; Table 1 indicates that 35.1% of the respondents favored most aspects of the concept, 35.8% favored some. The original proposal was supported by 47% of the parents; thus it appears that the concept was defeated large they those who favored some, but not all, aspects of the modified school week. It is significant that approximately the same percentage of the population favored the original proposal as that which indicated approval of the manner in which the proposal was made on the opinionnaire; conversely, approximately the same percentage in both cases expressed their disapproval. This seems to indicate that the parents responded to the opinionnaire as they did to the original proposal.

favoring each response to questions which obliquely indicate the respondents' degree of approval of the concept, and directly inquires about their opinions on specific aspects of the change.

As is shown by the percentage distribution, a majority felt that the modified work week in schools will eventually be widely accepted. Respondents were fairly evenly divided as to how soon they expected this change, although the largest group, (35.3%) estimated that it would occur within two to four years. A majority (62.8%) thought

that the concept was practical and useful. The respondents were evenly split (39.2%) as to whether the change would be advantageous or disadvantageous; a smaller group (21.5%) felt that it would be of no consequence. Questioned as to the effect a modified school week would have on the quality of education, a majority (56.3%) felt it would be unchanged; however, of the two minority opinions, more respondents (28.6%) believed it would deteriorate than that it would improve (15.1%).

To determine if there is a relationship between the answers to the key questionnaire item (the answers to which are indicated in Table 1 Question 1) and the questions listed in Table 2, dealing with specific questions about the change, a chi-square test was used.

An examination of Table 3 shows that all five chi-squares have probabilities less than .001 indicating that a relationship exists. Briefly, the relationship is as follows:

- (1) most of the respondents who favored the proposal thought that it would be widely accepted; most of those who favored no aspects considered that the idea was a passing fad;
- (2) the largest percentage of those who favored the concept felt that it would be adopted in Alberta in less than four years; the largest percentage of the group which disapproved of the concept felt that it would not be introduced within the next eight years;
- (3) most of those who favored the proposal also felt that the concept was practical and useful; most of those who disapproved believed that it was impractical and useless;

Table 1

THE RESPONSE RATES TO QUESTIONS DEALING WITH THE RESPONDENTS' COMPREHENSIVE VIEW TOWARDS THE MODIFIED WORK WEEK IN SCHOOLS

				1
Quest	Questionnaire Item	<b>4</b> 4	25	1
	Are you, as a parent, in favor of:  A. Most of the aspects of the modified work week in schools?  B. Some of the aspects of the modified work week in schools?  C. None of the aspects of the modified work week in schools?	33 62	35.1 35.8 29.1	
2,	Do you, as a parent, feel that the school week should be changed in any way from its present form?  A. Yes  B. No	62 70	47.0	
e e	Do you, as a parent, approve of the manner in which the modifiled work week was proposed at R.J. Scott Elementary School? A. Yes B. No	81	64.3 35.7	
		/		

Table 2

THE RESPONSE RATES TO OTHER QUESTIONS DEALING WITH THE RESPONDENTS' VIEW OF THE MODIFIED WORK WEEK IN SCHOOLS

			ø
lë	Opinionnaire Item	H	۹
1.	The modified work week in schools is: A. A passing fad B. Going to be widely accepted	43	36.4
ά.	The modified work week in schools, if adopted, will be introduced in Alberta in:  A. Less than two years  B. Two to four years  C. Five to eight years  D. More than eight years	25 30 20	21.6 35.3 25.9 17.2
· m	The modified work week in school is: A. Practical and useful B. Impractical and useless	76 45	62.8 37.2
<b>च</b>	If the modified work week in schools were to be put into practice, to us as a family it would:  A. Be an advantage  B. Be a disadvantage  C. Make no difference	51. 28	39.2 39.2 21.5
. <b>v</b>	If the modified work week in schools were to be put into practice, the standard of education for our children would: A. Improve B. Deteriorate C. Remain the same	19 36 71	15.1 28.6 56.3

Table 3

DISTRIBUTION OF RESPONSES TO QUESTIONS FROM SECTION FIVE WHEN GROUPED BY AMOUNT OF FAVOR OF CONCEPT

Concept is:   a) a passing fad   b) going to be widely   a coupt is:   a) a passing fad   b) going to be widely   a coupt is:   a) a passing fad   a) a passing fad   b) going to be widely   a) a coupt is:   a) a passing fad   a) a passing fad   b) going to be widely   a) a coupt is:   b) two to cour years   c) five to eight years   d) more than eight years   d) concept is:   a) practical and useless   d) impractical and useless   d)							
Concept is:  a) a passing fad b) going to be widely a passing fad a passing fad b) going to be widely accepted  Time until implementation: a) less than two vars b) two to four years b) two to eight years c) five to eight years d) more than eight years d) more than eight years b) two to eight years d) more than eight years d) more than eight years concept is: a) practical and useful b) impractical and useless concept to us, as a family would: a) be an advantage b) be an advantage c) make no difference b) be a disadvantage c) make no difference c	Opinionnaire Item	Pe	rcentage		Ch1-Square	đť	pability
Concept 1s:  a) a passing fad b) going to be widely accepted  Time until implementation: a) less than two years b) two to four years c) five to eight years d) more than eight years c) five to eight years d) more than eight years c) five to eight years d) more than eight years c) five to eight years d) more than of the years d) more than of the years c) five to eight years d) more than of the years d) more than of the years c) five to eight years d) more than of the years d) more than of the years c) five to eight years d) more than of the years d) more than of the years c) five to eight years d) more than of the years d) more than of the years c) five to eight years d) more than of the years d) more than of the years c) five to eight years d) more than of the years d) more than the same d) more than the same d) more than the same d) more than the years d) more than two years d) more than two years d) more than the years d) more than two years d) more than the years d) more than		Most	Some	None			
b) going to be widely accepted accepted  Time until implementation: a) less than two years b) two to four years c) five to eight years d) more than eight years d) more than eight years c) five to eight years d) more than eight years d) more than eight years d) more than eight years d) practical and useful b) impractical and useful b) impractical and useless concept to us, as a family would: a) be an advantage b) be a disadvantage c) make no difference c) no	1. Concept is: a) a passing fad	1.8	10.5	22.8		(	
Time until implementation:  a) less than two years b) two to four years c) five to eight years d) more than eight years d) more than eight years c) five to eight years d) more than eight years d) more than eight years concept is: a) practical and useful b) impractical and useless c) concept to us, as a family would: a) be an advantage b) be a disadvantage c) make no difference c) make no difference d) improve c) make no difference c) nemaln the same	b) going to be widely accepted	39.5	23.7	1.8	60.963	4	00.
Concept is: a) practical and useful b) impractical and useful concept to us, as a family would: a) be an advantage c) make no difference c) make no difference a) improve b) deteriorate c) remain the same c) 23.3 0.9 c) 79.828 2 .00 c) 0.0 c) 6.0 c) 6.0 c) 79.828 2 .00 c) 0.0 c) 6.0 c	Time until imple a) less than two b) two to four y c) five to eight d) more than eigh	12.6 19.8 9.9 0.0	8.1 14.4 10.8 0.9	0.9 1.8 4.5	68,018	9	00.
Concept to us, as a family  would:  a) be an advantage b) be a disadvantage c) make no difference c) make no difference 32.3 8.9 0.0 12.1 25.8 4.8 13.7 2.4 5.418 4 .00  Standard of education would: a) improve b) deteriorate c) remain the same c) remain the same c) remain the same converted conve		40.5	23.3 8.6	0.9	79,828	N	00•
Standard of education would:  a) improve b) deteriorate c) remain the same $26.2  23.8  7.4  63.678  4  .00$	Concept to us, as would:  a) be an advantage b) be a disadvant: c) make no differe	32.3	8.9 12.1 13.7	0.0 25.8 2.4	95.418	<b>,</b>	00 <b>•</b>
		11.5	4.1 5.7 23.8	0.0 21.3 7.4	63.678	<u></u>	

- (4) of those who approved of the concept, most thought it would be an advantage to their families; the largest percentage of those who disapproved thought that it would be a disadvantage;
- (5) most respondents felt that the modified school week would have no effect on the quality of education; however, of those who felt it would improve, most favored the concept, and of those who felt it would deteriorate, most disapproved of the concept. It is curious that, in item 5, 5.7% of the respondents favored some aspects of the change, even though they felt that the quality of education would be reduced.

The next areas of study are those questions which inquire about the effect the modified school week would have, in the parents' estimation, on family life, and whether those effects would be beneficial, harmful, or unimportant. For purposes of discussion, it is considered that a figure exceeding 66% represents a significant majority, from 50% - 66%, inclusive, represents a majority; if the highest percentage is between 40% and 49%, inclusive, this is simply referred to as the largest number of the three groups, and if it is between 33% and 39%, inclusive, the answers are considered to be evenly distributed, and are referred to as such. It should not be necessary to mention that the statements that follow are intended to be qualified by the conditional application of the modified school week.

From the results tabulated by frequency of responses and percentage in Table 4, it is clear that the largest number of parents to whom the question applied thought that they would spend less time with those children in other schools, and that this

would be a disadvantage. The largest number waver, felt that the time given to pre-school age children would not decrease, and that this would be an advantage. A majority felt that the time husband and wife have together without the children would not decrease, and would be of no consequence. A significant majority of the parents felt that the would try to arrange their families' out-of-school appointments on the extra free day and a majority felt that this would be an advantage. The majority also believed that they would try to arrange their children's recreational activities on the extra day, and that this would be advantageous. However, a majority felt that they would not do more shopping on the children's free day; they were fairly split as to whether the change would be advantageous, disadvantageous, or neither in that respect.

A slight majority of the parents indicated that the longer school day would cause their children to go to bed earlier; the groups were evenly divided as to whether or not there was any advantage in this. A larger majority thought that their children would likely sleep in on the extra day off, although the largest number indicated that this was inconsequential.

The majority of the respondents thought that they would not engage in more leisure activities, as a family, because of the change. The largest group thought that this was an advantage, but an almost equal group indicated that it was of no consequence. A majority also thought that they would spend more time visiting friends and relatives, and that this was not consequential. However, a majority felt that their eating habits would be changed.

