

1977

A Relationship Between Teachers' Contract Provisions and Individual Teachers' Needs Ranked According to Maslow's Hierarchy of Needs.

Page N. Nicolson
Northern Michigan University

Follow this and additional works at: <https://commons.nmu.edu/theses>

Recommended Citation

Nicolson, Page N., "A Relationship Between Teachers' Contract Provisions and Individual Teachers' Needs Ranked According to Maslow's Hierarchy of Needs." (1977). *All NMU Master's Theses*. 222.
<https://commons.nmu.edu/theses/222>

This Open Access is brought to you for free and open access by the Student Works at NMU Commons. It has been accepted for inclusion in All NMU Master's Theses by an authorized administrator of NMU Commons. For more information, please contact kmcdonou@nmu.edu, bsarjean@nmu.edu.

THE RELATIONSHIP BETWEEN TEACHERS' CONTRACT
PROVISIONS AND INDIVIDUAL TEACHERS'
NEEDS RANKED ACCORDING TO
MASLOW'S HIERARCHY
OF NEEDS

BY

N. PAGE NICOLSON

A Field Study Report
Submitted in Partial Fulfillment
of the Requirements for The
Education Specialist Degree

NORTHERN MICHIGAN UNIVERSITY

May 23, 1977

ProQuest Number:10804847

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 10804847

Published by ProQuest LLC (2018). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 – 1346

Dedicated to my wife,
Joyce, whose patience
and encouragement were
invaluable

Acknowledgements

I would like to thank the following people, for without their help this project would have been impossible: Dr. A. Kloster for his guidance; Dr. G. Peterson and Dr. D. Mortimer for their advice in the design of the project; Dr. M. Commons, Dr. A. de Man and Patti Miller for their assistance with the statistics; Mr. R. Derby, Director of Education and the Sault Ste. Marie Board of Education for their permission to conduct the survey; the principals and staffs of the schools involved for their co-operation and Ms. E. Schultz for her typing skills.

Table of Contents

Dedication	II
Acknowledgements	III
List of Figures	V
List of Tables	VI
I. INTRODUCTION	1
Objectives	2
Significance of the Problem	2
Purpose of the Study	6
Assumptions and Limitations	7
Definition of Terms	9
II. REVIEW OF RELATED LITERATURE	11
Views of Workers' Needs	11
Taylor and Scientific Management	14
Hawthorne Studies	16
Maslow and a Hierarchy of Needs	18
Herzberg and the Two-Factor Theory	24
McGregor's Theory X and Y	28
An Overview	31
Administration Texts	36
III. DESIGN OF THE STUDY	39
Procedures Used	39
Sources of Data	39
Methods of Gathering Data	41
IV. PRESENTATION AND ANALYSIS OF DATA	45
Text	45
V. SUMMARY AND CONCLUSIONS	51
Restatement of the Question	51
Description of Procedures Used	51
Principal Findings and Conclusions	52
Recommendations for Further Research	53

List of Figures

Figure Number		
1	Maslow's Hierarchy of Needs	19
2	Relationship of Maslow's Theory to Herzberg's Theory	26
3	Relationship of Maslow's, Herzberg's and McGregor's Theories	30

List of Tables

Table Number

1	Method of Determining Final Items for Opinionnaire	43
2	Data Summary	46
3	Significance of Differences Between Means of Various Levels at .05 Level of Significance	49

INTRODUCTION

In recent years confrontations between boards of education and teachers have become common-place. Between 1901 and 1972 there was not one teacher strike in Ontario. In 1974 five boards involving 2,880 teachers were struck for forty-one days. In three of the five strikes wages were cited as the major issue involved. Another noted that the arbitration procedure was the cause and the fifth simply stated that a breakdown in negotiations caused the strike.¹ When the issues over which negotiations broke down became public, money items were most often cited as the cause.² Is money the problem or are demands for more money symptomatic of an underlying problem?

Many theorists, Maslow, Herzberg, McGregor et al., believe that much more than money is necessary for a satisfied productive employee. They believe that psychological and social needs are as important as money and in many cases more important for the employee of the 1970's. Surveys of what workers want from their jobs fail to list money as the top priority.

In 1973 and 1974 the National Opinion Research Center conducted two nationwide surveys to determine worker attitudes about job preferences. From a list consisting of high income, no danger of being fired, short work hours and

much free time, chances for advancement and important and meaningful work, over half the white male workforce considered work that is important and provides a sense of accomplishment the most important characteristic of a job. (Weaver, 1976:49)

If the theorists and survey results are accurate, teachers should be negotiating in those areas that will fulfill their psychological and social needs. The researcher is interested in learning if teachers' needs really are money related, or are their real needs not being met in the agreement that is the result of the negotiation process.

Objectives

Question One

Is there any consensus between what teachers want and what the agreements state?

Question Two

Is there any relationship between what teachers express as needs and Maslow's hierarchy of needs?

Significance of the Problem

In 1975 the Ontario Legislature passed Bill 100, An Act Respecting the Negotiation of Collective Agreements between School Boards and Teachers. This act, in addition to detailing negotiation and grievance procedures, legalized the strike option for teachers (Section 63) and stated that, "Negotiations shall be carried out in respect of any term or condition of employment put forward by either party." (Section 9)

Bill 100 had an immediate effect on negotiations and the agreements that resulted. From 1968 to 1974, the Sault Ste. Marie Board of Education and Elementary teachers' yearly agreements of three to four pages consisted of a salary scale, fringe benefits, special allowances and what criteria were used to determine positions on the salary grid. The agreement of 1974-5, the year Bill 100 was enacted, was a document of fifteen pages. Its purpose was specified in Article 1.

It is the desire of the Parties to set forth in the Agreement certain of the conditions of employment together with the Salaries and Allowances which govern the teachers who are covered by this Agreement (1974-5 Agreement Between The Sault Ste. Marie Board of Education and The Statutory Members of the Federation of Women Teachers' Associations of Ontario and the Ontario Public School Men Teachers' Federation, employed by the Board. p. 1)

It is interesting to note that the words salaries and allowances are capitalized. The agreement gave a detailed explanation of each side's rights and in intricate detail how such items as compassionate leave were determined. The latter type of item was formerly in the Board's Policy Manual. The 1975-76 agreement grew to twenty-eight pages in length.

A detailed look at the agreement indicates that the articles can be divided into four main categories: legal, money and fringe benefits, grievance, and working conditions. Working conditions cover two areas in two sentences. Tenure is assured for all teachers properly qual-

ified with a permanent contract, and consideration will be given to free teachers from classroom duties to work on curriculum. (1976-77 Agreement between The Board and The Branch Affiliates, Articles 15, 16) Despite the stated purpose of the agreement, working conditions occupy a miniscule part of the whole document.

In order to determine what trustees' and teachers' views on Bill 100 were and particularly what constituted negotiable items, a request for this information was sent to the provincial office of each organization. (Appendix A, B)

The information from the Ontario Public School Men Teachers' Federation (O. P. S. M. T. F.) discussed sanctions, strike procedures and methods of avoiding an impasse in negotiations. When sanctions are to be used is stated in a paper, "Work to Rule and Withdrawal of Voluntary Services", by Stanley G. Hood, Executive Assistant in O. P. S. M. T. F.

Sanctions are used only to improve education opportunities through the elimination of conditions detrimental to effective education. The most severe types of sanctions should be involved only as a last resort where conditions are such that it is impossible for educators to give effective professional service.³

Nowhere does the Federation indicate what types of unsatisfactory working or learning conditions are considered important enough to impose sanctions. The Federation has no policy on what types of items it considers important for negotiation. The O. P. S. M. T. F. has recently advertised for an executive assistant whose main area of responsibility

will be collective bargaining.

The trustees know exactly what their position is with regard to negotiable items.

The trustees argued against many provisions in Bill 100. Most of their opposition was aimed at Section 9. They believed that the scope of negotiations had to be limited in order to preserve their management rights.

This provision (Section 9) coupled with the right to stike, effectively denudes the boards of any power or authority to manage the school system and provide the quality of education for the citizens of the community ... (O. S. T. C. Response to Bill 100, June 17, 1975:3)

The regional conferences of the Ontario School Trustees' Council in the fall of 1975 had as its main topic Collective Bargaining (Bill 100). One of the speakers, Mrs. Doreen Thomas, Chairman of the Waterloo County Board of Education, in a speech entitled "What does Bill 100 mean to Trustees?" expressed fears that the teachers would use Sections nine and sixty-five to pressure the weaker boards. Section sixty-five creates the anomaly that while principals and vice-principals are members of the federation and thus part of the negotiating group, they may not take part in a strike.

Concern about management rights was allayed by a speech from Bruce Stewart, a lawyer. He pointed out that management rights were residual powers. The traditional management powers were deemed to be in existence unless negotiated away. What is negotiable is the way in which

these powers may be used, but an agreement is not necessary to give the board the powers. He did warn the boards that:

From an employer's point of view, therefore, a collective agreement should say as little as possible for every sentence and clause is a further incursion into its basic rights.
(Stewart, Speech at the O. S. T. C. Autumn 1975:5)

Since agreements may be settled by arbitrators, Mr. Stewart gave the trustees a management rights clause to insert into agreements in order to prevent any decisions by unknowledgable arbitrators that might infringe on the board's rights. The rest of the conference dealt with strike procedure, lock-out, and other similar topics.

While Bill 100 provides for open negotiations the employers, the trustees, plan to limit what is negotiated and the employees, the teachers, have no set of priorities as to what they believe is negotiable. Both parties have devoted a great deal of time to studying the conflict resolution sections of Bill 100. Neither party, it seems, has thought to discover what it is that causes the conflicts and how to avoid them.

Purpose of the Study

The purpose of this research is to discover what types of working conditions are perceived as important to job satisfaction by the teachers. Are teachers really interested in more money and security or do they want more of the social and psychological needs as indicated by the social scientists?

Presently local teachers are asked to submit

briefs to the salary committee each year. A survey of the briefs submitted to the committee shows a remarkable lack of input from the average classroom teacher. Only two of forty schools submitted briefs. Seven specialized groups, such as principals or French teachers, submitted briefs. With one exception all the briefs dealt with money items as a first priority. Only the kindergarten teachers listed a working condition, class size, as a first priority in their submission. The other groups listed various types of working conditions after salary or special allowance considerations.

Little input is received by the negotiators from average classroom teachers, the group that comprises the majority of the teaching body. In this study the researcher is attempting to find the needs of the teachers. Once these needs are satisfied through the agreement a more effective learning environment is likely to be present.

This better environment is probable because social and psychological conditions on the job will permit the teacher to devote more energy to the teaching process.

Assumptions and Limitations

Assumptions

The major assumption in this paper is that confrontations between teachers and employers have dramatically increased in recent years because of unsatisfied needs. While these needs were no doubt partially related to economic and security matters, it is believed that other needs exist

that are not being satisfied.

