JOB MOTIVATION OF SECONDARY SCHOOL TEACHERS:

AN APPLICATION OF THE JOB CHARACTERISTICS THEORY

by

Nicole Marie Lucille Fournier

A Thesis

Submitted to the Faculty of Graduate Studies

and Research in Partial Fulfilment of the

Requirements for the Degree of

Masters of Arts

Faculty of Administration and Policy Studies

in Education

The University of McGill

Montreal

March, 1990

DEDICATION

I would like to dedicate this thesis to my parents, Alice Lalonde and Emile Fournier. They always showed support and encouraged me in my studies. My father passed away shortly after I obtained my Bachelor's degree. He was so proud then, how proud he would be now.

Abstract

Motivation of Secondary School Teachers:
An Application of the Job Characteristics Theory

Better educated people want more meaningful and
challenging jobs. Improving teacher motivation should be a
continuing concern of educational administrators, therefore,
the general purpose of the study was to assess the
motivation for a sample of anglophone school teachers using
the complete "Job Characteristics Model" designed by Hackman
and Oldham (1980).

This study is based on a voluntary sample of full-time
teachers from two anglophone secondary schools members of
the Lakeshore Teachers Association (LTA). Of a possible
theoretical population of 156 teachers, 93 usable
questionnaires from which analysis could be drawn were
returned. The "Job Diagnostic Survey" was the tool used to
obtain the data from the teachers. One-way analysis of
variance was used to identify significant between the means
of respondents grouped by demographic variables.

The findings revealed that the schools were very
homogeneous. In the core job characteristics, autonomy was
the most important motivating factor for teachers, followed
by task significance, skill variety, feedback from the job

and lastly task identity. In the critical psychological states, experienced meaningful of the work was the highest degree, followed by experienced responsibility for outcomes of the work, and knowledge of results of the work activities. Other dimensions revealed that dealing with others had a relatively high score, followed closely by internal work motivation, an outcome factor of the theory, and finally that feedback from agents was the lowest score. The motivating potential score of 174, out of a possible 343, reflected the overall potential of a job to foster internal work motivation on the part of the teacher. This MPS was higher than the American professional norm of 154 and the National norm of 128.

The author recommends that similar motivation studies of a wider scope be undertaken so that comparisons might be made and more light shed on a complex but challenging topic.

Resume

La Motivation des Enseignants(es) au Niveau Secondaire:
Une Application de la Theorie de Caracteristiques des Emplois.

De nos jours, les gens mieux instruits ont besoin d'emplois plus significatifs et offrant des défis. Les gestionnaires de l'éducation se doivent de toujours essayer d'améliorer la motivation des enseignants. C'est la raison pour laquelle cette étude avait pour objectif d'examiner la motivation des enseignants en prenant comme base théorique " Le Modele relatif aux Caracteristiques des Emplois" élabore par Hackman et Oldham (1980).

Les enseignants à temps plein de deux écoles anglophones du niveau secondaire de la Commission Scolaire du Lakeshore avait été choisi pour cette étude. Il s'agisait donc d'un echantillon volontaire restreignant anisi la generalisation des résultats. L'étude fut menée aupres de quatre-vingt treize (93) enseignants. "L'Etude Diagnostique de l'Emploi", instrument recommendé par les auteurs, a été menée en vue d'obtenir des données . Une analyse de variance à sens unique a été utilisée pour identifier les differences significatives entre les moyennes obtenues par les répondants groupes selon les variables démographiques.

L'étude a révélé que les deux écoles etaient tres homogenes. Dans les caracteristiques de l'emploi, l'autonomie était le facteur le plus motivant pour les enseignants, on trouvait en suite la signification de la tache, la varieté des habilités, le feedback de l'emploi, et en tout dernier lieu l'identification à la tache. Les etats psychologiques ont demontre que le sentiment d'un travail valorisant était le plus motivant, ensuite le sentiment de responsabilité à l'egard de son travail et finalement la connaissance des résultats de son travail. Parmi les autres dimensions, le feedback des superieurs et des collegues était important, ainsi que la motivation intrinseque, et le feedback des superieurs et des collegues. Le potentiel de motivation des enseignants (MPS), ayant un total possible de 343, était de 174, un niveau de motivation quelque peu plus elevé que les normes Americaines de 154 et de 128.

L'auteur recommende que des études semblables, mais de plus grande envergure, soient entreprises afin de pouvoir faire de plus amples comparaisons et ainsi apporter des eclaircissements sur un sujet si important et complexe.