 $\langle \rangle$ 

rable 4

DISTRIBUTION OF RESPONSES RELATED TO FAMILY LIFE AND ROUTINES

Advan-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	23 27	- 24 34.8 34 49.3 11 15.9 30 45.5 15 22.7	28 24,8 67 59,3 18 15,9 33 27,3 24 19,8	illes 58 61.7 11 11.7 58 61.7 11 11.7	llar (	1t   51 40.8 67 53.6 7 5.6 42 34.4 38 31.1	3 2.3 43 37.4 36 31.3 36 31.3	66 52.4 42 33.3 18 14.3 31 27.0 33 28.7
11 6	in the parents opinion, in a day school week were adopted:	spend less time with chi in other schools?	-spend less time with pre- school children?	-have less time together without the children?	-try to arrange their families out-of-school appointments on the extra day?	-try to schedule their children's extra-curricular activities etc. on that day?	- do more shopping on that day?	the children: -go to bed earlier during the week?	-sleep in on the extra day off?

Table-4 (continued)
DISTRIBUTION OF RESPONSES RELATED TO
FAMILY LIFE AND ROUTINES

In the parents' opinion, if a four- les day school week were adopted:	res no	2 . 41 84		Answer	ar 6	tage f &	vantage comment f % f %	comment f %
engage in more leisure activities together?	43 45.3 52 54.7	25	¥.7	1		n 2n 2n	42 42,4 21 21.2 36 36.4	36 36.4
- spend more time visiting together?	30 25.4 79 66.9	2	6,93	6.	7.6	9 7.6 24 25.5 17 18.1 53 56.4	17 18.1	53 56.4
Would the family:	42 42.9	夫	55.1	~	2.0	54 55.1 2 2.0 7 6.9 47 46.1 48 47.1	47.46.1	48 47.1
- spend more?	30 28.3	\$	7.09	12	11.3	64 60.4 12 11.3 14 11.8 49 41.2 56 47.1	49 41.2	56 47.1
- earn less?	34 30.6	63.	56.8	#1	12.6	63, 56.8 14 12.6 20 17.9 44 39.3 48 42.9	- 44 39.3°	48 42.9
- spend more time together?	57 46.7		39.3	17	13.9	48 39.3 17 13.9 51 41.5 35 28.5 37 30.1	35 28.5	37 30.1

The largest group thought that this was inconsequential, but an almost equal group held it to be a disadvantage. The majority also felt that the family would neither spend more money nor earn less, and that this, too, was of no consequence. Finally, the largest group of parents felt that the total time their family spent together would decrease and that this was a disadvantage.

The next problem to be addressed is the question to parents about what activities they expect their children to be engaged in on the extra day off. Table 5 lists the possible activities that were specified on the questionnaire, as being those most common to elementary school children. The figures indicate the frequency, percentage of responses to each activity. As indicated in Table 5, the most frequently mentioned activity was play at home; the rest, in order of frequency of mention, are watching television, play away from home, recreation or other leisure activities with the aparents, doing household chores, reading, homework, organized recreational activities or a hobby, and finally miscellaneous activities. The question of the child's extra leisure time can be further refined by the subsequent inquiry about what portion of the total time the children are expected to devote to each activity.

Table 5 indicates that play activities at home was mentioned most often (N-115) as being an activity which parents thought their children would engage in on their extra day away from school.

Table 6 indicates that this same activity has the highest mean value (20.9%) of the portion of time likely to be spent at that activity. Watching television in this case has the same mean value (20.9) as play at home.

## RESPONSE RATES DEALING WITH ACTIVITIES IN WHICH CHILDREN WOULD ENGAGE DURING THE EXTRA DAY AWAY FROM SCHOOL

ctivities	Troquesto,	y percent
. Watching television	110	13.4
. Doing chores	84	10.2
. Play activities at home	115	13.9
. Play activities away from home	100	12.2
5. Reading	83	10.1
6. Doing school work	74	9.0
7. Leisure or recreational activitie with parents	<b>88</b>	10.8
8. Organized recreational activities	71	8.6
9. Participating in a hobby	71	8.6
0. Other	26	3.2

Table 6

PERCENTAGE DISTRIBUTION OF TIME EXPECTED TO BE SPENT ON EACH EXTRA DAY ACTIVITY

044504400																		.
ACTIVITY	۲>	ر د	0.1	(35	20	25	8	35	0+7	45	50 . 55	. 55	8	70 75	75	80	95	<b> </b> ×
T.V.		17.3	35.5	13-	3.6	:4.5	<b>†*9</b>	0.9	2.7	10.9				1.8	1.8 1.8 0.9	6.0	12	20.9
2. Chores		60.7	27.4	2.4	7.1				2.4								· <del>-</del>	8.5
3. Play (home)	6.0	15.7	20.9	10.4	16.5	16.5 10.4 10.4		1.7	1,7	ي. ئ.	6.1		<u></u>			0.0	0.9	20.9
4. Play (away)	٠ پير	23.0	36.6 1	15.0	15.0 % 12.0	0.1	0.9		0	2.0			•					14.1
5. Reading	1.2	1.2 53.0	30.1	<b>4.8</b>	3.6	1.2	1.2		1.2							•	-	8.8
6. School		62.2	29.7	2.7	, -		•		<b>7.</b>									7.8
7. Leisure Activity 2.3		33.0	29.5	13.6	12.5	*	3.⊄				3.4		ra e			0		12.6
8. Organized recreation		16.3	32.4	& %	8.5	œ « «	*:				2.8						,	40.4
9. Hobby		49.3	49.3 36.6	2.0	7.0						<del></del>						- 3	, <b>9</b>
10. Other		23.1	30.8	23.1	7.7	3.8					3.8	3.8	3.8				· =	 16.5
	1				1		1	1				•				est.	. 3	VI.

Table 7 compares the rank order of activities by frequency of mention and by percentage of total time. In both instances the first two include watching television and play activities at home. An interesting discrepency occurs in the case of "Other activities" which ranks last in terms of frequency of mention yet ranks third in terms of percentage of time.

An attempt to determine if there was a correlation between the parents' general favor or disfavor of the proposal, and the activities they thought their children would engage in on the free day. The answers to these questions were obtained by analysis of variance. The respondents were again divided into three groups, depending on whether they favored most, some, or none of the aspects of a modified work week. When this was done, it was found that there was a statistically significant difference between these groups for six of the ten specified activities in which the children might be engaged (Table 8).

The Scheffe probability matrix for the comparison of means is shown in Table 9. Those parents who favored most aspects of the four-day school week tended to perceive that more time would be spent on reading, doing school work, in recreational activities with parents, in organized eisure activities, and on hobbies, than did parents who favored some aspects. Parents no favored no aspects consistently perceived that their children would spend less time on the above activities than did the other two groups of parents. The converse applied in the case of watching television. Parents who favored most aspects tended to perceive that less time (mean 9.8%) would be spent viewing than did the

Table 7

RANK BY MENTION AND RANK BY MEAN OF PERCENT OF TOTAL TIME OF EXTRA DAY ACTIVITIES

Act	ivity	Rank, by " Mention	Rank by Mean of % Of Total Time
1.	Watching television	2	1
20	Doing chores	5	9
3.	Play activities at home	1	<b>1</b>
4.	Play activities away from home	3	4 ·
5.	Reading	6	7
6.	Doing school work	7	10
7.	Leisure or recreational activities with parents	4	5
<b>`</b> 8.	Organized resident activities	8	6 6
.9.	Participata hobby	8	8
10.	Other	10. •	3

Table 8

LEISURE ACTIVITIES WHICH GENERATE STATISTICAL DIFFERENCES
BETWEEN THE MEANS OF PERCENTAGES OF TIME SPENT
AT THAT ACTIVITY WHEN THE RESPONSES ARE
GROUPED ACCORDING TO THE AMOUNT OF
FAVOR SHOWN TOWARDS THE CONCEPT

		4		0
Variable		9	Watching Television	
	Z	Mean	Standard Deviation F Ratio	Probability
4 + cott	) <b>S</b>	8.6	9.2	900°0
Bone aspects	49 938	20.2	17.6	
	•			
Variable			Reading	<b>&gt;</b>
	×	Mean	Standard Deviation F Ratio	Probability
most aspects	Ltt.	7	6.5	0.034
some aspects	5	×	7.5	
no aspects	V	•		
Variable			Doing School Work	
	N.	Mean	Standard Deviation F Ratio	Probability
most aspects	o 64.	5.3	5.3	0.011
some aspects	46 38	6.0	2.2	
no aspects	<u></u>	2		

Table 8 (continued)

8

LEISURE ACTIVITIES WHICH GENERATE STATISTICAL DIFFERENCES
BETWEEN THE MEANS OF PERCENTAGES OF TIME SPENT
AT THAT ACTIVITY WHEN THE RESPONSES ARE
GROUPED ACCORDING TO THE AMOUNT OF
FAVOR SHOWN TOWARDS THE CONCEPT

Variable	•	Leisure or	Leisure or recreational activities with parents	th parents	
	Z	Mean	Standard Deviation	F Ratio	Probability
most aspects some aspects no aspects	74 173 38	12.8 6.7 4.1	8. 8. 8. 8.	₹.6	000°0
Variable	_	Organi	Organized leisure activities		
	Z	Mean	Standard Devigition	F Ratio	Probability
most aspects some aspects no aspects	47 46 38	. 5. 5. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.	7.2 10.9 4.3	3.19	1770°0
Variable			Hobby	A Batto	Probability
most aspects some aspects	7 646 144 38		5.2 5.2 5.3	4.63	0.011

# PROBABILITY MATRIX FOR SCHEFFE MULTIPLE COMPARISON OF MEANS OF PERCENTAGE OF TIME SPENT AT LEISURE ACTIVITIES WHEN GROUPED AS TO AMOUNT OF FAVOR TOWARDS CONCEPT

(1= most aspects favorable,

2= some aspects favorable,

3= no aspects favorable

. . .

	Watching	Television	
	1	2 7	3
•	1.000	.02	.03 %
•	.02	1.000	•99
	.03	•99	1.000
N. C.	Read	iing	
V. 25.0	1	2	3
	1.000	<b>.</b> 80	. 04
2.	.80	1.000	.15
3.	.94	.15	1.000
114	Doing S	chool Work	
	1	2	3
	1.000	•93	.02
2.	•93	1.000	.05
	.02	•05	1.000
3. 8.			