The man whose needs for safety, association, independence, or status are thwarted is sick, just as surely as is he who has rickets. And his sickness will have behavioural consequences. (McGregor, 1960:39)

These unsatisfied needs may be able to be written into the agreement in an effort to change the work situation in such a way that it meets teachers' needs.

The second major assumption is that Maslow's hierarchy of needs is indeed representative of needs of people. Because of the complicated process of negotiation teachers' needs may not be effectively communicated to the negotiators.

The third assumption rests on the idea that an economically, socially, psychologically satisfied teacher will perform more effectively on the job.

Limitations

At present the Canadian government has an Anti-Inflation Board (A. I. B.) in effect. All pay raises are subject to certain ceilings and all agreements, after review by this agency, may be 'rolled back'. In addition to this limiting factor the provincial government has provincial educational ceilings. The individual boards whose budgets are beyond their prescribed ceilings must raise the extra money by local taxes. The existence of A. I. B. and provincial ceilings may cause a bias in the responses to the instrument with respect to money matters. Since governmental ceilings are a fact of life in the education system

and the A. I. B. will be in effect for at least one more year the responses will reflect teacher opinion at this time under less than optimum conditions.

The salary scale for the elementary teacher in Sault Ste. Marie is below the mean salary for the province in all seven categories. However, because of much higher than average qualifications, the staff has one of the highest average salaries in the province. (1976-77, Teacher/Board Collective Agreements A Provincial Overview, 1977:7) These two facts combine to make the group non-representative of the teachers of the province. Because of this, the results would not be generalizable to the elementary teaching population in the province. Further to this non-representative nature of the group is the fact that the research is based on only two of five affiliated groups that comprise the teachers of Ontario.⁴

The opinionnaire is another limitation. Although the design of the instrument is intended to make it valid and reliable, it is quite possible that all perceived needs of teachers are not represented on the instrument. Since the opinionnaire is based on Maslow's hierarchy of needs, it is limited to his conception of human needs.

Definition of Terms

In this study the term teacher refers to regular classroom teachers, special education teachers, librarians, vice-principals and principals involved in the public elementary system, that is the kindergarten to grade eight program in Sault Ste. Marie, Ontario.

The word agreement means the yearly document detailing salary, fringe benefits and working conditions that is negotiated between the board and the teachers. Principals, vice-principals, consultants and special teachers are all provided for under the one agreement.

Motivation, as used in this research, is based on views of the Platonic school which believes that man is a rational being, aware of his goals and behaves in a manner that will help him achieve those goals. This view of motivation involves the concept of organizations that attempt to use goals to attain their objectives. The belief is that motivation can be influenced although there may often be complex and competing goals. (Lawler, 1973:4)

An excellent interpretation of the term motivation was given by Saul Gellerman in his book Motivation and Productivity.

The ultimate motivation is to make the self concept real: to live in a manner that is appropriate to one's preferred role, to be treated in a manner that corresponds to one's preferred rank, and to be rewarded in a manner that reflects one's estimate of his own abilities. (1963:304)

REVIEW OF RELATED LITERATURE

Views of Workers' Needs

The study of workers' needs reveals many theories and dozens of applications used with varying degrees of success. Most writers agree that the worker of today is different from his predecessor but how to motivate him is open to interpretation. The union leaders are not necessarily in agreement with the academicians.

In 1972 the auto workers at General Motors' Lordstown plant staged a strike for twenty-two days. Their major complaint was the dull and degrading aspects of their jobs. (Berkley, 1975:459)

In the fall of 1972, the auto union sent Chrysler a letter noting that absenteeism and dissatisfaction with assembly line work had been a continuing source of friction. The letter proposed the development of some mutually satisfactory experiments to increase workers' satisfaction and improve workers' attitudes towards their jobs.⁵ For the first time, job satisfaction had been proposed as a collective bargaining issue. (Labour Gazette, 1972:612)

However, agreement on worker satisfaction among union leaders was not unanimous. In March 1973, at a conference sponsored by the Canadian Department of Labour,

titled "Social Indicators of Quality of Working Life" labour leaders wondered whether or not it was really correct to generalize that there was widespread discontent because of a few visible cases found in plants where work was repetitive. The union leaders continued to believe that their goals were to provide good wages, generous fringe benefits and reasonable working conditions. (George Sanderson, 1973:385)

This belief of union leaders is confirmed by a study on job satisfaction conducted in the early 70's by Jack Shapiro and Mahmoud Whba. (1974:574-8) They concluded that money as a prime motivator was still a viable hypothesis as the employees they studied were not motivated by social self esteem or self-actualization work associated needs.

According to the social scientists, absenteeism, vandalism, theft, high job turnover and sabotage are only the symptoms of a much deeper problem. A report by H. E. W. entitled "Work in America" (1973) states clearly that Americans are bored and alienated at work. The report goes on to say that the only solution is to redesign the work. (Schreiner, 1973:7)

Another government report, "American Productivity: Key to Economic Strength and National Survival," published by a Sub-committee on Priorities and Economy in Government, indicated that a new concern for job satisfaction was an important factor in achieving greater produc-

tivity. Chairman Grayson said:

Studies evaluated by the Committee provide evidence that increasingly in the U. S., attitudes toward work, work quality, workplace conditions, organization structures and other environmental, psychological and social factors have profoundly affected and will continue to profoundly affect work performed in the U. S. (Bull, 1973:24)

In Motivating the New Breed or Maslow Revisited, T. C. Laughlin (1973:102-4) believes that the older generation who lived through the Great Depression are still motivated by money. The younger members of the workforce are not as concerned about money and security because it has always been provided by their parents. The current generation is in search of higher level needs in the form of social, ego or self-actualization needs. Dr. Frederick Herzberg, while speaking at a conference, indicated the same need for workers when he said, "People look now for psychic income from their work." (Rumball, 1973:7)

Compared to twenty years ago, the majority of the workforce is now affluent. Even those without work need not concern themselves with money for the necessities of life for the state will provide. Life styles and attitudes have changed with the deep changes in culture and technology. The attitudes of workers are very different now that the basics of life are available for worker and non-worker or achiever and non-achiever alike. In many cases the employer of today resembles a man using a whip to start his 1977 car. Yesterday's methods will not be effective on today's workforce. As Wilbur M. McFeely, vice-president

of Riegal Paper Corporation said, "Our major problems are people problems. They are problems that will not respond to traditional approaches." (Miljus, 1970:36) The effective manager must know how to utilize human resources.

Taylor and Scientific Management

The first major attempt to effectively use human resources was introduced by F. Taylor at the turn of the century. His interest in increasing productivity resulted in the scientific management theory. This was the beginning of time and motion study. As Taylor's now famous work with 'Pigiron Schmidt' showed, careful planning of the work sequences plus the promise of more money motivated people to work harder, thus increasing productivity.

Taylor's studies were conducted at a time when unions were weak, welfare was almost non existent and the United States was absorbing almost a million immigrants a year. Herzberg believes that this immigrant work force had certain characteristics. He says:

Immigrant labor was essentially concerned about security and the 'my son the doctor' routine, my children will make it. The worker performed 'Mickey Mouse' work and couldn't care less about what he did as long as it provided for his basic needs. He had however the psychological benefit of his ethnic, political, religious, social and family traditions. (Herzberg, 1974:53)

Today's worker wants more than just security from his work. With the decline in importance of the family and ethnic and social organizations, he must receive psychological income from his work or some other source.

This recognition of worker needs is not new. At the same time that Taylor was developing his scientific management principles, a meeting of the National Society For Promotion of Industrial Education (N. S. P. I. E.) in 1916 reported that, "enlightened self interest now required employers to think seriously about worker satisfaction." (Wirth, 1972:116)

Many organizations today operate on the scientific management principles despite the work of behavioural scientists to influence professional managers. In a survey conducted by Ernest Dale it was found, "that most managers were using classical techniques, but these practices were identified by the respondents as behavioural principles." (Bowman, 1976:396) In an article, "Asinine Attitudes Toward Motivation", Levinson equates scientific management to the carrot and stick approach.

People inevitably respond to the carrot and stick by trying to get more of the carrot while protecting themselves against the stick. (1973:73)

Not all writers agree that using money as a motivator is outmoded. Lawler (1976:11-22) believes that pay has a strong influence on worker satisfaction and when pay is tied to performance it contributes to motivation. Bowman (1976:395-7) maintains that organizations still use their pre-behavioural assumptions about man because they are quite successful. John McArthur (1973:64-5) takes what may be considered the golden mean with respect to pay.

In his view, pay must be sufficient to dispel concerns for survival needs before interest in on the job achievement can be sought. "Money then becomes, if not the motivator, at least the key to the motivation door." (McArthur, 1973:65)

Richard Walton, a professor at Harvard, believes that boredom in the workforce is exaggerated. In other words, people are still motivated by money. He also goes on to say that in one or two decades as present organizations persist, worker alienation will grow. Unless the alienation is avoided, the result will be more antisocial behaviour on the part of workers. (Schreiner, 1973:7)

Beliefs about worker alienation and what workers want from their jobs are varied. The numerous confrontations between managers and workers in all types of occupations indicates that there is indeed a difference between what workers want and what managers believe they want.

Hawthorne Studies

One of the first studies designed to investigate the effect of working conditions on productivity was known as the Hawthorne Studies (1924-32). The studies showed that productivity increased whether conditions were improved or not. The amazed investigators realized that they had made participation in the study attractive. The workers had been freed from close supervision and had been given an explanation about the purpose of their work. They were receiving an extraordinary amount of attention from plant personnel and because they felt special they worked to full capacity. The investigators realized that attitude and

morale were important for increasing output.

Further experimentation revealed that employee attitude improved when he was given the opportunity to express his opinion about the work. Their conclusions were that personal problems and characteristics of the worker as a human being would have a great effect on his work and willingness to work.

The Hawthorne studies were the beginnings of a new look at man and his work.

Societies of the past have viewed work in a variety of ways. Some have viewed work as a curse on humanity, the path to worldly happiness or an investment towards life in the hereafter. This last view has often been referred to as the Protestant work ethic. This ethic views work as a necessary part of a lifetime of pain and suffering. This hard work would indicate that man was able to sacrifice and accumulate wealth. Thus he would prove to be a member of the chosen few, the Elect. "Thus economic success was viewed as evidence of self denial and sacrifice in the name of God." (Evans 1970:726) While most managers would discount the Protestant work ethic as a strong motivator today, the idea of materialistic wealth is still prevalent. This materialistic drive is seen by some authors as the result of past economic conditions and scarcity of necessary goods.