Acknowledgements

The writing of this thesis is the culmination of several years of part-time study which required patience and perseverance. This endeavour would not have been undertaken or sustained without the encouragement, assistance and support of several people. I am grateful to those individuals who provided it:

Dr. Clermont Barnabe, who gave generously of his time providing advice, guidance, constructive comments and expertise throughout the course of my graduate studies.
Dr. Gary Anderson for believing in me and accepting in the program.
The school principals and the school teachers, for their valuable time they so generously gave for the survey.
My friend, Brenda Walsh, who was always there to encourage me.
My friends, Anita and Denis Bedard, for providing the technical materials and expertise needed.
My colleague, Pat Machin, for proofreading and editing this thesis.

Table of Contents

Table of Contents -Con't

Table of Contents - Cont'd

List of Tables

List of Figures

Figure:

Chapter I

Introduction

For the past two decades, there has been an unmistakable upsurge of activities sponsored by teacher organizations world wide aimed at gaining legal and social recognition of teaching as a profession. Quebec, Canada, is no exception but the declining enrolment and the implementation of the new regime pedagogique, accompanied by various modifications in teacher assignments has made the task more difficult. Examining the present existing situation, the Ministry of Education insists that the education provided for Quebec children is intended to foster the optimum possible development of all dimensions of the person. Much research supports the student's motivational potential to attain this goal but little research appears in literature relating to what motivates their classroom leader -the teacher.

In 1939, Peter Drucker wrote "We know nothing about motivation. All we can do is write books about it" (Royal Bank of Canada, 1980). This emphasizes just how complex and inscrutable are the motives of flesh-and-blood people in the work field today. Concern with how people feel about their

jobs is of relatively recent origin. Bendix (1956, p. 294) best summarized the evolution in managerial thinking by noting that the "failure to treat workers as human beings came to be regarded as the cause of low morale, poor craftsmanship, unresponsiveness, and confusion". The bulk of the research on motivation initially concentrated on trying to determine the existence of various drive or need states and\or their influence on behavior (Campbell et al, 1970, p. 358).

Before the industrial revolution "motivation" took the form of fear of physical, financial, or social punishment. However, as manufacturing processes became more complex, large-scale factories emerged which destroyed many of the social and exchange relationships existing under the "home industries", or "putting-out", system of small manufacturing (Steers and Porter, 1975, p. 15). Before 1930, studies concentrated on the physical surroundings of the worker and how they could be improved. From the 1930 onward, interest increased in trying to learn about the thoughts, feelings, and attitudes of people that motivate them to work. Three reasons underlay this increased concern about job attitudes and the motivation to work. First, social critics were prodding society to pay, more attention to individuals and their feelings. The second reason for focusing on job

attitudes was the increasing awareness of managers that jobs were changing and that greater discretion and responsibility would be needed from workers. A third reason for the attention to the worker attitudes in the United States in the 1930's was renewed vitality of labor unionism at that time (Bass et al., 1981, pp.53-54).

Once it was realized that employee motivation had a bearing on productivity studies around 1936 focused on the field of business administration and management. Initially, the bulk of the research concentrated on trying to determine the existence of various drive or needs states and/or their influence on behavior (Bass et al., 1981, p. 74). The purpose of these studies and some more of the recent work has been to create a match between employee and task in order to maximize production (Pastor and Erlandson, 1982, p. 172).

The importance of motivation in education is not a new concept. Teachers expect to be treated fairly, to receive support from the school board and their administration, to have friendly interpersonal relationships, and to work in pleasant working conditions. Teachers and administrators have different needs which vary according to age, sex, and professional role. The almost universal failure of

administrators, board members and citizens to recognize these different needs helps to explain educational rigidity, faculty dropout, and increased teacher militancy. When teachers are denied opportunities for motivation expression, not only are valuable human resources wasted but students are denied important opportunities for self-actualization (Trusty and Sergiovanni, 1966, p. 116).

It is interesting to note that most of the teacher achievement-centered stories involved less concrete evidence of actual success and more sensing and feeling by teachers that students have been reached and were presumably affected in some positive way (Sergiovanni, 1967). Lortie (1969-1975) demonstrated, using his own and others' research, that teachers draw their satisfaction and motivation primarily from intrinsic rewards tied to the act of teaching itself (p.119). As Lortie (1975) reminds us, teachers want to teach. Other satisfaction factors include recognition, work itself, responsibility and advancement. On the other hand, factors of dissatisfaction involve poor salary conditions, the impossibility of growth, the problems of interpersonal relations with subordinates, peers and superiors, the lack of status, the energy consumed in supervision, board policy and administration, poor working conditions, the lack of personal life and job security. Factors which accounted for

high attitudes of teachers were related to the work itself while factors which accounted for low attitudes of teachers are related to the conditions or environment of work.

Sergiovanni and Carver (1980) acknowledged that motivation is an important word to educators. As it applies to students, motivation has received considerable attention in the preparation programs of teachers and as an integral component of curriculum development. Yet with all of the emphasis on motivation for students, educators have tended to overlook the topic of motivation as it relates to professional workers (p. 81). The recent emphasis on professional burnout and increasing demands for improved student performance have intensified teacher motivation (Matthews and Holmes, 1982, p. 22).