Table 9 (continued)

PROBABILITY MATRIX FOR SCHEFFE MULTIPLE COMPARISON OF MEANS
OF PERCENTAGE OF TIME SPENT AT LEISURE ACTIVITIES
WHEN GROUPED AS TO AMOUNT OF FAVOR
TOWARDS CONCEPT

(1= most aspects favorable,
2= some aspects favorable,
3= no aspects favorable

	· .				والمراجع المراجع المر		
	Leisure	or Recreation	onal Activ	ities w	ith Pare	nts	
		1		2		3	·
1.	•	1.000	•	.01		•00	
2.		.01		1.000		.47	4
3.		•00		.47		1.000	<u> </u>
		Organized	Leisure A	ctivitie	s		
. <del></del>		1		2	,	3	
1.		1.000		. 66	4	.05	. 20
2.		.66		1.000	•	.25	
3.		.05	•	•25		1.000	A
			Hobby			,	
		1	) .	.2		3	
1.		1.000		.08		.02	
2.		<b>.0</b> 8		1.000	a	.74	
3.		.02		.74		1,000	

other two groups (mean approximately 20%).

ro do

From the data in Table 10 it can be seen that the only demographic variables which have any relation to the key question are the number of pre-school age children and the number of children in junior-high school. These two variables are statistically significant at respectively the 0.02 and 0.01 percent levels of probability. None of the other variables show any relation to the key question in their pattern of response.

Table 11 indicates how the responses from the key question and the responses to the number of pre-school age children are related.

The group which has one child are divided in that the largest group (39.4%) are in favor of most of the aspects of the concept, 33.3% are in favor of some of the aspects of the concept, and 27.3% are in favor of no aspects of the concept; 100.0% (N=5) of the group which have two children are in favor of most of the aspects of the concept; 100.0% (N=2) of the group which have three children are in favor of most aspects of the concept, and; 40.4% of the group which have no children are in favor of some of the aspects of the concept, and 28.7% are in favor of most of the aspects of the concept, and 28.7% are in favor of most of the aspects of the concept.

Table 11 indicates how the responses from the key question and the responses to the number of children in junior-high school are related.

The group which has one child are divided in that the largest group (45.5%) are in favor of no aspects of the concept; 30.3%

Table 10

CHI-SQUARE OF KEY QUESTION WITH DEMOGRAPHIC DETAILS AS VARIABLES

Variable		Chi-Square	Degrees of Freedom	Probability
1.	age of older parent	14,179	12	0.29
2.	mariatal status	7,402	· 4 ,	0.12
3.	number of pre-school children	14,911	6	0.02*
4.	number of elementary school children	13,856.	8	0.09
5.	number of junior-high school children	16,772	6	0.01*
6.	number of senior-high children	4,173	4	0.38
7.	employment status	5,190	8	0.65
8.	care of pre-school children	5,519	6	0.48
			1	

<sup>\*</sup> indicates an acceptable level of significance

favor of most aspects of the concept. 60% (N=6) of the group that has two children are in favor of some of the aspects of the concept; 30% (N=3) are in favor of no aspects of the concept, and 10% (N=1) are in favor of most of the aspects of the concept. 100% (N=2) of the group that has four children are in favor of no aspects of the concept, and; 42.7% of the group who have no children are in favor of most aspects of the concept, 37.1% are in favor of some aspects and 20.2% are in favor of no aspects of the concept.

The final questions asked what the parents would prefer by way of administrative arrangements if the modification were to be adopted in a school their children attended. Table 12 indicates the rates of responses to the various questions concerning the actual implementation of the change. It is seen from the figures on Table 12 that most parents felt that the program should be only perimental, that they should be consulted before its implementation and regularly during its operation, and that it should be adopted in all the schools in one area at one time. Most favored a special recreation program for the extra free day; parents were not clear in indicating who should be responsible for it, but some agreed that the School and the City should be involved; a small group felt that recreation could be co-ordinated by some other agency. Assuming that the program could only be adopted at one school level, most parents favored its use in elementary schools; next was senior high, and last, junior high. A large majority of the parents approved of either Monday or Friday closing; between the two days, there was a slight preference for Monday. And a majority of the respondents

Table 11

PERCENTAGE DISTRIBUTION OF LEVEL OF ACCEPTANCE
OF ASPECTS OF THE CONCEPT WHEN GROUPED
BY NUMBER OF CHILDREN

* * * * * * * * * * * * * * * * * * * *	Pre-School	ol Children	jaj.	•
ý.	., none	one	two	three
nost aspects	28.7	39.4	100.0	100.0
some aspects	40.4	33:3	00.0	00.0
no aspects	30./9	27.3	00.0	00.0
	f=100.0%	f=100.0%	f=100.0%	f=100.0%
· · ·		•		
		igh School	Children	
		- · · · · · · · · · · · · · · · · · · ·	Children two	three
nost aspects	Junior-H	igh School		three 00.0°
	Junior-H	igh School one	two	

Table 12

OPINIONS TOWARDS METHOD OF POSSIBLE IMPLEMENTATION
OF THE FOUR-DAY WORK WEEK

Question	, Answer	
f the four-day school week were to be		•
dopted in R.J. Scott Elementary School:	YES	NO
. Should it be only experimental?	98.5%	1.5%
. Should the parents be consulted first?	94.9% 87.4%	5.1% 12.6%
regularly #	1	12.0/8
. Should it be adopted in all schools		_
in one area at the same time?	83.8%	16.2%
. Should there be a special recreation		, <b>1</b>
program on the extra day?	76%	24%
run by the City?	15.3%	84.7%
run by the School?	20.3%	79.7%
other?	5.9%	94.1%
. To what school level should the change		
begin (if only possible at one)?	n n	
elementary?	58.2%	41.8%
junior high?	14.8%	85.2%
senior high?	27.0%	73%
. What day should be unused:	35	*
Monday?	49.6%	50.4%
Wednesday?	5.7%	94.3%
Friday?	44.9%	55.1%
. How should the day be lengthened:		
start earlier?	11.5%	88.5%
end later?	25.4%	74.6%
both?	63.1%	36,9%

felt that, in a modified school week, the school day should be lengthened at both ends.

#### SUMMARY

Less than half of the families polled favored most aspects of a modified school week. However, according to the opinionnaire results only one-quarter of the respondents favored no aspects of the idea.

Most parents felt that the concept, if introduced, would cause significant changes in their family life. Some of these changes, of course, would be beneficial, especially as regards appointments with professional people. The general opinion seems to be that there would be only slight change in the overall family routines, but significant changes in the daily lives of the children. As expected, those parents who favored most aspects of the proposal consistently viewed the resulting changes in family routines more positively than did parents who were less in favor of the change.

#### SUMMARY AND DISTUSSION OF THE FINDINGS

In the previous chapter the results of the opinionnaire administered to parents have been analysed and presented. In this chapter the information so derived is reorganized to parallel the sub-problems listed in Chapter 1. In this way the research findings are summarized and at the same time the opportunity is taken to provide additional commentary where such appears to be warranted.

## Introduction of the R. J. Scott Proposal

The review of the literature has indicated that in the majority of cases the idea for the implementation of a four-day work week originated with the employer. Employers favored the idea because of the direct benefits of improved production and reduced personnel problems. In most cases, the employees accepted the change because it meant an increase in usable leisure time with no reduction in pay.

In R. J. Scott Elementary School, the staff reached an opinion among themselves and then questioned the parents about the proposal, in the ballot of January 16, 1973. If a majority of the parents had favored the concept, the staff would have proceeded with an application to the School Board for permission to change the school week. One of the questions on the opinionnaire sent to the parents was whether or not they approved of the means by which the proposal was made; 64.3% of those who responded found the manner of the

proposal agreeable. Whether this agreement was with the fact they had an absolute veto with the vote or with the total proposal is a matter of conjecture. Nevertheless, the problems that were discussed as part of the legal barriers to a four-day, school week suggest that the School Board should have been approached before the matter was taken to the parents. As explained in Chapter 3, application to the Board of Industrial Relations to modify working hours must be made jointly by the teachers and the School Board; if the Board does not accept the proposal, it cannot be even considered.

on the other hand, consulting the parents first may have a special advantage. In the R. J. Scott Elementary School case, had the parents been in favor of the concept their approval might have had an influence on the School Board's decision. At the meetings, the parents were presented with two lists of possible results of the implementation of a modified work week. However, no attempt was made to enhance any of these results as advantages nor was there much done to explain how the disadvantages could be limited or reduced. Of paramount importance was the fact that the effect on the students was not explored fully.

In view of the failure of the proposal, it is useful to specualte on why it was not approved.

One factor in the R. J. Scott Elementary School proposal was the short time from the presentation of the concept to the parents (January 12) until the vote concerning the implementation (January 17). Between these dates, on January 15, was the only meeting between the staff and the parents. Those who did not attend the meeting were not able officially to receive direct,

verbal information from the staff and had to vote on the basis of the information in the bulletins as it affected their personal views.

The majority of parents likely had little exposure to the concept of the four-day school week before the proposal was made.

As a result they preferred to remain in the situation they were familiar with rather than try something new.

The last factor affecting the failure of the R. J. Scott Elementary School proposal was that it arose from, and involved, the staff of only one school. R. J. Scott graduates students into junior-high school, which in turn graduates students into high school. Therefore, parents of the children here could have other children in both junior and senior high schools. This means that if R. J. Scott Elementary School went onto a four-day school week many families could have children on quite different school schedules.

## Preferences for Administrative Arrangements

The respondents to the opinionnaire indicated some very definite opinions about the administrative arrangements necessary for the implementation of a four-day school week. They were very definite that they would have preferred the implementation of the concept in all the schools in the area, and not just in one elementary school. They indicated that if only one school utilized this concept, it would be a definite disadvantage. This disparity of timetables was mentioned in regard to the effect of the change on family routines, but is also a problem because of children in the same area who go to different elementary schools.

As to the actual structure of the modified work week, most respondents indicated that they would prefer the removal of Monday from the school week. However, Friday was also very popular and only slightly less preferable than Monday. The removal of Monday from the school week would necessitate some adjustments for those weeks when Monday is already a holiday. If Friday were the day removed from the school week, this problem would be much less frequent.