McGregor believes that many employees view work as a type of punishment which is the price one must pay

for enjoyment away from the job. (1960:40)

Today our society is at the point of saturation with security and material goods. The nearer this saturation point the less important become the material benefits from work. The increased material benefits are used to try to enrich life outside work. "The result is that we no longer enjoy leisure; we consume it." (Herzberg, 1974:54) These leisure activities are not fully satisfying the needs of men.

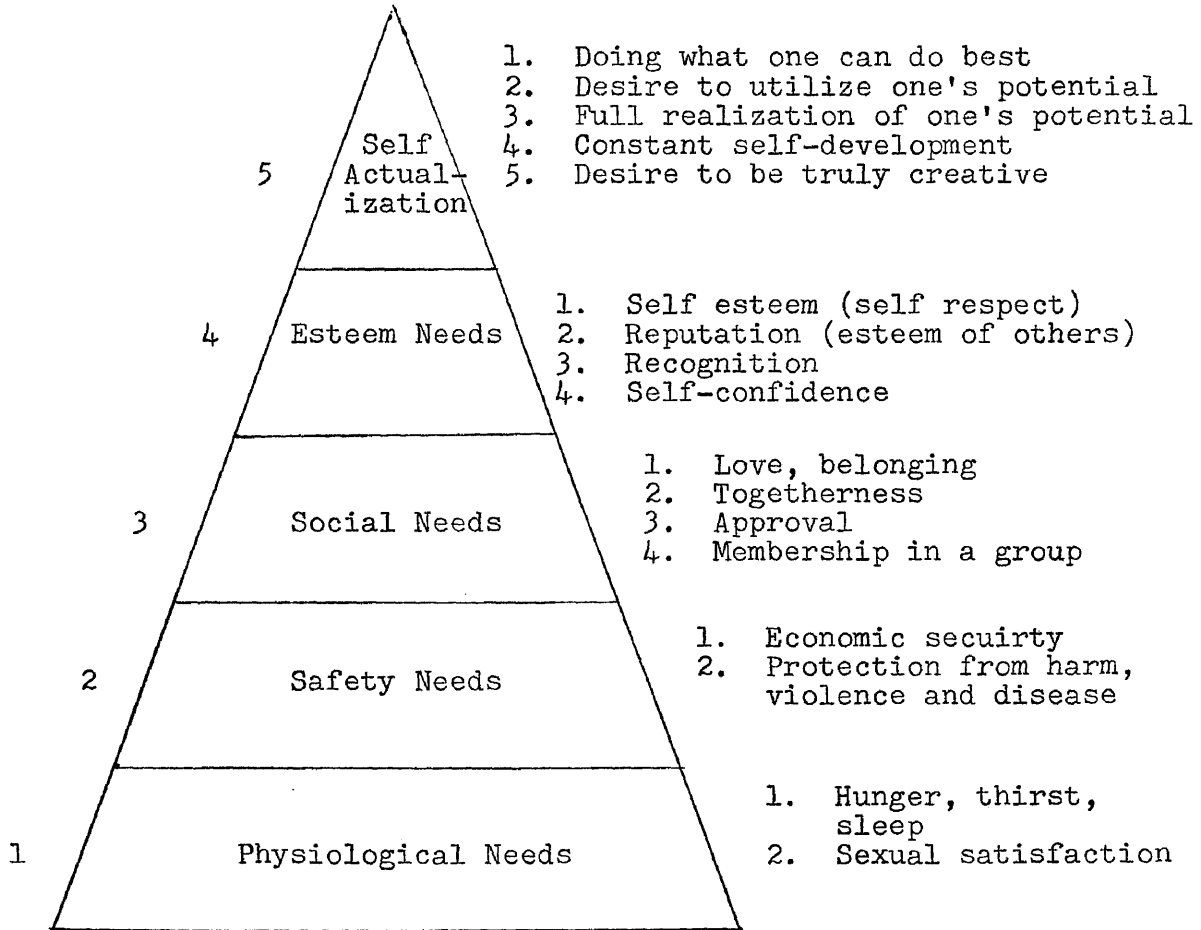
What is needed is a new concept of life and of work that fulfils more than just economic ends. This work must meet all the needs of the human being not just some of them. One of the most complete models of human needs is found in the theories of Abraham Maslow.

Maslow and a Hierarchy of Needs

Abraham Maslow's book, Motivation and Personality, serves as a base for most of today's motivational theories. His basic theory is that man is motivated by a hierarchy of needs and successive needs emerge when preceding needs have been satisfied. (Figure 1) Complete satisfaction of lower needs is not required before higher need satisfaction is demanded.

In this theory satisfaction of a need is as important as deprivation because the former allows for domination of a higher need which in each succeeding level is a more social goal. Once a physiological need is satisfied, it no longer determines behaviour but does exist in a potential fashion in that it may dominate again if its de-

Figure 1
Maslow's Hierarchy of Needs



sires are not met. "The organism is dominated and its behaviour organized only by unsatisfied needs." (Maslow, 1954:84)

The safety needs may dominate just as physiological needs. In a peaceful, smooth-running society, people generally feel safe from tyranny, murder and extremes of climate. In this sense safety needs are not active modifiers. In management security needs are equated with safety. The desires for adequate medical coverage and other types of insurance against financial loss are seen as important modifiers. This is an attempt by man to stabilize the future and protect against the unknown.

Other broader aspects of the attempt to seek safety and stability in the world are seen in the very common preference for familiar rather than the unfamiliar or for known rather than the unknown. (Maslow, 1959:88)

Once physical and safety needs are met, love, affection and belongingness needs appear. The whole pattern of need satisfaction repeats itself with these needs as its focus. At this level a desire to be part of a group and to have affectionate relations with others dominates. Maslow believes that it is the thwarting of these needs that results in maladjustment and more severe psychological reactions.

The fourth level, esteem, is based on the desire people have for self-respect and for the esteem of others. These needs are shown in the desire for an individual to become competent in a specific area and a desire for re-

cognition or appreciation of his mastery of a task. This fulfilled esteem need leads to self-confidence and a feeling of being useful and necessary in the scheme of the world. Self-esteem must be deserved rather than unwarranted.

Often a restlessness emerges when the previous four needs are satisfied. This is the desire of the sculptor to keep on sculpting or an artist to keep painting. As Maslow states, "What a man can be, he must be. This need we may call self-actualization." (1954:92)

This hierarchy of needs is not a rigid model. To some people security needs are more important than love. In some, levels of aspiration may be permanently blocked because of some previous experience, e.g. The Depression. Another problem is that 'familiarity breeds contempt'. A need that has been satisfied over a period of time may be underevaluated by an individual.

People are not locked into the model at a particular level. It is a false impression that if one need is satisfied the next automatically emerges. Behaviour has many causes other than needs and desires.

In actual fact, most members of our society who are normal are partially satisfied in all their basic needs and partially unsatisfied in all their basic needs at the same time. (Maslow, 1954:100)

Needs emerge slowly in degrees rather than suddenly. Most behaviour is determined by all the basic needs simultaneously rather than by just one. These needs are not the only causes for certain behaviours because most

behaviour is multimotivated. In the average person these needs are more often unconscious than conscious.

In administration, the key to understanding this model in terms of the job environment is that levels one and two can be satisfied with money. The higher level needs are psychological in origin and require psychic income for satisfaction. (Norwich, 1974:64)

By applying this needs hierarchy to today's society one can see that the labour union movement has endeavoured to satisfy the physiological and security needs of most workers. The needs level for much of society has moved to the higher levels. The Dale Carnegie courses of the fifties, followed by the hippie culture, and now the concern with meditation and sensitivity-training, all indicate society's concern with higher level needs. People are concerned about achieving all that they are able to achieve. Motivation for today's workers will involve a response to his needs as expressed in Maslow's levels three, four and five.

The point is not that money is unimportant but that if the organization wishes to keep its employees and have them productive, money is not enough for a large part of the workforce. Sufficient money to fulfil physiological and safety needs can be obtained at any factory or from the state. Satisfaction of higher level needs is necessary for a stable, productive work force.

Stanley E. Seashore, professor of psychology at the University of Michigan, believes that job satisfaction

is necessary not only in the short run for the employer but also in the long run for society. Failure to satisfy employee needs affects behaviour and this will have important social consequences. (Sanderson, 1973:386)

Many research studies have been conducted to test Maslow's theory. Most of the research has agreed with his concepts. In one such experiment, salesmen were allowed to work as hard as they wished and to earn as much as possible. The results indicated that the salesmen worked just hard enough to attain what they considered an acceptable level of income. (Darmon, 1974:418-26) They worked hard enough to fulfil their needs as shown in levels one and two in Maslow's hierarchy.

A second piece of research indicated that group motivation can be an important aspect of on-the-job performance. Individuals low in motivation to succeed became more highly motivated when they were placed in situations that required group motivation for success. This type of work situation allows the worker to fulfil his social needs. (Zander, 1974:64-8)

Talk of concern for the worker and his satisfaction is not new. What is new is the development of schemes by employers to deliberately try to improve worker satisfaction. On November 12, 1976, Air Canada announced that it was allowing groups of employees to determine how they could best do the job and determine their own working hours.

Much of the work in organizations based on Mas-

low's theory came to be known as the Human Relations movement. Part of the problem with management's response or lack of response was that the movement did not tell managers how to manage. A poll, conducted by the American Management Association in 1972, indicated that while managers showed great interest in the behavioural sciences they had not made any changes in their organizations. As Bowman states, "Many managers are people-oriented in principle, yet remain task-oriented in practice." (1976:396)

Herzberg and the Two-Factor Theory

Before one can motivate employees, it is best to determine what attitudes the workers have toward their work. In an effort to determine what motivates workers Frederick Herzberg undertook a study of job attitudes in the late 1950's. In addition to the concern for job attitude and its relationship to productivity Herzberg was concerned about the psychological well being of the worker. As he states:

To the individual, an understanding of the forces that lead to improved morale would bring greater happiness and greater self-realization. (Herzberg et al., 1959:IX)

The study, which has since come to be known as the two-factor theory of job satisfaction, used 200 engineers and accountants as a population sample. The research concluded that factors causing job dissatisfaction differed from factors causing job satisfaction. Job satisfaction resulted from jobs that provided achievement, recognition, challenge, responsibility and growth. Job

dissatisfaction resulted where employees were mainly concerned with wages, company policies, supervision and working conditions. The belief is that the first group are related to positive motivation since they supply such motivational needs as self-esteem and self-actualization. (Chung, 1972:34-5) A comparison of Herzberg's findings to Maslow's theory is found in Figure II.

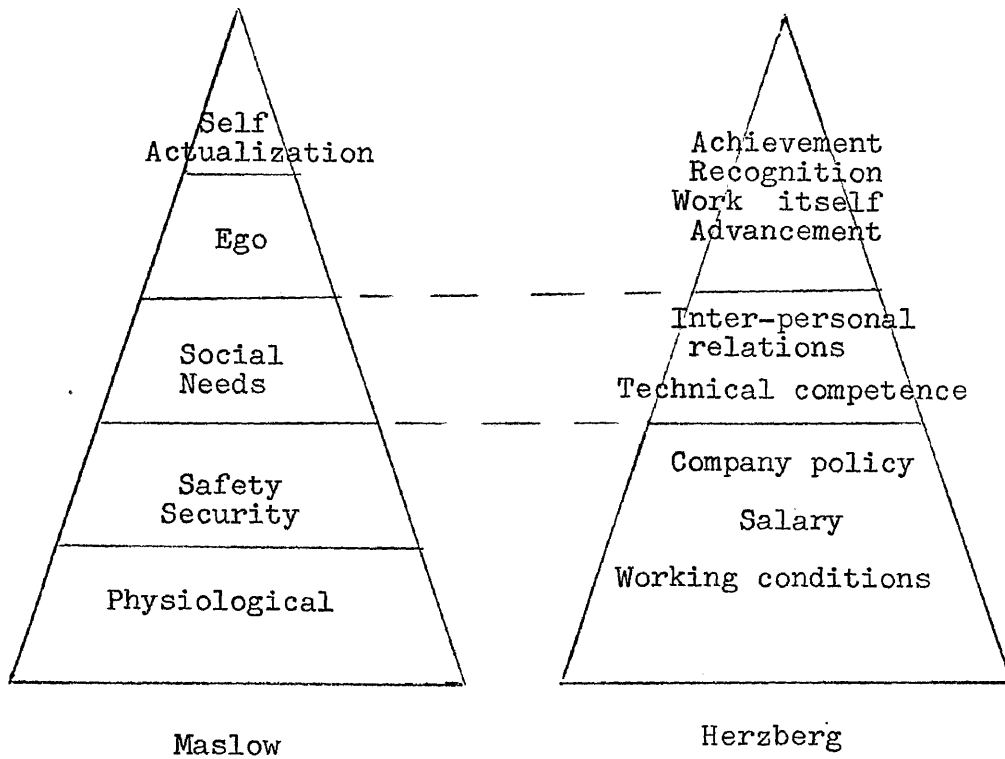
Herzberg's job satisfiers are referred to as motivators, the job dissatisfiers as hygienic. It is important to recognize that these are not opposites on a continuum but separate. Lack of dissatisfaction does not mean the individual is satisfied; it simply means that he is not dissatisfied. (Charles, 1973:17)

The assumption in the study is that when people report they are satisfied on the job, they are also achieving goals, gaining recognition and respect. These are occurring as a result of creative work which is the product of a motivated worker.

In the foreward to Herzberg's book, The Motivation to Work, John Flanagan, Director of Research for the American Institute For Research, points out that a previous book by Herzberg Job Attitudes: Review of Research and Opinion, indicated that there was much disagreement and confusion in the area of job attitudes and the effect of job attitude on performance. (Herzberg et al., 1959:VII) Unfortunately, Herzberg's research into job attitudes added to the confusion.

Figure II

Relationship of Maslow's Theory
to Herzberg's Theory



• Many people do not agree with his ideas. They believe he studied work satisfaction not motivation. A motivator is an influence that causes an individual to choose a certain course of action whereas satisfaction is a subjective feeling. These critics are not prepared to equate satisfactory experiences with motivators. (W. E. Evans, 1970:728)

Some object to Herzberg's methodology. People respond to questions about themselves relative to their self esteem. People with high self esteem are more realistic in their responses than people with low self esteem who ascribe causes of good to themselves and causes of bad events to the environment.

	Good Sequences	Bad Sequences
High Self Esteem	Mention Motivators and Hygiene	Mention Motivators and Hygiene
Low Self Esteem	Mention Motivators only	Mention Hygiene only

(M. G. Evans, 1970:34)

Two other problems are apparent with the two-factor theory. Recognition is associated with good job sequences but interpersonal relations with peers and superiors are associated with bad job sequences. If this is so, where does the recognition come from? In order for recognition to be considered important and satisfying, it would seem logical that the source of recognition be one's peers and superiors.

The second problem is that many attempts to du-

plicate the findings of Herzberg with different methods have failed to support his results. It seems that Herzberg's work is method-bound. (M. G. Evans, 1970:35) In spite of the problems, many people find support for such plans as job enlargement and job enrichment in the two-factor theory.

McGregor's Theory X and Y

Another source for ideas on how to motivate workers can be found in the theories of Douglas McGregor. His Theory X people believe strongly that money is the major factor in motivating people to work. Theory X managers believe that most people are lazy, stupid, unambitious, self centred and resistant to change. Management based on this belief is authoritarian and manipulative. People work only to increase monetary rewards. The higher the pay the greater the effort. In spiral-like fashion, the more pay that is offered, the more effort exerted.

This view of man, which is similar to Taylor's, seems to be quite evident in management styles today. The behaviouralists say that this conception of man is the natural result of the pattern of industrial organization. An overriding concern for money has arisen because it lends itself to measurement. Money cannot be disregarded as an incentive but research indicates that a large percentage of the workforce wants more than money from their work. The work of social scientists shows that men work to fulfil a variety of needs. (Megley, 1970:218) As Douglas McGregor said: "Man tends to live for bread alone when there is little

bread." (1960:41)

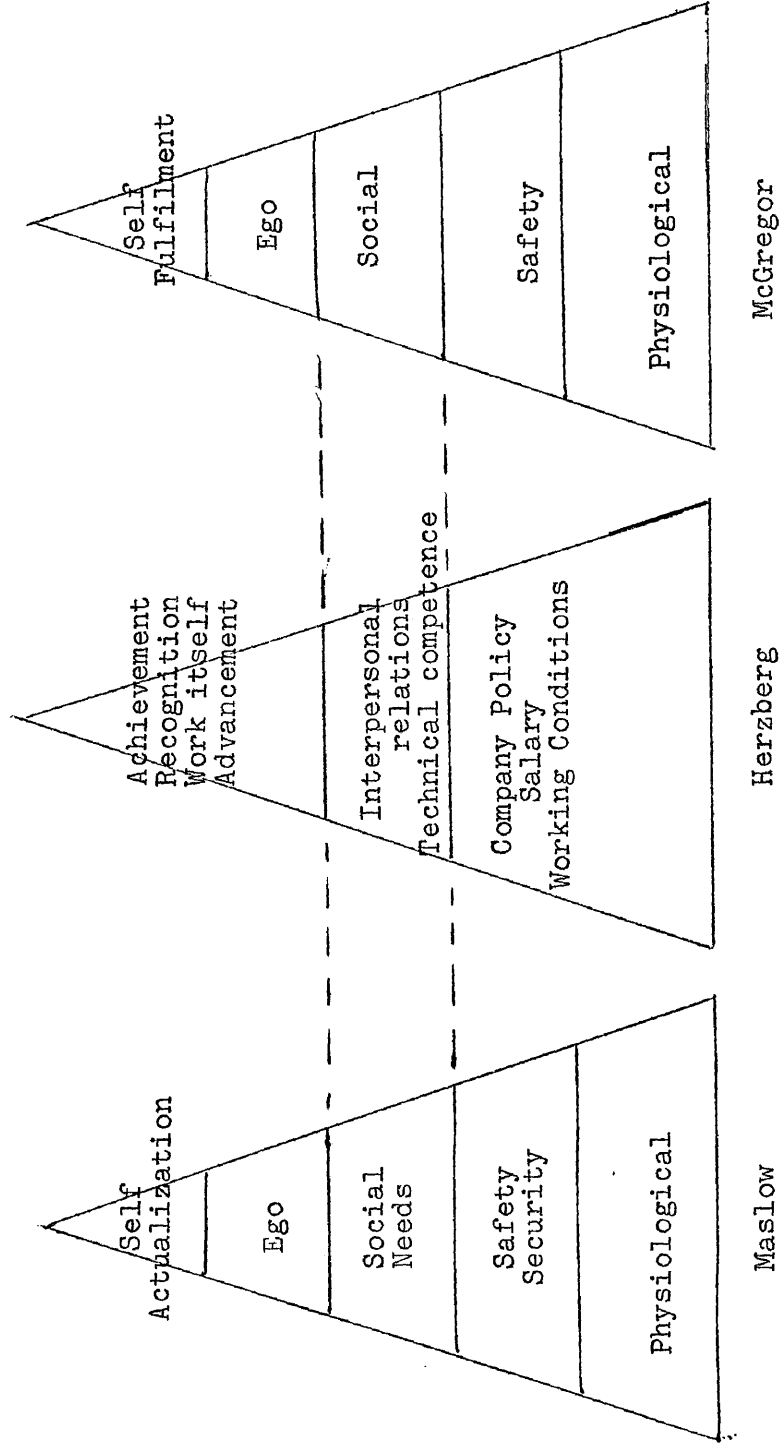
On the opposite end of the continuum from Theory X is Theory Y. Theory Y people believe man is ambitious, industrious, imaginative, seeks responsibility, and works to fulfil organizational goals. Man seeks change and becomes passive when the way is blocked. Managers who have this conception of human nature will be friendly, open and candid. They will help people to become more satisfied and fulfilled which in turn will lead to a more motivated work force resulting in higher productivity. Management has a responsibility to provide the employee with an opportunity to grow and mature into a person who is best able to realize his own goals while striving for organizational success.

The relationship between McGregor's theory and Maslow's theory is clearly seen in Figure III. McGregor believes that a man suffering from a deficiency of higher level needs is just as sick as someone suffering from malnutrition or exposure. The difference is in the symptoms. Deficiency of higher level needs results in hostility or passivity. He believes that the insistent demands for higher wages are an attempt to buy the material goods to provide satisfaction for a psychological need. The way business is organized, money is the only means available to the frustrated worker.

By making possible satisfaction of low level needs, management has deprived itself of the ability to use as motivators the devices on which conventional theory has taught it to rely: rewards, promises, incentives, or threats and other coercive devices. (McGregor, 1960:42)

Figure III

Relationship of Maslow's, Herzberg's
and McGregor's Theories



An Overview

Application of motivational theory is extremely difficult because motivation is a function of life-style, back-ground, education and age. How can the employer un-tap these reservoirs of energy and creativity that are sup-pressed in the employee? What technique will motivate the employee?

Administration literature is replete with arti-cles on new theories of compensation based on the work of Maslow, Herzberg, McGregor and others. The titles vary from 'Theory Z' to such mundane titles as 'Motivating the Worker'. A close look at many of these ideas reveals that they are all extremely similar.

Money must be carefully used as a motivator. To some people it is an extremely strong modifier. Some writers suggest immediate cash payoffs for workers. At present there is a six to twelve month delay between raises and the worker sees no relationship between his productivity and the raise. Any pay scheme must not only be fair but be seen as fair by the employees. The organization has a responsibility to ensure that all employees are aware of and understand all aspects of the reward system.