The remaining days would have to be lengthened in some manner. The parents indicated that they would have preferred to have the school day commence earlier and end later. Also, there was some indication that if the lengthening of the school day could have been kept to a minimum through the use of reduced breaks this would have been acceptable. Possibly the parents felt that their children would have had enough time to play with friends on their extra day away from school, and therefore did not object to the curtailment of recesses and lunch hours.

type of program on the extra day from school. They were alightly in favor of non-compulsory attendance, although a sizeable minority indicated that mandatory attendance was preferable. They wanted the program to be the responsibility of both the school and the Parks and Recreation Department of the city. Also, there was a stated preference for some parental input into the program offered, at both operational and administrative levels.

The parents indicated that they wished to be consulted about all phases of the implementation of the concept if it were

adopted. They felt that they should also have some control over the actual structure of the proposal as well as representation on any committees struck to review any aspects of the concept. One of the possibilities of the program about which the parents were very definite was that it should be experimental, and subject to periodic review, by parents as well as staff and administrators.

After this initial experiment it would have been necessary to decide whether or not to continue with the modified school week or to revert to the original system. The parents would have to participate in this decision, because one of the major areas of concern is the effect of the change on students, and on their families.

### Probable Effects on Tank

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The parents the opinionnaire indicated that they foresaw some very real effects on their family lives.

One effect, which they considered an advantage, was that appointments could have been arranged on the extra day off from school. They also felt that their children would have had more time to engage in recreational activities on that extra day off from school. However, the parents who were in favor of the concept felt that their children would have done more reading, and spent more time on homework or in various organized recreational activities. The parents who were not in favor of the concept felt that their children would have watched more television and played more at home and with friends, on the extra day off.

Because the longer school day would have necessitated an earlier departure for and return from school, parents felt that both eating and sleeping patterns would have changed. Either the

family would have had an earlier breakfast or the students on a modified school week would have eaten alone before the rest of the family. Dinners may have had to be slightly later, but most families felt that this change would not have been significant. The parents felt that their children would probably have been more tired after the longer school day, and this would have resulted in an earlier bedtime. Also, a likely result would have been most students sleeping later in the morning on their extra day from school.

These changes could also have had an effect on the amount of time parents spent with their children. The parents indicated that they felt that the time they would have been able to spend with their children in other schools would have decreased. This was seen as a marked disadvantage. They indicated that the time spent with other children and the time without any children would probably not have changed appreciably.

# Immediate Outcomes and Future Prospects

The immediate result of the teachers' proposal for R. J. Scott Elementary School was their approaching the parents to engage their support for the change. With this support, it was felt, the proposal could have been presented to the School Board. However, the a priori level of support of 66 2/3% was not received (approximately 45% of the parents approved), so the proposal went no further.

The opinionnaire indicated that a large majority of the respondents felt that, even though they had rejected the proposal, they saw that the idea of a modified school week was inevitable.

This awareness on the part of the parents could have been the result

of a realization of the history of "work weeks," or familiarity with it in fields other than education, or a combination of these. The question that thus arises is why, five years later after the R. J. Scott Elementary School proposal, there seems to be no more interest in examining the modified school week. To suggest answers to this, it is necessary to examine current influences on the education system, which might support of detract from the concept of the modified work week.

The largest single force affecting education in Canada in the recent past has been economic. In Alberta, this pressure has been exerted from two distinct directions. The first has been the imposition by the federal government of wage and price guidelines. Second has been the imposition, by the provincial government, of a 12% ceiling on the increase in the basic grants to school boards. Both of these have affected teachers' salaries, which is one of the largest expenditures of a school board.

Educational organizations are generally found to be laborintensive. This means that the largest portion of their budgets is utilized to pay the salaries of educators. An example of this is the fact that for the 1975 fiscal year the total Edmonton Public School Board Revenue was \$106,037,000.00 of which \$76,791,094.00 or 72.6% was for the salaries of educational personnel.

A review of the Anti-Inflation Board rulings for 1975
would indicate that an increase of approximately ten percent would
be the maximum allowed in negotiations with teachers and their
representatives. It appears, then, that School Boards will continue
to face restrictions on their revenue, and will not be able to offer

increased salaries as an inducement in hard-to-staff areas. Thus they are being forced to use other means to attract teachers.

Another factor which has had a direct effect on education economics is the limit, approximately 12%, imposed on grant increases to the school boards from the provincial government. This has had the same effect as the wage and price controls, and could alwayst be seen as a provincial extension of the federal program. Therefore, it would seem that even without wage and price controls increased salaries could not be used as a motivational tool in hard-to-staff areas.

However, there are other factors which also act against the movement towards the use of a four-day work week as a possible incentive for employment.

At the present there is a surplus of teachers, if we compare the rate of increase of teachers with the rate of increase of available positions. Second, there is a decreasing enrollment in most school districts. These two factors combine to make every teaching job more attractive. This limits the necessity of a School Board's having to increase the attractiveness of jobs by incentives such as a four-day work week.

#### Relationships Between Data Variables

It is necessary to examine whether or not there are correlations between the answers on the opinionnaires. A review of the statistics indicated that there were a number of significant relationships between the answers to major sections of the opinionnaire. One of the most important was that between the percentage of parents who voted for the original proposal, and the percentage of

opinionnaire respondents who were in favor of most aspects of the concept. This relationship was consistent throughout the opinion-naire questions. This group saw few disadvantages from the implementation of the proposal. The group that was pivotal was that which favored some aspects of the concept. If they had been convinced of the advantages of the concept and voted for it a level of approval of at least 66 2/3% could have been attained.

There was also a relationship between family size and the parents' general attitude towards the concept. Usually, the larger the family, the more likely the parents were to favor the concept. This was consistent for all families except those who had children in junior high school. They, as a group, were in favor of no aspects of the concept.

#### Summary

In summary, it was found that there were some probable reasons for the failure of the R. J. Scott Elementary School proposal. These included the teachers' failure to emphasize the advantages to be gained, and the shortness of time between the presentation of the proposal and the vote.

Assuming the implementation of the concept, the respondents preferred that either Monday or Friday be the extra free day, that school start earlier and end later, and that school-time breaks be shortened. Also, there should be a specific recreational program for that extra day off. The parents indicated that they wanted to have considerable input into these and all other decisions concerning the modification.

The parents felt that sleeping and recreational activities

would be most affected by the implementation of the concept. The proposal was defeated but, it was felt that the four-day work week would be established some time in the future. The more children the parents had the more they were in favor of the concept except where a family had junior-high school children where they tended to favor none of the aspects of the concept.

#### Chapter P

## SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter synthesizes what was learned from the review of the precedents for a modified work week in business, industry, government and education and the insights gained from a survey of a particular informed group. This synthesis is based on objective results. However, since it involves extrapolation from the present situation into the future, it entails some conjecture and, of necessity, subjective judgement. The interpretation does, however, follow the over-all guidelines established as the frame work of the total study.

#### **SUMMARY**

This study sought to examine the concept of the four-day work week in education. It was concerned, particularly, with the case of the R. J. Scott Elementary School where the implementation of the concept was proposed to the parents of the students attending the school, who rejected it.

The concept of the four-day work week as a departure from tradition was established after a literature search, which outlined the historical perspective of the work week. Work patterns were traced from ancient Roman and Greek civilizations through Feudal times, the Industrial Revolution and finally into industrialized North American society, to show that the very concept of a "work week" is recent. This historical perspective indicated that hours

and habits of work have been changing since the time of ancient Rome and Greece, and that the four-day work week is just another step in an evolutionary process.

The literature from organizations utilizing a modified work week was then reviewed and organized into three main areas. These areas consisted of the method of implementation of the modified work week, advantages and disadvantages of the concept, and the results of experiments with it. Also, there was special attention given to the experiment in the Unity, Maine School Administration District; this was found to be the only educational institution using a four-day work week and as such warranted special consideration.

The information from this review of the literature provided the basis for the construction of a Frame of Reference, which was subdivided into the feasibility and the anticipated effects of the implementation of the concept. The concept was deemed feasible after consideration of the areas of legal implications, structural implications, traditions and costs. A study of costs involved not only the feasibility but also the anticipated effects of the change. The examination of effects also dwelt on the effects on clients, employees, and school curriculum. The information concerning the anticipated effects of implementation on family routines was available only from the opinionnaire. The information concerning the feasibility was derived from an extensive review of the literature relating to the four-day work week in business, industry and government.

In order to examine the parents' opinions towards various

aspects of the concept an opinionnaire was constructed from the Frame of Reference, It attempted to determine various demographic details about the respondents, their opinions about the effect the implementation of the concept at the school would have on their family lives, the activities they thought their children would engage in on their extra day away from school, the revised timetable which they preferred, and their general opinion towards the concept.

#### CONCLUSIONS

As has been shown in the particular case studied, parents F tend to be ambivalent about a four-day school week, feeling that it has both advantages and disadvantages. In a specific proposal, made by the teachers of R. J. Scott Elementary School in 1973, this group generally rejected the idea. Nevertheless, this does not mean that the general public are rigidly or unequivocally hestile to it. It may be possible to alter the manner of presenting the proposal in such a way that the influential middle group, which holds the balance of power between those for and those against the idea, would be disposed to approve the experimental modification of normal school hours. The review of relevant literature has indicated that people tend to look more approvingly on the concept once they have passed the initial shock of unfamiliarity. Thus it is reasonable to suppose that time will wear away some resistance, as people become acquestomed to this new concept. It is fair) to assume that, in any given area, a majority of the parents may come to favor the proposal.

The fact must be considered that at the time of the proposal by the teachers of R. J. Scott Elementary School there was

no established recreation program to occupy the students' time on the extra free day. Yet a large majority of the parents in that area indicated that they wanted a special program for the extra free day. It appears, then, that many parents resisted the change from a five-day school week because they wanted their children occupied away from home during weekdays. This could be because both parents work approximately the same hours as their children attend school, or it could be simply that it has, through tradition and habit, come to seem natural that the children be away from home. Whatever the reason, this problem could be attacked by a special recreation program in the community, which should not be difficult to establish.

Although the proposal to change the school week was rejected, a high rate of response was generated by both the original proposal and the follow-up survey. Also, a majority of the parents indicated that they wanted to be involved in any decision before the implementation of such a program, and regularly through its experimental stages. This meant that the parents were concerned about what was happening in school. This fact underscores the importance of involving parents in any proposal to change the structure of education. There were several distinct advantages of a four-day school week, and these must be examined in order to assess the future possibilities for the concept.