Most articles pay so little attention to the money issue that it seems the authors believe that managers al-ready understand the above points regarding economic mo-tifiers. Unfortunately, a survey of Fortune's top 500 com-panies discovered that the majority of them do not use job performance as part of their calculation of wages and salaries.

Money can motivate people to a surprising extent but it must be seen as related to performance. It is only one factor in motivating workers.

The ideas relating to money in today's environment can be summed up with these two comments:

Money's reputation as the strongest motivator will be a long time dying because it is partially true. (Charles, 1973:13)

If money is to stimulate motivation it must be related to job performance in a direct fashion. (Charles, 1973:18)

A second feature common to many articles is the frequent mention of Maslow's hierarchy of needs or at least needs that are more than just financial. It appears that Maslow has laid a foundation stone in the theory of management.

A third common feature of the literature is the preponderance of 'should, would, needs' and similar words. This obviously indicates that there is still a lot of theorizing taking place.

Three terms appear frequently as a managerial strategy designed to motivate the worker by appealing to his higher needs. These terms are job rotation, job enlargement and job enrichment. The differences between them concern the extent to which work is made meaningful to the employee. Job rotation just moves people from job to job. Job enlargement, the reverse of specialization, concentrates on expanding the scope of workers' activities. Only the third, job enrichment, is a concentrated effort to motivate employees.

It expands the task into planning, organizing and controlling the work. (Carroll, 1973:54) This type of program appeals to the psychological needs of responsibility, recognition and growth.

Communication is the next general theme that concerns most modern authors. If companies are going to practice ideas like job enlargement, open lines of communication must exist up, down, and across the organization. This communication must be characterized by openness, frankness and complete honesty. The rise of terms like active listening, facilitators and blockers with respect to communication indicates the importance that society as a whole is attaching to communication.

Staff involvement is another common thread. Some authors refer to this as the team approach, democracy in industry, group techniques or participative management. Participation in work, as mentioned in job enrichment, plus community involvement is encouraged. The key is to have employees feel that they are part of the action. One way of carrying this out is to delegate authority. People generally rise to the challenge.

The manager can no longer be the authority figure in the eyes of the work force. He cannot move to the other end of the spectrum and become a friendly confiding member of the group he is responsible for. He will become subject to group pressures, and have a difficult time when company goals differ from group goals. The manager must assume a

position somewhere between the extreme of authority on one end and the extreme of one of the boys on the other.

This is likely a wise course because not all people respond to one extreme form or the other. By staying in the middle the manager can lean one way with one type of employee and lean the other way with another type of employee. By making small shifts in his approach he is not seen as inconsistent.

This approach to motivation of employees by managers can take three forms.

The projective approach, where the manager attributes his own needs to subordinates; the normative approach, where the manager, on the basis of surveys, generalizes about employee needs; the individualistic approach, where the manager deals with each employee as having differentiated needs. Obviously, from the previous discussion of needs theory, only the last approach is realistic. In the others, the management may be 'holding out carrots to employees who don't particularly care for carrots'. (Ackerman, 1970:560)

While the individualistic method may not be practical at present, it is up to the organization to change its structure so that such communication can be realized. They must develop an individually oriented climate, where individuals may satisfy their own particular goals and at the same time contribute to organization objectives.

The wise manager should not be so naive as to think that satisfied, motivated employees will automatically lead to better performance. Motivation is only one of many fac-

tors that contribute to effective performance. Other factors such as employee ability, efficient tools and well planned work systems also are important to effective performance.

This conception of the worker, coincides with the view of man as expressed in the Declaration of Independence. If the managers really believe in the equality of man, it is part of their job to structure the job situation so that each man has as much freedom as possible in performing his task. John Dewey spoke of combining technological achievements with democratic traditions in order to have the liberation of the American mind.

A new culture expressing the possibilities imminent in a machine and material civilization will release whatever is distinctive and potentially creative in individuals, and individuals thus freed will be the constant makers of a continuously new society. (Dewey, 1927:143)

Participation and sharing in the workworld result in better work and a better society.

In speaking of democracy and its relationship to the industrial age Dewey commented on the importance of human relations

Democracy has many meanings, but if it has a moral meaning, it is found in resolving that the supreme test of all political institutions and industrial arrangements shall be the contribution they make to the all-round growth of every member of society. (Dewey, 1950:147)

The human relations people have shown the relationships necessary to secure the dignity of man while accomplishing organizational goals. Management must create the conditions necessary for employees to achieve personal goals

while striving toward the achievement of organization objectives. This can occur by restructuring the work environment around man's true motivation to work and by using motivational theory in management practices.

The emphasis of the managers' role in the future will be on non-financial incentives. A thorough understanding of the principles of motivational theory coupled with wise application of the theory will greatly aid the manager in co-ordinating human efforts to attain organizational goals.

The following quotes will serve to remind the manager that praise, respect, honesty, sensitivity and listening are some of the tools of his trade.

Success lies in learning to prevent work from preventing people from being themselves. (Hall, 1970:43)

Lord Chesterfield told his son - "Make the other person like himself a little bit more and I promise you that he will like you very much indeed. (Personnel Journal, 1970:143)

Whether they were bums, board chairmen or in between, they were all just about equally as hungry to maintain 'face' to have a word of approval. (Chruder and Sherman, 1966:150)

Administration Texts

Texts for administration courses tend to be very general in their approaches to the human problem. Concern with the human resources and how to handle them with respect to psychic income occupy varying amounts of space. Generally most texts devote little space to the problem of worker motivation. Most texts make reference to the leaders in the field such as Maslow, McGregor and Herzberg. Perhaps the

attitude of authors is best expressed by Knezevich.

Very often the scientists understanding of time constraints, date limitations, and variable complexity faced by managers in the field produced models and strategies that failed to work as well as they might. (1962:201)

Concern for employees is most often expressed in details as to how to determine employee benefits, pensions and employee health and safety. As indicated earlier, these concerns are directed at the basic physical levels not the psychological ones.

If the student of administration wishes to look at worker motivation in depth he must enroll in specific motivational courses likely found in the Psychology department, or be fortunate enough to have instructors who will emphasize the human side of management.

As more field research based on motivational theories is conducted, the rather skeptical attitude of authors may be replaced with an air of confidence. Then, graduates would be in a better position to use the human relations principles of management rather than use scientific management principles on employees that are not receptive to such schemes.

This rather optimistic view is tempered considerably when one reads about the most famous business school, Harvard. In the Canadian Establishment, Newman quotes Peter Cohen, a Harvard Business school alumnus.

You realize they haven't got faith in anything except pressure, fear and terror. Students, professors, even the secretaries -

it was as if everybody were fighting to get out of some corner, and they were not worried too much about habits of thinking or questioning anything, but content to accept that the maximization of long-range profit is why God hath created the earth... So you learn not to give a shit if the people you climb over are weak or sick or small or blind. You understand that everybody is your enemy, and you learn to fear and hate people, to live in crowded isolation for the rest of your days. (Newman, 1974:357)

A school with this environment may not produce people interested in pursuing a human relations type of program in either teaching or business. Since Harvard is the leader in business schools other institutions may find it difficult to stray from the path.

Textbooks, like management practices, are suffering from the same dilemma. There is discussion and interest in human relations but the emphasis is on tried and true methods of operating an organization.

DESIGN OF THE STUDY

Procedures Used

In order to determine what type of needs teachers consider important, a survey of their perceived needs was undertaken. An opinionnaire of seventy-two questions, based on Maslow's hierarchy of needs, was developed. (Appendix C) Following each statement was a scale of 0 - 9. Teachers were asked to respond in terms of the statement's importance to them, their satisfaction with certain items, or their beliefs.

The replies from this initial sample of thirty teachers were coded by the researcher. A factor analysis of their replies enabled the researcher to reduce the number of questions from seventy-two to twenty-nine.

This new instrument was distributed to ten schools with approximately 119 teachers. The results of this survey were analyzed as a group and by sex.

Sources of Data

The source of the data was a sample of 149 public elementary teachers from the city of Sault Ste. Marie, Ontario. There are about 400 teachers in forty schools. In order to obtain the sample the following method was developed. The city was divided into four geographic areas; the east, primarily residential, the central, downtown, the

west, industrial and residential, and the north, rural and residential. From a list of schools in each area, schools were chosen at random until a total of approximately twenty-five teachers was achieved. Each area was represented by at least two schools. In addition to this, two schools were chosen at random from the system at large. (Appendix D) It was this last group that was the sample for the first opinionnaire.

The randomization by schools was chosen for two reasons. To randomize by staff member would have entailed mailing or delivering instruments to forty schools in a hundred-mile area. Since the principal gave the instrument to each staff member, teachers likely felt more obliged to complete it, thus ensuring a better rate of return.

The sample was fairly large in an effort to obtain more reliable data. In addition to this, as Popham says, "... for with increased sample size, means tend to become more stable representations of group performance." (1967: 134) This accurate representation was important because of the wide variety of teaching situations present in the city. Schools range in size from a staff of four to larger schools with a staff of eighteen. In addition to the different socio-economic areas present in any city, some schools are in rural areas. Some staff members teach only one grade, others teach as many as three grades in one room, and still others travel to as many as three schools in a day. Since all these teachers, as well as principals and vice-principals, are covered by the same agreement, they must be

analyzed as one group.

Methods of Gathering Data

The Director of Education was approached to obtain permission to contact principals and to distribute opinionnaires. (Appendix E) After the schools were selected, the principals were contacted and given an explanation as to the purpose of the study, and were asked for permission to distribute the opinionnaires to their staff. Co-operation was excellent. This was due in part to two factors. The letter from the Director of Education likely caused the principals to feel that co-operation was in their best interests. The excellent response by the principals may also have been because they are all known by the researcher.

Anonymity of individual and staff replies was assured. No names were required on the instruments. The principals and staffs were told that the data was computed on the basis of the entire sample, not by schools.

The instruments were delivered to each school. A covering letter to the principal asked him to distribute the instruments, collect them in a week and thanked him for his co-operation. (Appendix F) The top sheet on each instrument asked the teachers to return the forms in a few days. Eight days after delivery the researcher picked up each bundle of completed opinionnaires.

Control of Error

The degree of sampling error was minimized by the

use of the large sample. By working from the Director, through the principal, to the staff, a large measure of co-operation was ensured. One possible side effect was that some principals and staffs may have felt coerced and may not have attended carefully to the task. While this was not evident to the researcher, it still remains a possibility.

Transfer of results from the instrument to the computer cards by the researcher was to reduce scoring error.

Description of Data-Gathering Instruments

The initial opinionnaire, developed by the researcher, was based on Maslow's hierarchy of needs. (Appendix C) The first section deals with general information. The response scale of zero to nine and a total of seventy-two questions were used because of the type of program that was employed in factor analysis. Sections II through VI relate directly to Maslow's hierarchy. Section II relates to level I, physiological needs, Section III to level II, economic needs; the others follow in similar fashion.

The first opinionnaire was given to thirty teachers in two schools, chosen from the system at large. The factor analysis of the data enabled the researcher to construct a much shorter instrument of twenty-nine statements. (Appendix G) In order to determine what statements to choose for the final opinionnaire the following procedure was followed. Those variables that loaded on a factor at a rate

of point three or higher were noted. The economic variables loaded at this rate on factors seven to ten. Since factor seven accounts for four point three of the variance, the loading rate of each variable was multiplied by this number. For those economic variables that loaded on factors seven to ten the same procedure was followed. The relative values for each variable on each factor were added and the highest five variables were employed on the final opinionnaire. (Table 1)

Table 1

Variable	Factor 7	Factor 8	Factor 9	Factor 10	Total
	x 4.3	x 3.7	x.3.4	x 2.9	
5	- .16	.59	- .37	1.53	1.59
7	.16	- .25	- .20	2.29	2.00
10	- .52	.29	.17	1.07	1.01
12	- .56	.37	3.06	-.14	2.73
14	- .08	1.88	- .13	.26	1.93
15	3.2	.55	0	-.29	3.46
17	2.04	.85	0	.31	3.2

Method of Determining Final Items
for Opinionnaire

Information from this table was used to choose variables fifteen, seventeen, twelve, seven, and fourteen for the final instrument. The same procedure was followed for each of the other sections.

The final opinionnaire was very similar to the first in format. The explanation page differed only in minor details. The code beside each response enabled the researcher to accurately transfer results to computer cards.

As in the original instrument, Sections II through VI relate directly to Maslow's hierarchy of needs. Most

questions were constructed in such a manner that the idea could be incorporated into an agreement. Question twenty-five (encouraging teachers to take practical courses) was an example of this. By encouraging the primary teacher to enrol in elementary reading courses, the board not only helps the teacher become self-actualized which results in a more satisfied employee, but has gained an employee with more knowledge in the particular teaching area.

PRESENTATION AND ANALYSIS OF DATA

Text

The factor analysis of the data from the first opinionnaire revealed that questions dealing with levels two through five comprised most of the first five factors. These first five factors accounted for sixty-six per cent of the variance. Economic variables were clustered in factors seven through ten which represented fifteen point one per cent of the variance. As one moved from level one to level six the loading of variables increased on the first five factors. At level six most of the loading was on factors one, two and three. The factor analysis indicated that items other than economic were extremely important to teachers. These results were based on preliminary data from a small sample.

The return rate on the final opinionnaire was 85.7%. The data is based on a sample of approximately one-quarter of the public elementary teachers.

Table 2 shows the mean response for each question, as well as the differences between males and females. The largest difference between male and female responses occurred on question nine, which dealt with the importance of special allowances when applying for new positions. This difference was not significant at the .05 level. (For T-test employed, see Appendix H)

Table 2

Data Summary

Section	Question	Male Mean	Female Mean	Overall Mean	Variance	Standard Deviation
Ec- on- om- ic- s	5	4.51	4.46	5.86	2.89	1.7
	6	5.48	6.45			
	7	8.32	8.29			
	8	6.62	6.0			
	9	5.27	4.32			
Se- cu- ri- ty	10	8.75	8.04	7.84	2.5	1.58
	11	8.16	7.95			
	12	7.32	6.64			
	13	7.94	8.03			
	14	8.16	7.92			
So- ci- al	15	7.67	7.81	8.37	.5	.7
	16	8.24	8.52			
	17	8.02	8.2			
	18	8.59	8.67			
	19	8.94	8.9			
Es- te- em	20	7.78	7.03	8.00	1.04	1.01
	21	7.81	7.76			
	22	8.52	8.18			
	23	8.59	8.32			
	24	8.21	8.21			
Self Actua- li- za- tion	25	7.72	7.78	7.8	1.53	1.2
	26	7.4	6.9			
	27	7.89	7.29			
	28	8.37	8.15			
	29	8.59	8.38			

Since there is no significant difference between male and female responses, it is presumed that their contract needs are similar. The common negotiating team is practical since the needs of the two groups are similar.

The area of social needs, with a variance of .5, is the section with the highest degree of agreement. It also has the highest mean, 8.37. Participation in the decision making procedure as it affects the job is extremely important to teachers. The yearly agreement says nothing

about this need of the teaching body.

The need ranked second by teachers is the esteem need. They express a desire for self-respect and recognition for their work. The yearly agreement includes only one article which might be used to help meet the esteem need. Time off with pay to work on curriculum writing would help meet the esteem needs of a few teachers. In the first eight months of the agreement not one teacher was freed from classroom duty to work on curriculum, nor was there any indication that one would be released from classroom responsibilities.

The third ranked need is security. With the large number of insurance plans and special benefits in the agreement this need is definitely met.

The fourth ranked need is self-actualization. Question twenty-nine, which dealt with curriculum writing, had the second highest mean response. This need, although written in the contract, is not being met.

The least important need is in the economic area. The major section of the agreement is concerned with economic matters. The low mean of 5.86 in the economic area may indicate that teachers are not nearly as concerned with money as many would believe. The researcher does not reach this conclusion.

The large salary increases over the past few years have allowed teachers to satisfy those needs that money can buy. Since this need has been satisfied in the past, its

value may be underestimated. The teacher may consider reasonably good salary as normal. In terms of physiological needs, they only become important in terms of behaviour when they are unsatisfied. The same is likely true for economic needs. Since teachers are now earning enough money to satisfy their physiological needs, needs at a higher level have emerged. Should salary be reduced, teachers' desires will be focussed on economic matters again.

The difference between the economic mean and the means of the other levels is significant at the .05 level. (Table 3) Terms for satisfying these higher level needs must be written into an agreement since they are considered so important by the teachers.

The differences among the security, social, esteem and self-actualization needs, with one exception, are not significant. They are all considered more important than economic needs. There is a significant difference between the social needs and self-actualizing needs.

In terms of an agreement the results clearly indicate that teachers want to be made part of the decision-making process in the school and in the system. Since these needs have been frustrated to date, there have been increasing demands for more security related issues such as tenure, and various types of insurance.

This pattern was predicted by Maslow. He pointed out that, "...the person will want the more basic of two

needs when deprived of both." (1954:99) When teachers' demands for decision-making power are frustrated, they fall back on security issues.

There is a large difference between what teachers express as needs and what agreements state in an effort to satisfy these needs. The majority of the agreement deals with economic and security matters. Teachers feel that participation and self-respect are important areas for them. Articles that will fulfil these needs are necessary in future agreements if a satisfied teaching population is desired.

The relationship between Maslow's hierarchy of needs and the data is not clear. Economic or physiological needs are at the bottom of his model, as they are in this data. Since there is not significant difference between the other areas, except between social needs and self-actualization needs, they cannot be arranged in any type of order. The similarity between Maslow's hierarchy and the pattern of responses of the teachers is shown by the significant difference between the economic and higher level needs.

The general theory that social needs will tend to dominate once physiological needs are satisfied is clear.

Table 3
 Significance of Differences Between
 Means of Various Levels
 at .05 level

	5.86 Economic	7.89 Security	8.37 Social	8.00 Esteem	7.8 Self Actualization
Economic 5.86	X	Significant	Significant	Significant	Significant
Security 7.84	Significant	X	Not Significant	Not Significant	Not Significant
Social 8.37	Significant	Not Significant	X	Not Significant	Significant
Esteem 8.00	Significant	Not Significant	Not Significant	X	Not Significant
Self Actualization	Significant	Not Significant	Significant	Not Significant	X

SUMMARY AND CONCLUSIONS

Restatement of the Question

Teachers in the last few years have become more militant and adopted courses of action unthinkable ten years ago. Social scientists believe that frustrated psychological and social goals have behavioural consequences. The researcher was interested in determining what teachers' needs were with respect to their job environment and were these needs being met in the yearly agreements between the teachers and board.

Most needs theories are based on Maslow's work. The researcher wanted to see if there was any relationship between what teachers actually expressed as needs and what Maslow theorized these needs to be.

Description of Procedures Used

A sample of 149 teachers was drawn from the elementary teaching body of the Sault Ste. Marie Board of Education. This sample included principals, vice-principals, consultants and special teachers because they are all covered under the same contract. An opinionnaire based on Maslow's conception of needs was completed by thirty teachers. A factor analysis of the results enabled the researcher to reduce the opinionnaire to twenty-nine statements. This form was then completed by the remainder of the sample.

From this data means were established for each of Maslow's five levels. A pooled variance T-test was employed to determine if the differences between male and female responses and differences between levels were significant at the .05 level.

Principal Findings and Conclusions

There was no significant difference between male and female responses. The teachers indicated a significant difference between economic factors and all others. They considered the higher level needs of security, social, esteem and self actualization more important than economic considerations. Social needs were deemed more important than self-actualization needs but not more important than esteem or security needs.

The researcher concluded that agreements with their concern for economic and security matters are only partly fulfilling the desires of teachers. Teachers do not regard economic factors as terribly important because at the moment they are satisfied. A satisfied need will not determine behaviour. Money and security needs must still be met in agreements but social needs of teachers must play a much more important role. These social needs can be met by insuring that teachers have meaningful input in the decision-making process.

At the school level, the research indicates that the principal who employs the committee type of administration will be much more successful than the dictator or manipulator. Use of the committee will allow staff to feel

that they are part of the decisions and will likely result in better implementation of those decisions.

The relationship between the results and Maslow's hierarchy of needs was not precise. The economic needs were definitely at the bottom but there was no clear cut separation of the higher level needs.

Recommendations For Further Research

Presently most of the negotiators' time is spent on money issues. Research to determine what level of pay would be acceptable to both teachers and boards is required. Once this has been accomplished, efforts can be directed towards methods of fulfilling teachers' social and esteem needs.

Before teachers will be permitted in the decision making process, management must be convinced that it is in their best interests to allow teachers to have some influence in the process. This will be a very difficult step because most administrators consider it their role to make decisions for employees and will brook no interference in their management rights. Research needs to be carried on to determine the best ways to convince administrators to have their employees involved in the decision making process.

Regardless of what the research indicates, researchers and practitioners must be adaptable for very few employees resemble the statistical mean.

Appendix A

80 Fort Creek Drive,
Sault Ste. Marie, Ont.,
January 3, 1977.

O. P. S. M. T. F.,
1260 Bay Street,
Toronto, Ontario,
M5E 2B7.

Dear Sir,

I am currently on sabbatical and pursuing an Education Specialist degree. Part of the degree program involves a research paper.

My topic deals with contracts and what trustees and elementary teachers view as negotiable items.

Any information you could forward on trustees' and elementary teachers' attitudes towards Bill 100 and specifically negotiable items would be appreciated.