The first question that should be examined is the administrative one of staffing a school. The proposal to change the school week was initiated by the teachers at R. J. Scott Elementary School. In every province, there are some school boards who suffer (sometimes extreme) staffing problems. However, since most

employees have seemed to feel that the advantages of a modified school week outweigh the disadvantages, this modification could be used as an incentive to attract teachers to those especially hard-tastaff schools. This factor is perhaps less significant in the present economic situation, when jobs are more scarce than usual. The modified school week could also help to solve some of the budgeting problems which many school boards face yearly. There can be an actual saving in the costs of school maintenance and transportation, possibly up to 20%. This aspect of budgeting is particularly applicable to rural schools. However, there are ways in which the modified week could also benefit urban school boards through the extended use of facilities.

Another alternative in which the four-day school week would be useful is in a pre-vocational or work-oriented program. These programs often require the student to spend time away from the school, in training that constitutes a credit course. These programs could easily be adapted to a modified school week, so that the regular teachers work four days a week even if the school week is still five days. The students could then devote the fifth day to those specifically vocational aspects of their education.

Other possible student benefits of the four-day work week could arise from the fact that there are many student projects which require information from extra-mural sources, specifically public and university libraries. These are often intensive and lengthy projects, which the student could more readily undertake if he had one full day a week to give to this activity. Many special facilities are much less busy on week days than on the weekend, so

a school-free day would be doubly useful to the student.

The modified school week could also benefit the student in other ways; there are certainly many who could function more easily on a four-day week. Many could use the extra free day helping at home or in a family business, or working a part-time job in order to save money for post-secondary education.

Another fruitful possibility allows for the teachers to work on a four-day schedule, even though the school operates for the normal five days. By the selective scheduling of classes, the administration could arrange all academic activities during the four days when the teachers involved in those areas worked. The fifth day could be devoted to special activities such as inter-mural and inter-scholastic recreation programs, and elective courses such as arts and crafts, band, etc. By this arrangement the teachers could work on a four-day week, without disrupting the accustomed routines of students and their families.

#### RECOMMENDATIONS .

It cannot be denied that, as the work week in North America grows shorter, the school week is likely to undergo similar changes. In view of this, there are many areas where further research could be useful. There is room for surveys and experiments like that at R. J. Scott Elementary School, which could be based on a broader segment of the population.

Surveys like that conducted at R. J. Scott Elementary
School could also deal more specifically with the opinions of school
board members, as well as of teachers and parents. It may be

fruitful to survey the students affected, although this should probably be restricted to junior and senior high schools. Opinion-naires to students may help to determine more exactly what type of activities, recreational, vocational and educational, the children would prefer on the extra free day.

Another area of major concern is the effect that working only four days out of seven would have on the performance of both students and teachers. Related to this is the inquiry whether the student's learning process would be hindered or enhanced by a longer school day.

Another study which would be valuable is a specific analysis of the effect of a modified school week on the cost of school operation. This could best be done by an examination of the past budgets and projected future budgets of particular school boards. It would be wise to examine both rural and urban school boards, since the effects of changing the school week may vary in different settings.

BIBLIOGRAFHY

#### BIBLICGRAPHY

- Ackerly, R. L.
  1973 "The Alberta Gazette," Part 1, published by Authority,
  Volume 69, Number 1, Edmonton, Monday, January 15,
  pp. 154-162.
- Ackerly, R. L.

  "The Alberta Labour Act," Chapter 196 of the Revised
  Statutes of Alberta, 1970 with amendments up to and
  including June 2, 1972, Part 5, Labour Relations,
  pp. 34-37.
- Brewster, Albert J.

  1972 "Less School Better Learning; The Four-Pay School Week,"

  Maine School Administration, District Number Three,

  Presented to the General Subcommittee on Education,

  Committee on Education and Labor, House of Representatives,

  Congress of the United States of America, April 24.
- Brewster, Albert J., Jr.
  1971 "The Four-Day School Week," September 20, 1971.
- Brewster, Albert J., Jr. and Day, David 1971 "Responsibility, Responsiveness, Results."
- Burrow, Edward E. and Leslie, Edmund

  1972 "The 4-Day, 40-Hour Neek One Year Later," Hospital

  Progress, July, pp. 33-42.
- Carson, Susan

  1972 "The New Look in Working Hours; I) The Four-Day Week is

  Here!; II) Europe Turns to 'Flextime'," Weekend Magazine,

  September 23.
- Coughlin, Howard

  1966 "A Union President Makes a Case for...The Four-Day Office

  Week," Personnel, Volume 43, Number 3, May-June, pp. 46
  50.
  - Cray, Douglas W.

    1969 "A 4-Day Work Week? Economist Favors 3," New York Times,
    September 25.
  - Daeschel, Werner F. O. and Jeanotte, M. Sharon

    1972 "Hospitals and the Four-Day Work Week," Hospital Administration in Canada, January, pp. 28-39.

- Davis, William Stearns
  - "The Slaves," A Day In Old Athens, A Picture of Athenian Life, Biblo and Tannen, New York, pp. 51-56.
  - "The Schoolboys of Athens," A Day In Old Athens, A
    Picture of Athenian Life, Biblo and Tannen, New York,
    pp. 63-76.
- Davis, William Stearns
  - 1923 "Life on a Mediæval Barony.".
  - "The Education of a Feudal Nobleman," Life on a Mediaeval Barony, Harper and Brothers Publishers, New York and London, pp. 176-188.
  - "The Life of the Peasant," Life on a Mediaeval Barony, Harper and Brothers Publishers, New York and London, pp. 253-274.
- Downing, Peter R.
  - "A New Workweek is Coming, Ready or Not," The Canadian Personnel and Industrial Relations Journal, Volume 19, December, pp. 18-25.
- De Marsh, Kathleen G., and McLellan, Elsie I.

  1972 "The Seven Night Fortnight," The Canadian Nurse, Volume
  68, January, pp. 37-38.
- Demarino, Guy
  1973 "Munro Cool to Shorter Work Week," Edmonton Journal,
  Thursday, February 8, p. 9.
- Drummond, Robert
  1972 "Preliminary Report," Research and Evaluation Team,
  June 12.
- Duggan, Alfred Leo
  1964 The Romans, World Publishing Company, Cleveland.
- Duggan, Alfred Leo
  1962 Growing Up in the 13th Century, England, Pantheon Books,
  New York,
- Earle, G.

  1971
  "The 35-Hour Week and the Reallocation of Those Hours
  From 5 to 4 Days," Inter-Departmental Correspondence,
  to A. D. Cairns, Registrar, University of Alberta,
  November 23.
- Edmonton Journal
  1973 "Modified Work Week Backed," Canadian Press, Friday,
  February 2, p. 15.

- Farina, John
  1972 "Hours of Work," Paper presented to Oil, Chemical and
  Atomic Workers Union, January 29, Skyline Hetel, Toronto,
  Ontario.
- Ferguson, George Andrew
  1971 "Statistical Analysis in Psychology and Education," New
  York, McGraw-Hill Book Company.
- Ferguson, George A.

  1966 "Statistical Analysis in Psychology & Education,"

  Psychological Test and Multivariate Statistics, McGrawHill Series in Psychology, pp. 347-361.
- Field, Paul L.

  1969 "The Three-Day Workweek and the Six-Day Company,"

  Business Management, Volume 36, September, pp. 25-29,

  72-73.
- Forrest, W. F.

  1972 "Before Going Too Far in Development Consider the Options
  IM--Scheduling the Four Day Work Week," Canadian
  Hospital, Volume 49, Number 3, March, pp. 63-65.
  - 1969 "Four Day Work Week Yields Unexpected Dividends," Plant Operating Management, August, pp. 42-43.
- Hedges, Janice Neipert

  1971 "A Look at the 4-Day Workweek," Monthly Labor Review,
  Volume 94, Number 10, October, pp. 33-38.
- Hiron, D. W.
  1971 "Report on Extended Workweek Experiment," Training and
  Development Branch, Personnel Department, The City of
  Edmonton, September.
- Hiron, D. W.
  1972 "Report No. 2 on the Extended Workweek Experiment,"
  Training and Development Branch, Personnel Department,
  The City of Edmonton, March.
- Hoffman, Eileen
  1972 "The Four-Day Workweek Raises New Problems," The
  Conference Board Record, Volume 9, February, pp. 21-26.
- Horton, Marc
  1971 "The Best of Both Worlds," Edmonton Journal, Thursday,
  June 3, p. 55.
- Houghton, W. F. 1935 "Soldiers of Sparta," Greeks and Romans, pp. 34-39.

- Janssen, Richard F.

  1961 "The Short Work Week, It has Been Tried at Kellogg's .

  With Mixed Results," Wall Street Journal, January 10, p. 18.
- Kaplan, Abraham

  1964 "The Conduct of Inquiry; Methodology for Behavioral Science," Chandler Publishing Co. San Francisco, pp. 131-134.
- Kleinschrod, Walter A.

  1971 "The New Hours," Administrative Management, Volume 32,
  March, p. 18.
- Langholz, Bernd
  1972 "Variable Working," Journal of Systems Management, Volume
  23, August, pp. 30-33.
- Livingstone, R. W.

  1935 "Introduction," Greek Ideals and Modern Life, Oxford
  University Press, London, pp. 1-10.
- Mahaffy, J. P.

  1896 "The Inner Life of the Period," Greek Life and Thought,
  MacMillan and Co. Ltd., New York, pp. 397-419.
- Maxcy, Horace P. Jr.
  1971 A Summary Report: The Four-Day School Week Evaluation.
- Maxcy, Horace P. Jr., Natale, Anthony J., McGary, Carroll R.

  1972 "Community Survey of School Administrative District Three,"
  A Report on the Community Survey of School Administrative
  Three, Prepared by Office of Planning, Evaluation and
  Research, January 1, and January 19.
- McClure, C. H.; Scheck, Charles C.; Wright, W. W.

  1938 "Life in the Castle," "The Serfs," The Middle Ages,
  Laidlaw Brothers, U.S.A., pp. 104-134.
- Mills, Dorothy
  1925 The Book of the Ancient Greeks, G. P. Putnan's Sons,
  New York.
- Mills, Dorothy
  1927 The Book of the Ancient Romans, G.P. Putnan's Sons,
  New York.
- Mills, Dorothy, 1935. "Mediaeval Education," The Middle Ages, G.P. Putnan's Sons, New York, pp. 252-262.