Sincerely,

N. P. Nicolson

Appendix B

80 Fort Creek Drive,
Sault Ste. Marie, Ont.,
January 3, 1977.

Mr. H. M. Nightingale,
Ontario School Trustees' Council,
Suite 500, 2 Bloor St. West,
Toronto, Ontario. M4W 3E2.

Dear Sir,

I am currently on sabbatical and pursuing an Education Specialist degree. Part of the degree program involves a research paper.

My topic deals with contracts and what trustees and elementary teachers view as negotiable items.

Any information you could forward on trustees' and elementary teachers' attitudes towards Bill 100 and specifically negotiable items would be appreciated.

Sincerely,

N. P. Nicolson

Appendix C

Teacher Desires and Agreements

Permission to distribute this opinionnaire has been received from Mr. Derby, Director of Education, and your principal.

The following opinionnaire is a test run. After the results are statistically analyzed to determine which statements are best, a much shorter opinionnaire will be developed. You will not be asked to complete the revised edition but I will deliver a copy of it to your school.

Any questions or suggestions you have would be appreciated. Please write them on the back of the last page.

Do not put your name on the sheets. Individual replies are confidential. The summarized information from all the pre-opinionnaires will be used as a basis for the second one.

This opinionnaire is to try to determine what teachers consider to be important in their yearly agreement with the Board. Other than number one (1) where you use only a 0 or a 9, please place a number 0 thru 9 in the space at the end of every statement or question.

Thank you very much for your time.

Sincerely,

Page Nicolson

Question No.	Part I	Code
1.	Please indicate your sex. Male - 0. Female - 9	1 - 4
2.	How often are you absent? Infrequently - 0 (less than five days a year) Frequently - 9 (more than fifteen days a year)	1 - 5
3.	Would you want your child to have the same job as you? No - 0. Yes - 9	1 - 6
4.	Are you satisfied with your job? Not at all - 0. Very - 9	1 - 7
Part II		
5.	Elementary salaries are fair with respect to what other people in society earn. Extremely unfair - 0. Very fair - 9	1 - 8
6.	How would you rate the salary grid compared to grids from other areas? Poor - 0. Excellent - 9	1 - 9
7.	Salary is very important to my job satisfaction. Not at all - 0. Extremely - 9	1 - 10
8.	The salary grid is the most important part of the agreement. Disagree - 0. Agree - 9	1 - 11
9.	My salary allows me to fulfil the basic needs of food, shelter and clothing. Seldom - 0. Always - 9	1 - 12
10.	The salary schedule gives me a fair return for the amount of time I have invested in taking courses. Very poor return - 0. Excellent return - 9	1 - 13
11.	The pay is the main reason I remain in teaching. Definitely no - 0. Definitely yes - 9	1 - 14
12.	The method of pay is satisfactory to me, i.e. 4% each cheque plus 12% in June and 8% in Sept. Unsatisfactory - 0. Very satisfactory - 9	1 - 15

13.	The Q.E.C.O. Programme 2 Evaluation Statement is a fair method of determining level for salary. Unfair-0. Fair - 9	_____	1 - 16
14.	Special allowances are an important consideration when applying for a new position. Definitely not-0. Definitely yes - 9	_____	1 - 17
15.	Failure to achieve a salary grid competitive with other elementary areas is an important enough reason to go on strike. (Please assume that A.I.B. will disband shortly.) Definitely no - 0. Definitely yes - 9	_____	1 - 18
16.	Most teachers are only concerned with the salary grid and not the other articles in the agreement. Disagree - 0. Totally agree - 9	_____	1 - 19
17.	Those teachers with lunch room supervision duties should receive an extra allowance. Disagree - 0. Agree - 9	_____	1 - 20
18.	Allowance for teachers in out of city schools should be made more realistic. Disagree - 0. Agree - 9	_____	1 - 21

Part III

The following items may appear in teacher-board agreements. Please indicate how important it is to have these items written into an agreement. Consider each item separately, NOT in relation to any other. 0 - unimportant. 9 - very important.

19.	Long Term Disability Insurance	_____	1 - 22
20.	Dental Plan	_____	1 - 23
21.	Ontario Hospital Insurance	_____	1 - 24
22.	Maternity Leave	_____	1 - 25
23.	Paternity Leave	_____	1 - 26
24.	Adoption Leave	_____	1 - 27
25.	Personal Business Days	_____	2 - 1
26.	Grievance Procedure	_____	2 - 2

27.	Life Insurance	_____	2 - 3
28.	Retirement Gratuity Plan	_____	2 - 4
29.	Major Medical Insurance Plan	_____	2 - 5
30.	Compassionate Leave	_____	2 - 6
31.	Cumulative Sick Leave	_____	2 - 7
32.	Tenure	_____	2 - 8
33.	Leave for Federation Duties	_____	2 - 9
34.	Leave for Educational Examinations	_____	2 - 10
35.	Leave for Convocations	_____	2 - 11
36.	Leave of Absence	_____	2 - 12
37.	Sabbatical Leave	_____	2 - 13
38.	Policy for Redundant Staff	_____	2 - 14
39.	Seniority as a major criterion for promotion	_____	2 - 15

Part IV

40.	The atmosphere at school allows me to feel at ease. Never - 0. Always - 9	_____	2 - 16
41.	I believe the staff should participate in the decision-making process in the school. Never - 0. Always - 9	_____	2 - 17
42.	I would like to be able to choose the people with whom I work. Never - 0. Always - 9	_____	2 - 18
43.	Teacher participation on board committees that make policy concerning elementary schools is important. Unimportant - 0. Very important - 9	_____	2 - 19
44.	Decisions affecting the staff should be made cooperatively by the staff and principal. Strongly disagree - 0. Strongly agree - 9	_____	2 - 20
45.	It is important for the principal to ensure that all staff feel that they are part of a team. Unimportant - 0. Very important - 9	_____	2 - 21

46. In curriculum committees, teachers should be able to choose the people with whom they wish to work, rather than have members appointed.
Disagree - 0. Totally agree - 9 _____ 2 - 22
47. All staff members should feel free to contribute their ideas at staff meetings.
Never - 0. Always - 9 _____ 2 - 23
48. Negotiation of working conditions is more important than salary considerations.
Disagree - 0. Agree - 9 _____ 2 - 24
49. The staff should decide how to divide up duties rather than have them assigned.
Disagree - 0. Agree - 9 _____ 2 - 25
50. It is important for all staff members to be informed of all activities taking place in the school.
Disagree - 0. Agree - 9 _____ 2 - 26

Part V

51. Self evaluation should play an important part in teacher evaluation.
Not at all - 0. A great deal - 9 _____ 2 - 27
52. Teachers who have good ideas should have the board print them and distribute them to applicable areas.
Never - 0. Always - 9 _____ 3 - 1
53. Schools with unique projects should be able to call the Sault Star for publicity.
Disagree - 0. Agree - 9 _____ 3 - 2
54. Principals should spend more time in classrooms in order to better appreciate the work of the staff.
No - 0. Yes - 9 _____ 3 - 3
55. Teachers should be relatively free to decide what is best for the students.
Disagree - 0. Agree - 9 _____ 3 - 4
56. Teachers should have a choice of workshops on professional development days rather than be assigned to sessions.
Disagree - 0. Agree - 9 _____ 3 - 5

57. Teachers should be free to make the majority of decisions affecting the class without seeking permission from higher authorities.
Disagree - 0. Agree - 9 _____ 3 - 6
58. Teachers who do an extremely good job should receive some form of recognition.
Disagree - 0. Agree - 9 _____ 3 - 7
59. Board decisions should only be taken after consultation with the teachers.
Disagree - 0. Agree - 9 _____ 3 - 8
60. Teachers with above average ideas for classroom use should be encouraged to share these ideas with others.
Disagree - 0. Agree - 9 _____ 3 - 9
61. When the school receives a favourable report in the news media, I feel proud to be part of that organization.
Seldom - 0. Always - 9 _____ 3 - 10
62. I work better when I feel that the principal has confidence in me.
Seldom - 0. Always - 9 _____ 3 - 11

Part VI

63. Teachers who are extremely good in teaching one subject area should be allowed to teach this subject in other classes.
Disagree - 0. Agree - 9 _____ 3 - 12
64. The board should encourage teachers to take practical courses in which they are interested.
Disagree - 0. Agree - 9 _____ 3 - 13
65. Above average classroom teachers should be encouraged to help those teachers who are having problems.
Disagree - 0. Agree - 9 _____ 3 - 14
66. Free time and a quiet place to work should be provided for those teachers who wish to develop new methods of instruction for their classes.
Disagree - 0. Agree - 9 _____ 3 - 15
67. Good teachers believe that they are contributing something to society by doing the best they can.
Disagree - 0. Agree - 9 _____ 3 - 16

68. I would like to have more control over the amount of teaching I do and what I teach.
Disagree - 0. Agree - 9 _____ 3 - 17
69. I consider that the opportunities for in-service training are potentially very beneficial.
Disagree - 0. Agree - 9 _____ 3 - 18
70. Teachers can best decide the size of class where they can do the most effective job.
Disagree - 0. Agree - 9 _____ 3 - 19
71. Those teachers who wish to work on curriculum should be provided time off, necessary materials, expertise, and staff support to develop curriculum.
Disagree - 0. Agree - 9 _____ 3 - 20
72. Teachers should be allowed to experiment with new and untried teaching methods without fear of criticism.
Disagree - 0. Agree - 9 _____ 3 - 21

Appendix D

Schools Used in Survey

Number of Teachers	<u>First Opinionnaire</u>	
13	Tarentorus Public School	
17	Greenwood Public School	
	<u>Second Opinionnaire</u>	
19	Parkland Public School	East
15	Manitou Park Public School	
15	Etienne Brule Public School	Central
12	King George Public School	
7	Broadview Public School	West
7	James Lyons Public School	
9	Prince of Wales Public School	
12	Northern Heights Public School	North
7	Searchmont Public School	
16	Aweres Public School	
<hr/>		
149		

Appendix E

80 Fort Creek Drive,
Sault Ste. Marie, Ont.,
February 14, 1977.

Mr. R. S. Derby,
Director of Education,
Board of Education,
644 Albert St. E.,
Sault Ste. Marie, Ont.

Dear Mr. Derby,

After our discussion of my project in December, I contacted the principals of a number of schools, for permission to distribute opinionnaires to the staff. Co-operation was 100%.

Opinionnaires will be distributed to the staffs of the following elementary schools.

Aweres
Broadview
Etienne Brule
Greenwood
James Lyons
King George
Manitou Park
Northern Heights
Parkland
Prince of Wales
Searchmont
Tarentorus

Thank you very much for permission to approach the principals to carry out my research.