- Moore, Geoffrey, H., Hedges, Janice Neipert

  1971 "Trends in Labor and Leisure," Monthly Labor Review,
  Volume 94, Number 2, February, pp. 3-11.
- Moores, Jeoffrey
  1971 "The National Economic Implications of the Rearranged
  Workweek," Presentation to the American Management
  Association, November 1.
- Morrison, Donald M.

  1972 "Is the Work Ethic Going Out of Style," Time, October 30, pp. 67-68.
- Metsaslu, Taimf and Harrison, Gordon F.

  1971 "The Shortened Work Week in Canada Trend or Fad?,"

  Report on the Shortened Work Week, Samson, Belan, Riddell,
  Stead, Inc., October.
- Nadeau, J. R.

  1972 "Let's Be Practical About the Shorter Work Week," Canadian
  Personnel and Industrial Relations Journal, Volume 19,

  December, pp. 26-33.
- Nolan, Jim
  1972 "Advance Planning For An Experiment With Time," Canadian
  Personnel and Industrial Relations Journal, Volume 19,

  December, pp. 37-38.
- Ohler, Robert Bruce
  1969 "Seven-Day Versus a Five-Day Week: A Comparative
  Utilization Analysis," Hospital Topics, Volume 47,
  Number 12.
- Oeslner, Lesley
  1970 "3-Day Work Week is Gaining Favor," New York Times,
  New York, January 4, p. 33.
  - Schedule, Employee Relations Bulletin, Report 1241,
    November.
    - 1971 "On the Way to a Four-Day Week," Time, March 1, pp. 69-70.
- Perret, Eleanor
  1935 "The Industrial Revolution," Effects of the Industrial
  Revolution," Man's World and Work, pp. 171-233.
- Phillips, Charles Edward

  1938 "The Education of a Spartan Boy," Chapter 21, pp. 55-59.

  "Social Classes of Sparta," Chapter 22, p. 59,

  "A Philosopher's View on Education," Chapter 51, pp. 134
  135, The Orient and Greece, J. M. Dent & Sons (Canada)

  Ltd., Toronto.

Poor, Riva
1970 "4 Days, 40 Hours, Reporting a Revolution in Work and
Leisure," Paul A. Smuelson (ed.), Cambridge,
Massachusetts.

Prideaux, Ann Apel

"Shorter Work Week," Extension Bulletin, Prideaux,
Ann Apel, Editor, Volume 4, Number 1, March, p. 4.

"Professional Women Seek Jobs With Five-7 Hour Work Day,"
Employee Relations Bulletin, July 22, Report Number 1202.

Robinson, C. E.
1933 "Women and Slaves," Everyday Life in Ancient Creece,
pp. 81-89.

Robinson, K. R.

1971 "PSAC Priority - A Shorter Week," Canadian Labor,
Volume 16, Number 11, November, pp. 4, 5, 18.

Rowling, Marjorie

1968

"Lords and Vassals," pp. 31-49, "Schools and Scholars,"

pp. 135-155, "Doctors and Patients," pp. 175-196,

pp. 135-155, "Doctors and Patients," pp. 175-196,

Everyday Life in Mediaeval Times, G. P. Putnan's Sons,

New York.

Scheffe, H.

1959 The Analysis of Variance, New York: John Wiley & Sons,
Inc.

Schnore, Leo F.

1970

"Demography and Human Ecology: Some Apparent Trends,"

The Anals of the American Academy of Political and

Social Science, Volume 390, Number 32, July, pp. 120
128.

Schreiner, John
1972 "Compressed Work Week Heading for Showdown," Financial
Post, October 21, p. 19.

Siegel, Sidney
1956 "Nonparametric Statistics for the Behavioral Sciences,"
New York, McGraw-Hill, p. 9.

Slichter, Sumner

1959

"How the Four-Day Week Would Affect U. S. Marketing,"
Printers Ink, Volume 269, October 9, pp. 68-69.

Stanton, Ted

1969 "The 4-Day Week Gives 40 New Yorkers Time to Loaf and
Moonlight," Wall Street Journal, July 10, p. 41.

- Stetson, Damon
- "Abel Asks Organized Labor to Strive for 'Imperative' 4-Day Work Week," The New York Times, New York, September 1969 26, p. 85.
- "Page, Squire and Knight," pp. 1-18, "Life on a Manor," Tappan, Eva March pp. 102-123, "Schools and Literature," pp. 276-312, 1911 When Knights Were Bold, Houghton Mifflin Company, Boston and New York.
- "The Forty-Hour Work Week, Should It Be Cut?," Business T962 In Brief, Number 42, July-August.
- "The Four-Day Work-Week," Canadian Labor, Volume 16, 1971 Number 11, November, pp. 2, 3, 13.
- "The Seven-Day Week Is Not a Step Back, Happy Workers Say," The Wall Street Journal, March 23, p. 10.
- "Four Day Weeks Gain Popularity," Edmonton, Journal, Tompkins, John 1973 Saturday, January 20, p. 60.
- Quotations From Chairman Mao Tse Tung, Foreign Language Tsetung, Mao 1972 Press, Peking, pp. 204-205.
- "The School in 1980." Education Canada, Volume 10, Wallin, Herman 1970 Number 1, March, pp. 21-28.
- "Webster's Seventh New Collegiate Dictionary, Philip B. Webster, A. Merriam 1970 Gove (ed.).
- "Small Business Eyes the Four-Day Workweek," Management Wheeler, Kenneth E. memo in Harvard Business Review, Volume 48, May-June, pp. 142-147.
- Wheeler, Kenneth E.; Gurman, Richard; and Tarnowieski, Dale "The Four-Day Work Week," American Management Association Research Report, American Research Inc. 1972
- "Worker Attitudes About Industrial Democracy," Canadian White, Terrence H. Personnel and Industrial Relation's Journal, Volume 19, (j**1972** December, pp. 39-43.

1971 "Why the Work Week Pattern is Changing," Business Week, March 13, pp. 108-109.

Worth, Walter H.

1972 "A Choice of Futures," Report of the Committee on
Educational Planning, The Cabinet Committee on Education,
Province of Alberta, Canada.

Zsigmond, Z. E. and Wenaas, C. J.

1970 . "Enrolment in Educational Institutions By Province 1951-52 to 1980-81," prepared for the Economic Council of Canada, Staff Study, Number 25, January.

APPENDIX A COVERING LETTER

Dear Parents,

Due to the attention given to the modified work week at R. J. Scott I have become interested in the idea of the four-day work week as the research topic for my Masters' degree in Education. The questions on this opinionnaire have been developed as a result of discussions with a number of people, together with ideas expressed in articles which have been written on the subject. The purpose of the opinionnaire is to determine the opinions of parents who have had some experience with the idea.

You are requested not to put your name on the opinionnaire; this is to insure that your responses will remain anonymous. Despite this, if there are any questions which you feel are an invasion of your personal or family privacy, please feel free to leave them blank.

Consent has been obtained to distribute the opinionnaire to parents, as people concerned with any possible changes in school operations. Also, you have been selected due to your having been exposed to the idea of the modified work week in schools. It is hoped that all parents will respond.

Thank you very much for your time. It will be greatly appreciated if you will fill out this opinionnaire and have your child return it to school.

Alvin K. J. Solinski

## APPROVAL OF THE STUDY

Permission to carry out this study has been obtained from both the Edmonton Public School Board and R. J. Scott Elementary

The results should provide useful information although the School. Edmonton Public School Board is not obligated to use them to determine future policy decisions.

Sponsorship by the Edmonton Public School Board and the R. J. Scott Elementary School is limited to the granting of permission to carry out the study.

APPENDIX B
OPINIONNAIRE

## PART 1 FAMILY SITUATION BACKGROUND

This section deals with particular aspects of your family situation. The information is required to find out if background characteristics affect opinions about the modified work week. Please respond to the following questions by either circling the letter preceding the response you have chosen or filling in the necessar

1.	The age of the older parent is:	.29 C. 30-34
-	A. Under 25 B. 25-	
	D. 35-39 E. 40-	
	G. 50-55 H. Ove	<b>(C.</b> 55)
2.	Your marital status is:	
~•	A. Married B. Div	vorced or Separated
	C. Widow or Widower	
		8
3.	Pre-school age children:	Age (in years
J•	If none, leave blank.	
	II hono, Iour	Sex
		DOX.
		Age (in years)
4.	Children in elementary school:	was (Im Journ)
	If none, leave blank.	
		Sex
2	Children in junior high school:	Age (in years)
5.	If none, leave blank.	
	II Hone's Torre	Sex
		DGY.
	• Lead and all	Amm (in years)
6.	Children in senior high school:	Age (III Jours)
48 A	If none, leave blank.	
		Sex
7.	The employment status of the adv	ult members of this lamily is:
( •	A Hughand only captoyed	D
	C. Husband and wife both employ	ed D. Husband employed full time
	full time	and wife employed part time
	E. Other	
8.	If applicable please indicate h	ow your pre-school age children
0.	are cared for during the day:	
	A. At home by the mother	B. At home by someone other
	A. At home by	than the mother
	C. Outside the home by the moth	er D. Outside the home by someone
	G. Outback	other than the mother
. 0	How interested were you in the	modified school week as proposed
9.	Dw D I SCOTT	- 11
•	A. Studied the proposal careful	TA B. Grae me broboss
		Terra mana about it
	C. Didn't really know the detail	ils D. Knew little more about it than the name

of the proposal

than the name

4

## PART 2 EFFECTS ON FAMILY LIFE AND FAMILY ROUTINES

R. J. Scott School the children attending that school would be affected directly, but the child's whole family would probably be affected indirectly. This section deals with your opinions as to how you feel your family life and family routines might be affected. It also deals with your opinions as to whether these changes would be advantages or disadvantages. For each question please circle one of the following choices according to your opinion as to whether or not the change would likely occur in your family (Y - Yes; N - No). Then, circle one of the next choices to indicate your opinion of whether this change would be an Advantage, Disadvantage, or of No Consequence, to your family.

		YES NO ADVANTAGE DISADVANTAGE WONSEQUENCE
1.	We would try to arrange for our children to see the doctor, dentist, etc. on their extra day off from school.	YNADNC
2.	Our family would try to engage in leisure activities such as camping or travelling to a greater extent due to the children having an extra day off from school.	YNADNC
3.	We would try to schedule our children's recreation activities such as swimming or dancing on their extra day off from school.	Y N A D NC
4.	Our children would probably go to bed earlier during school days than they do now, due to the longer school day.	Y N A D NC
5.	The amount of time that we, as parents, would have with our children enrolled in other schools would decrease. (Leave blank if not applicable).	Y N A D NC
6.	The amount of time that we, as parents, would have with our pre-school children would decrease. (Leave blank if not applicable).	YNADNC
7.	We would likely do more of our shopping on the day that our children are home from school, than we do now.	YNADNC
8.	a greater extent on this day that our children have our from school.	Y N A D NC
9.	Due to the longer school day and the necessity of having our children leave for school earlier and/or coming home later our eating routines would probably be changed.	YNADNC
10.		YNADNC

· · · · · · · · · · · · · · · · · · ·	PART 2 (continued)	Ø		VANTAGE	SADVANTAGE	NSEQUENCE	•
	<b>~~1</b>	KE	윌	7	<u> </u>	<u>⊋</u> 8	
11.	Our children would probably sleep-in on the extra day off from school.	Y	N	A	D	NC	•
12.	Family income would probably be reduced (for example: a parent being able to spend less time working, or the necessity of hiring a baby-sitter for the extra day that the children have off).	Y	n	A	D	NC	
13.	The total time that we as a family spend together would probably increase.	Y	N	A	D	NC	
14.	The total time that a husband and wife have together	7, <b>Y</b> .	N		מ	NC	

#### PART 3 EXTRA DAY ACTIVITIES OF CHILDREN

without the children would probably decrease.

Y N A D NC

If the modified work week in schools were to be put into effect a number of changes might occur. One of these is that your children would have one less day at school than they do now. This section deals with what you, as parents, think your children would do with this extra time. Listed below are a number of activities that your child could take part in. Please indicate after each activity the percentage of time that you feel your children would spend at that activity if they had this extra day off from school. (Approximate to the nearest 5%; i.e. 0%, 5%, 10%, etc.).

ACTIV	<b>TTY</b>	PER CENT
1.	Watching television	
2.	Doing chores around the house	
3.	Play activities at your home (indoors and outdoors)	
4.	Play activities away from your home (indoors and outdoors)	
5.	Reading	
6.	Doing school work	
7.	Leisure or recreational activities with parents	
8.	Organized leisure activities (eg. music lessons or hockey)	•
.9.	Participating in a hobby	
10.	Other (specify)	100%

#### PART 4

Please indicate your response to the following questions by circling the letter preceding your choice.

- If the modified work week in schools were put into practice 1. the one day that should be removed from the regular school week is: C. Wednesday B. Tuesday Monday F. A different day E. Friday Thursday each week
- If the modified work week in schools were to be put into practice 2. it should be done so on an experimental basis, with periodic review. B. No Yes A.
- If the modified work week in schools were to be put into practice 3. it should, be done in all the schools in the area at the same time (elementary, junior and senior high). B. No A. Yes
- If the modified work week were to be put into practice, initially 4. at one level that level should be: C. Senior High B. Junior High A. Elementary
- If the modified work week were to be put into practice do you feel that the parents should be consulted before going ahead? . . 5. B. No A. Yes
  - If the modified work week in schools were to be put into practice do you think that the parents should be consulted regularly during 6. the experiment? В. No A. Yes
  - If the modified work week in schools were to be put into practice 7. the school days should be lengthened by: A. Starting earlier B. Ending later P.C. Both
  - If the modified work week in schools were to be put into practice there should be a recreation program established for the 8. . students for the extra day. B. No A. Yes
  - The recreation program referred to above should be the responsibility 9. of: B. The school The Parks and Recreation Dept.

**A.** C. The School Board Other agency (specify)

E. Joint responsibility

- Are you, as a parent, in favor of: A. Most of the aspects of the modified work week in schools 10. B. Some of the aspects of the modified work week in schools C. None of the aspects of the modified work week in schools
- Do you, as a parent, feel that the school week should be changed in any way from its present form? B. No

A. Yes

12. Do you as a parent, approve of the manner in which the modified work week was proposed at R. J. Scott? B. No A. Yes

#### PART 5

The following is a list of statements that sum up the modified work week in schools. Please select the one response to each statement which best expresses your opinion by circling the letter which precedes that response.

- The modified work week in schools is: B. Going to be widely accepted 1. A. A passing fad
- The modified work week in schools, if adopted, will be introduced into Alberta in: B. 2 to 4 years A. Less than two years
  - C. More than 8 years C. 5 to 8 years
- The modified work week in schools is: B. Impractical and useless 3. A. Practical
  - If the modified work week in schools were to be put into practice, 4. to us as a family it would: B. Be a disadvantage A. Be an advantage C. Make no difference
  - If the modified work week in schools were to be put into practice the standard of education for our children woulds B. Deteriorate A. Improve
    - C. Remain the same
  - The answers to these questions were arrived at by: B. Husband only A. Wife only
    - C. Husband and wife together

## PART 6

Up to this point you have been answering specific questions. Now, if there is anything you would like to say about the concept of the modified work week in schools, the method of proposal, or anything about this opinionnaire or the concept of the modified, work week please feel free to use the rest of this page and the back if you wish. Thank you very much for your co-operation.

#### THE MODIFIED WORK WEEK

# PART 1 EFFECTS ON FAMILY LIFE AND FAMILY ROUTINES

If the modified work week were to be put into practice at R. J. Scott School the children attending that school would be affected directly, but the child's whole family would probably be affected indirectly. This section deals with your opinions as to how you feel the family life of your student's families and their family routines might be affected. It also deals with your opinions as to whether these changes would be advantages or disadvantages. For each question please circle one of the following choices according to whether or not the change would likely occur in the families of your students (Y - Yes, N - No). Then, circle one of the next three choices to indicate your opinion of whether this change would be an Advantage, Disadvantage, or of No Consequence to the families of your students.

		YES	ON	ADVANTAGE	DISADVANTAG	NO CONSEQUENCE
1.	Do you feel that the parents would try to arrange for their children to see the doctor, dentist, etc. on their children's extra day off from school.					NC
2.	Do you feel that the families concerned would try to engage in leisure activities such as camping or travelling to a greater extent due to their children having an extra day off from school.	Y	Ŋ	A	ם	nc
3.	Do you feel that the student's families would try to schedule their children's recreation activities such as swimming or dancing on their extra day off from school.		N	A	D	NC
4. 2	Do you feel that the students would probably go to bed earlier during school days than they do now, due to the longer school day.	Y	N	A	D	NC
5•	Do you feel that the amount of time that parents would have with children enrolled in other schools might decrease.	Y	N	A	D	, NC
6.	Do you feel that the amount of time that parents would have to spend with their pre-school children would decrease.	Y	N	A	D	NC
7	Do you feel that the families affected would do more of their shopping on the day that their children would be home from school.	Y	N	A	D	NC

•	<b>.</b>			MAGE	VANTACE	80NSEQUENCE	
8.	visit with friends and/or relatives to a greater extent on the day that their children enrolled in R J Scott	YES	ğ	ADVAN	DISADVANTA	RONS	,
	are home from school.	Y	N	A	D	NC	
9.	Due to the longer school day and the necessity of having their children leave for school earlier and/or coming home later do you feel that their eating routines would probably be changed.		N	A	D	NC ,	i
10.	The families concerned will probably spend more money as a result of their children being home from school one extra day.	•	ų.	ς •		NC	
4.4		I	N	A	'n	NC	
11.	The children will probably sleep-in on the extra day off from school.	Y	N	A	D	NC	
12.	Family income will probably decrease (for example: a parent being able to spend less time working, or the necessity of hiring a baby-sitter for the extra day that the children have off.	Y	n	A	D D	NC	
13.	The total time that the families spend together as a family would probably increase.	Y	И	A	D	NC	
14.	The total time that a husband and wife have together without their children would probably decrease.	Y	N	A	D	nc	

#### PART 2

If the modified work week in schools were to be put into effect a number of changes might occur. One of these is that your students would have one less day at school than they do now. This section deals with what you, as a teacher think your students would do with this extra time. Listed below are a number of activities that the children could take part in. Please indicate after each activity the percentage of time that you feel your students would spend at that activity if they had this extra day off from school. (Please approximate to the nearest 5%).

- 1. Watching television
- 2. Doing chores around the house
- 3. Play activities at their home
- 4. Play activities away from their home

5.	Reading ,
6.	Doing school work
7.	Leisure or recreational activities with their parents
8.	Organized leisure activities (eg. music lessons, hockey)
9.	Participating in a hobby
LO.	Other (specify)
	PART 3
cir	Please indicate your response to the following questions by cling the letter preceding your choice.
1.	If the modified work week in schools were put into practice the one day that should be removed from the regular school week is:
	A. Monday B. Tuesday C. Wednesday D. Thursday E. Friday F. A different day each week
2.	If the modified work week in schools were put into effect it should be done so on an experimental basis, with periodic review.  A. Yes  B. No
3.	If the modified work week were put into practice it should be done in all the schools in the area at the same time (elementary, junior, and senior high).  A. Yes  B. No
4.	If the modified work week were put into practice, initially at one level that one level should be:  A. Elementary  B. Junior High  C. Senior High
5.	If the modified work week were put into practice do you feel that the parents should be consulted before going ahead?  A. Yes  B. No
6.	If the modified work week were put into practice do you think the parents should be consulted regularly during the experiment?  A. Yes  B. No  C. Occasionally
7.	If the modified work week were put into practice the school day should be lengthened by:  A. Starting earlier  B. Ending later  C. Both
8.	If the modified work week were put into practice there should be a recreational program established for the students for the extra day?  A. Yes  B. No

### PART 3 (continued)

- 9. The recreation program referred to above should be the responsibility of:
  - B. The School A. The Parks and Recreation Dept.
  - D. Joint responsibility C. The School Board
  - E. Other agency (specify)
- 10. Are you, as a teacher, in favor of: A. Most of the aspects of the modified work week in schools B, Some of the aspects of the modified work week in schools None of the aspects of the modified work week in schools
  - Do you as a teacher, feel that the school week should be changed in any way from its present form? B. No Air Yes
  - 12. Do you as a teacher, approve of the manner in which the modified work week was proposed at R. J. Scott? B. No A. Yes

#### PART 4

The following is a list of statements that sum up the modified work week in schools. Please select the one response to each statement which best expresses your opinion by circling the letter which precedes that response.