Sincerely,

Page Nicolson

Appendix F

TO - The Principal

RE - Teacher Desires and Agreements

Please distribute one of the enclosed opinionnaires to each of your staff members plus any regular itinerant teachers. (e.g. French, Special Ed.) You are also asked to complete the opinionnaire.

One week from today, I will return to pick up those forms that have been completed.

If there are any questions, please phone me - 949-1386.

I thank you for your co-operation and time.

Sincerely,

PN:ss

Page Nicolson

Appendix G

Teacher Desires and Agreements

Permission to distribute this opinionnaire has been received from Mr. Derby, Director of Education, and your principal.

This opinionnaire is to try to determine what types of items teachers consider to be important in their yearly agreement with the Board. Bill 100 permits negotiation on any topic.

Do not put your name on the sheets. Individual and school replies are confidential. The data will be analyzed to determine the priorities of the elementary teaching staff.

Other than number one (1) where you use a 0 or a 9, please place a number 0 thru 9 in the space at the end of every statement or question.

Please return the opinionnaire to your principal in the next two or three days.

Thank you very much for your time.

Sincerely,

Page Nicolson

Part III

The following items (10 - 14) may appear in the teacher-board agreements. Please indicate how important it is to have these items written into an agreement. Consider each item separately, NOT in relation to any other.

	Unimportant - 0	Important - 9	
10. Ontario Hospital Insurance			_____ 1 - 14
11. Leave of Absence			_____ 1 - 15
12. Personal Business Days			_____ 1 - 16
13. Maternity Leave			_____ 1 - 17
14. Long Term Disability Insurance			_____ 1 - 18

Part IV

15. I believe the staff should participate in the decision-making process in the school.			
Never - 0	Always - 9		_____ 1 - 19
16. Teacher participation on board committees that make policy concerning elementary schools is important.			
Unimportant - 0	Important - 9		_____ 1 - 20
17. Decisions affecting the staff should be made co-operatively by the staff and principal.			
Strongly disagree - 0	Strongly agree - 9		_____ 1 - 21
18. It is important for the principal to ensure that all staff feel that they are part of a team.			
Unimportant - 0	Very important - 9		_____ 1 - 22
19. All staff members should feel free to contribute their ideas at staff meetings.			
Never - 0	Always - 9		_____ 1 - 23

Part V

20. Teachers who have good ideas should have the board print them, and distribute them to applicable areas.
Never - 0 Always - 9 _____ 1 - 24
21. Schools with unique projects should be able to call the Sault Star for publicity.
Disagree - 0 Agree - 9 _____ 1 - 25
22. Teachers should have a choice of workshops on professional development days rather than be assigned to sessions.
Disagree - 0 Agree - 9 _____ 1 - 26
23. Teachers with above average ideas for classroom use should be encouraged to share these ideas with others.
Disagree - 0 Agree - 9 _____ 1 - 27
24. When the school receives a favourable report in the news media, I feel proud to be part of that organization.
Seldom - 0 Always - 9 _____ 2 - 5

Part VI

25. The board should encourage teachers to take practical courses in which they are interested.
Disagree - 0 Agree - 9 _____ 2 - 6
26. Above average teachers should be encouraged to help those teachers who are having problems.
Disagree - 0 Agree - 9 _____ 2 - 7
27. Free time and a quiet place to work should be provided for those teachers who wish to develop new methods of instruction for their classes.
Disagree - 0 Agree - 9 _____ 2 - 8
28. Good teachers believe that they are contributing something to society by doing the best they can.
Disagree - 0 Agree - 9 _____ 2 - 9

29. Those teachers who wish to work on curriculum should be provided with time off, necessary materials, expertise, and staff support to develop curriculum.

Disagree - 0 Agree - 9

2 - 10

Please respond to each item.

Thank you

Appendix H

T - test

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{n_1 + n_2 - 2} \right) \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

- \bar{X}_1 - mean of group
- $\sum x_1^2$ - sum of variance squared
- n_1 - number in group

Pooled Variance t Model
(Popham, 1967:145)

Footnotes

1. This information is based on a paper from O. P. S. M. T. F. which is in turn based on Urquhart, Historical Statistics of Canada, and Muir, Collective Bargaining by Canadian Public School Teachers.
2. In Ontario's most recent teacher strike, the Durham Region Roman Catholic Separate School system submitted salary, salary increments and weighted pupil-teacher ratio for Grades one, two and three to arbitration after a strike of fifteen days. (Sault Star, February 14, 1977, 8.)
3. This paper was presented at the Canadian Teachers' Federation (C. T. F.) Bargaining Conference in Ottawa, Ontario, June 5, 1975.
4. The Ontario Teachers' Federation is composed of five affiliated groups - the Ontario Secondary School Teachers' Federation, the Federation of Women Teachers' Association of Ontario, the Ontario Public School Men Teachers' Federation, l'Association des Enseignants Franco-Ontariens, and the Ontario English Catholic Teachers' Association.
5. Charles A. Lindbergh made a similar observation in August 1940 after touring Ford's River Rouge plant. Commenting on the workers' activities he said, "...it was not the type of activity that builds character in men." (The Wartime Journals of Charles A. Lindbergh, 1970:376)

Bibliography

- 1976-77 Teacher/Board Collective Agreements A Provincial Overview, Toronto: Education Relations Commission 1977. 28pp.
- ACKERMAN, Leonard. "Let's Put Motivation Where it Belongs - Within the Individual," Personnel Journal, 49:559-62, July, 1970.
- An Act Respecting the Negotiation of Collective Agreements Between School Boards and Teachers, Bill 100 5th Session 29th Legislature, Ontario, 24 Elizabeth II, 1975, Queen's Printer For Ontario. 28pp.
- BERKLEY, GEORGE. The Craft of Public Administration. Boston: Allyn and Bacon, Inc., 1975. 504pp.
- BOWMAN, JAMES S. "The Behavioural Sciences: Fact and Fantasy in Organizations," Personnel Journal, 55:395-7, August, 1976.
- BULL, WARREN. "Compensation Managers: Let's Not Sleepwalk the 70's," The Business Quarterly, 38:23-32, Winter, 1973.
- CARROLL, A. B. "Unmixing Current Motivational Strategies," The Personnel Administrator, 18:53-4, July-August, 1973.
- CHARLES, A. W. "Theory Y Compensation," Personnel Journal, 52:12-26, January, 1973.
- CHRUDER, HERBERT J. and ARTHUR W. SHERMAN. Readings in Personnel Management. Cincinnati: Southwestern Pub. Co., 1966. 761pp.
- CHUNG, KAE H. "Incentive Theory and Research," Personnel Administration, 35:31-41, January-February, 1972.
- DARMON, RENE Y. "Salesman's Response to Financial Incentives: An Empirical Study," Journal of Marketing Research, XI:418-26, November, 1974.
- DEWEY, JOHN. The Public and Its Problems. New York: Holt, 1927. 236pp.
- DEWEY, JOHN. Reconstruction in Philosophy. New York: New American Library, 1950. 168pp.
- EVANS, MARTIN G. "Herzberg's Two-Factor Theory of Motivation: Some Problems and a Suggested Test," Personnel Journal, 49:32-5, January, 1970.

- EVANS, WILLIAM E. "Pay For Performance: Fact or Fable," Personnel Journal, 49:726-31, September, 1970.
- GELLERMAN, SAUL, W. Motivation and Productivity. New York: Vail-Ballou Press, 1963. 304pp.
- GLUECK, WILLIAM. Personnel: A Diagnostic Approach. Dallas: Business Publications, 1974. 712pp.
- HALL, RICHARD H. "Reconciling Organization and Personal Goals," Personnel Journal, 49:41-4, January, 1970.
- HENDERSON, RICHARD I. Compensation Management: Rewarding Performance in the Modern Organization. Reston: Prentice-Hall, 1976. 452pp.
- HERZBERG, FREDERICK J. "New Perspectives on The Will to Work," Management Review, 63:52-4, November, 1974.
- HERZBERG, FREDERICK et al. The Motivation to Work. New York: John Wiley and Sons, Inc., 1967. 157pp.
- KNEZEVICH, STEPHEN. Administration of Public Education. New York: Harper and Row, 1962. 620pp.
- LABOUR GAZETTE. 72:612, December, 1972.
- LAUGHLIN, THOMAS C. "Motivating the New Breed or Maslow Revisited," Best's Review Life Health Insurance Edition, 73:102-4, Summer, 1972.
- LAWLER III, EDWARD E. Motivation in Work Organizations. Monterrey: Brooks/Cole, 1973. 224pp.
- LEVINSON, HARRY. The Great Jackass Fallacy. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1973. 178pp.
- LINDBERGH, CHARLES A. The Wartime Journals of Charles A. Lindbergh. New York: Harcourt Brace Jovanovich, Inc., 1970. 1038pp.
- MASLOW, ABRAHAM. Motivation and Personality. New York: Harper and Row, 1954. 369pp.
- McARTHUR, JOHN. "Is Motivation By Money Still Fashionable?" Management Review, 62:64-5, May, 1973.
- McGREGOR, DOUGLAS. The Human Side of Enterprise. New York: McGraw-Hill, 1960. 246pp.

- MEGLEY, JOHN C. "Management and the Behavioural Sciences: Theory Z," Personnel Journal, 49:216-21, March, 1970.
- MILJUS, ROBERT C. "Effective Leadership and The Motivation of Human Resources," Personnel Journal, 55:36-40, August, 1976.
- NEWMAN, PETER C. The Canadian Establishment Volume One. Toronto: McClelland and Stewart Limited, 1975. 479pp.
- NORWICH, JOSEPH J. "Motivational Theories: How They Relate," Canadian Business, 47:64-6, October, 1974.
- POPHAM, JAMES W. Educational Statistics Use and Interpretation. New York: Harper and Row, 1967. 429pp.
- RUMBALL, DONALD. "You Can't Manage any More by Money Alone," Financial Post, 67:7, October 13, 1973.
- SANDERSON, GEORGE. "Fulfillment on the Job: Possible Goal or Impossible Dream?" Labour Gazette, 73: 385-91, June, 1973.
- SCHREINER, JOHN, "Why Are More Workers in a I Hate My Job Mood?," Financial Post, 67:7, March 31, 1973.
- SHAPIRO, J. and MAHMOUD WHBA. "Fred W. Taylor: 62 Years Later," Personnel Journal, 53:574-8, August, 1974.
- URQUHART, M. (ed) Historical Statistics of Canada. Toronto: MacMillan, 1965. 672pp.
- WEAVER, CHARLES N. "What Workers Want From Their Jobs," Personnel, 53:49-55, May-June, 1976.
- WIRTH, ARTHUR C. Education in the Technological Society. Scranton: Intext Educational Publishers, 1972. 259pp.
- ZANDER, ALVIN F. "Productivity and Group Success - Team Spirit vs. The Individual Achiever," Psychology Today, 8:64-8, November, 1974.