- The modified work week in schools is: B. Going to be widely accepted A. A passing fad
- The modified work week in schools, if adopted, will be introduced into Alberta in:
  - A. Less than 2 years C. 5 to 8 years
- B. 2 to 4 years D. More than 8 years
- 3. The modified work week in schools is: B. Impractical and useless A. Practical
- If the modified work week in schools were put into effect to me as a teacher it would:
  - B. Be a disadvantage A. Be an advantage
  - C. Make no difference
- If the modified work week in schools were put into effect the standard of education for my students would:
  - B. Deteriorate Improve
  - C. Remain the same

#### PART 5

Up to this point you have been answering specific questions. Now, if there is anything you would like to say about the concept of the modified work week in schools, the method of proposal, this opinionnaire, or the concept of the modified work week in schools please feel free to use the rest of this page and the back if you wish. Thank you very much for your co-operation.

## APPENDIX C

NOTICE OF JANUARY 15th, 1973
MEETING OF HOME AND SCHOOL ASSOCIATION

R.J. Scott School, 11610 - 38 Street, Edmonton 21, Alberta January 12th, 1973.

#### R. J. SCOTT HOME & SCHOOL ASSOCIATION

## GENERAL MEETING

#### MONDAY, JANUARY 15th 7:30 - 9:30 P.M.

- I Introduction of your executive and Ad Hoc Committee members:
  - (a) Reports from committees, etc.
- II Presentation of experimental Four (4) Day School Week -Tuesday through Friday (with no loss of instructional time but a longer day) starting February 13th, ending June 22nd.
  - A// Procedures being followed in examining the proposal:
    - 1. Sending home of this notice with points for you to consider for discussion at Monday evening's meeting along with your points of view.
    - 2. Meeting Monday evening January 15th:
      - (a) Mr. Brian Plesuk of the City's Parks and Recreation Department will speak briefly on services his department can offer you and your children on the Monday school would be closed.
      - (b) Mr. Hubick will speak on advantages and disadvantages of the 4-day week.
      - (c) Parents will divide into groups with a teacher in each group to discuss the pros and cons of the proposal.
      - (d) The groups will report back to the assembly after discussions are over.
    - NOTE: We will not be debating or arguing the issue. We simply would like to have your views made known to everyone.
    - N.B. No decisions will be made at the meeting.

- B// Procedures to be followed in voting on proposed experimental 4 day week:
  - 1. Ballots along with points to consider as discussed at the meeting, will be sent home Tuesday, January 16th at 3:35 to every parent in the school.
  - 2. Ballots will be returned and counted on Wednesday afternoon by members of the Home and School Association.
- C// If the proposal is turned down by more than 33 1/3% of the parents, things will remain as they are.
- D// If 66 2/3% of the parents are in favor of the 4 day week, the proposal will be forwarded to the School Board for ratification at their January 23rd meeting.
- E// If the School Board turns us down, then things will also remain as they are.
- F// If the School Board agrees to let us proceed, we begin the week of February 11th and finish June 22nd so we may have a cross section of winter, spring, and summer to try it in. It will be re-examined at this time to determine if it will continue in the '73 '74 school year.

Our days would be Tuesday through Friday.

Our hours would be: Mainly academic prog. (A.M. start 8:25 - 10:10 - 3 periods
(A.M. recess 10:10 - 10:25
(after recess 10:25 - 12:10 - 3 periods
Noon - 12:10 - 1:35 - no change in length
(P.M. start 1:35 - 2:45 - 2 periods
(P.M. recess 2:45 - 3:00 (after recess

3:00 - 4:10 - 2 periods

Mainly fine arts: phys. ed., susic, etc.

Total instructional time in week does not change. The day is longer by two periods.

Grade I afternoon will be from 1:35 to 3:05.

PLEASE ATTEND THE MEETING TO MAKE YOUR VIEWS KNOWN!

APPENDIX D

POINTS TO CONSIDER FOR

JANUARY 15th, 1973 HOME AND

SCHOOL ASSOCIATION MEETING

Points for you to consider with the longer day and shorter school week. You will find some as advantages to you, others a disadvantage and many just food for thought.

- 1. This is a social change, not an educational change. It is being proposed as an experiment because of the changes in the work week in North America.
  - (a) Some 300 companies in Canada and 3,000 in the United States are on a 4-day or less work week now. More are being added every day.
- 2. There definitely will be no loss of in-class instructional time each week.
- 3. There will be less unfinished work for students to do at home and more time for the teachers in class to work with individuals with problems. The lengthened day will allow for immediate reinforcement of lessons that day which cuts down about 20% of the repetition of lessons by teachers which must be done now in the 5-day week. We should be able to accomplish more with your children in the four 10-period-day week as opposed to the five 8-period-day week we now have.
- 4. Less time is lost in school instructional time for assemblies and dismissals (20%).
- 5. Monday can be a day when doctor's visits, dental appointments, music lessons, and dancing lessons can be scheduled. Saves the rush after school.
- 6. Everyone has to get up 35 minutes earlier. / Children will be walking to school in the dark during part of the winter.
- 7. Working parents who do not have Mondays off will have to arrange for supervision of their younger children on Monday.
- 8. Students will be able to use community facilities such as the library, swimming pool, and community league facilities an extra day.
- 9. The longer day may be too hard on the students.
- 10. The longer day is more advantageous for the slower learner and slower worker? This we to like to find the answer to.
- 11. For many, it will give you more time with your families for weekend activities, i.e. weekend camping, etc.
- 12. Many families' life styles will change, some for the better and some not, and adjustments to new weekly routines will have to be made.

- 13. It will give the teachers a longer day but a shorter week.
- 14. The shorter week opens the door to the many exciting possibilities in the fields of:
  (a) recreational leisure time for individual children and families.
  (b) family and individual projects in earning extra money.
- 15. Children may spend less time with their parents in the evenings if they go to bed earlier.
- 16. We have 145 families in our school. Of these, 104 families have the mother at home only one parent is working.

#### FORWARD

One of the major objectives, if not the major one, of education is to prepare children for their future. This is a very important point in considering the four-day week on an experimental basis. The whole of society is in a state of change in relation to the length of the work week we now have. It is my opinion that by the time your children have finished their education, they will be faced with more leisure time than work time.

Society is just beginning to adjust to the change. The people who have the most difficulty adjusting are the ones who have devoped the habit of having more work time than leisure time. People who retire early and still are very capable of engaging in a variety of leisure time activities find life boring because they have not been prepared properly for this excess time.

We should not let the same thing happen in the future when your children are grown up. They should be prepared, starting now, not when it becomes a difficult and frustrating thing to do.

You may, or may not, think our proposal is premature. It may or may not be. It is my considered opinion, however, that it is inevitable. It will surely be implemented in the near future. We just happen to be the first school to propose it and have it voted on. I sincerely hope that when you vote yes or no, you consider this in your decision as a family.

The results of the vote will be sent home to you Thursday P.M. Thank you for your kind consideration of this new proposal.

Yours truly,

CORRECTION: On page 2, part D of the original notice of the meeting sent home on Friday, January 12th, it was stated that if the proposal passed by 66 2/3% or more, it would be forwarded to the Board for ratification on January 23rd. Time does not permit this.

A request will be made that the proposal be placed on the Board's agenda by the Central Office Administration at the earliest possible date. This would be forwarded to the Administration by the end of this week along with a request that a delegation representing the staff and Home & School Association be present to support it. The earliest we would receive word would be February 13th. The proposed week would not be implemented until 2 weeks after, if the Board ratifies it.

# APPENDIX E

REPORT OF JANUARY 15th, 1973.

HOME AND SCHOOL ASSOCIATION MEETING

## MEETING - JANUARY 15th, 1973

## R. J. SCOTT HOME & SCHOOL ASSOCIATION

## REPORT TO PARENTS

I must say that in all my years as an educator, I have never met with such a large group of parents who were as open-minded, enlightened, aware of, and receptive to a new idea in social change in relation to any suggested change in the pattern and operation of a school as the group we met with last night.

The meeting was tremendously successful. Your Home and School Executive have plans to pursue the proposed 4 - day school week further regardless of the outcome of the vote. All of the teachers and most of the parents sincerely want to give the proposal a try to see just what the outcome would be regarding the concerns listed below.

N.B. Mr. Brian Plesuk, who spoke to us on "Education for Leisure" assured us that the Parks and Recreation Department was willing to give all the assistance necessary, with the help of parents initially, in organizing programs for leisure time on Mondays. This he said was possible even if the whole area went on a 4-day week permanently.

Points to consider and food for thought were expressed by the parents and teachers as follows:

- Arrangements for Hondays will be difficult for some, but should be no different than those made for summer months.
- Point No. 5 on the following page was heavily emphasized in that there would be a number of parents who would have to change after school practices because of the extended day.
- Some children who are not fully motivated to attend school will find the longer day less attractive, but the Monday could possibly compensate for this.
- 4. It was pointed out that Fridays may be considered as an alternative to Mondays if the need was indicated in the future.
- 5. The later lunch hour 12:10 to 1:35 may be more suitable.
- This should be a nation-wide project.

- 7. Lost recreational time during the week could be made up on Monday, but school used to be out at 4:00 P.M. just 2 years ago as opposed to our proposed 4:10 dismissal on a 4-day week.
  - 8. Will parents really wish to involve themselves on Mondays in a recreational program?
  - 9. Some Music Teachers are not available on Monday.
- 10. We may be adding too much time to an already long day for some children (See point no. 9, next page.)
- 11. Recreational directors want more to do during week days and are available from 9 5 P.M. on Mondays.
- 12. Hockey could be extended to Monday for practices by Parks & Recreation Dept.
- 13. The extended weekend will provide for greater use and 33% less crowding of recreational facilities.
- 14. More students may be on the streets on Mondays if parents don't assist in organizing their children's leisure time.

APPENDIX F

BALLOT

•	MARK ONE (	1) BOX ONLY:		\
We (I) vote	·		<b>.</b>	
	yes	no		*
e e e e e e e e e e e e e e e e e e e				-
to trying the 4-da	y week on an exp	erimental bas	sis from Febr	mary 13th
through June 22nd				
voted on.	•	i.	g	.*
Comments (if you	wish to make any)		<u> </u>	
	· · · · · · · · · · · · · · · · · · ·		:	
		•		
Please put your by return it either by 1:00 P.M. Wedn then are lost vot	with the oldest of the state of	th. Ballots	not returne	