Teaching is the process of causing knowledge, guiding studies, imparting knowledge, and instructing. It demands integrity, honesty, spirituality, perfection, confidence, competence and caring. It is a life-way through which students learn to become that which they choose to be. A study by Atkinson (1958) demonstrated that one may be strongly motivated to complete a task but though motivated, how does one find the intensity to follow through? Later research in achievement motivation (Atkinson, 1983) suggests

that the kind of people, the kind of situation and combination of these define an order of points along the continuum of intensity of motivation.

Atkinson in 1983 further noted that we know that people are more or less strongly motivated to engage in the task depending upon the interaction of their own motivational characteristics and the incentive character of the situation. Individuals differ greatly in motivation because there are so many components of motivation in terms of which they can differ. Many teachers want to work and are both interested in and capable of making a significant contribution to their school system. They seek personal fulfillment and self-actualization through their work. Incentive plans such as differentiated staffing plans, career ladder plans, mentor and master teacher program were intended to motivate prospective and experienced teachers seeking to increase variety and responsibility in their work. These plans have raised more problems and failed to meet the specified goals intended by the organization.

Today we are trying to operate our schools as if the teachers in them possess an infinite capacity for coping with more and more demands on individual time and energy (Groves, 1984, p. 33). Although teaching is demanding work

requiring creativity, it is repetitive. Despite the variety of classroom challenges, one year can look very much like the next. Teachers often report that they are discouraged by work that promises the same responsibilities on the first and last days of their careers (Moore, 1986, p. 99). Research stresses that the best teachers stay in teaching because of intrinsic rewards, they may be forced to leave because of poor salaries or working conditions. There is a living human behind that title of teacher. He or she works best under certain types of educational structure as a proud and professional human being. Our teachers will cherish the gifts of teaching in direct ratio to the amounts of freedom and authority they are given. Efforts to retain outstanding teachers should focus on ensuring that they can do their work without disruption or financial hardship.More research is urgently needed as the exhausted teacher syndrome has become the rule rather than the exception, especially in the case of the creative and imaginative teacher. Unless a remedy is found, there is a distinct possibility that the whole school system may fall apart (Groves, 1984, p. 32-33).

Statement of the Problem

Many theories of motivation have been used to explain the different aspects of needs, desires and expectancies of workers. Public interest in education has been energized by a multitude of national reports, provincial studies and media commentaries but little empirical research has been done on the motivating potential of the secondary school teacher. It has become clear that classroom teachers are prime targets for much of the blame for the lack of excellence on the student's part. The public also expects excellence from its teachers but too often limited human, material and financial resources, coupled by restrictive administrative support require a great deal of motivation if school teachers are to be encouraged to fulfill their responsibilities effectively and efficiently. Recent research related to satisfaction and motivation in education has provided much needed understanding but further research is still needed.

In our attempt to further research teachers' motivation the following questions evolve:

Should teacher motivation be further encouraged?

Can in fact the job characteristics model be useful in
understanding secondary school teachers' motivation?

This can be answered through a diagnostic study of the
motivating potential of the secondary school teacher. Some
of the more recent work in the area of motivation has been
on its relationship to job design. The psychological study
of motivation is thought to be highly related to the job
characteristics. Miskel suggested the possibility of using
the job characteristics theory to study the motivation of
teacher, therefore following his suggestion (1982) to use
better motivational theories, this study delves in the
possibility of using the job characteristics theory to study
the motivation of teachers. The purpose of this study is
twofold:

First, to conduct a diagnostic survey to assess the
motivating potential of the secondary school teachers.

Secondly, to evaluate the results in an attempt to
identify the job characteristics which lead to motivation
and greater job enjoyment.

Research Questions

1. Which are the job characteristics which motivate teachers?

2. Do the psychological states, the motivating potential score, the internal work motivation, the feedback from agents and dealing with others matter to teachers?

3. Do the means vary when the respondents are grouped on the basis of the demographic dimensions?

Significance of the study

Theories of motivation have made an important contribution to the understanding of organizations and the actual work of the individual performing within the organization. The theories have stimulated further research in the area of motivation and its relationships with job design and its content. Sergiovanni and Carver (1980) noted that motivation factors, being intrinsic, are associated with the work itself and provide people with opportunities for psychological success. Hygiene factors, being extrinsic, are associated with the conditions of work and provide

people with relief from physical and psychological discomfort. Today's teachers expect more from their jobs in the way of extrinsic and intrinsic rewards. The need to understand the job characteristics and to assess tnese rewards and their importance may be vital.

This study is significant as it is the first to be conducted in education, with secondary teachers, using the Job Characteristics Model.

Secondly, it will provide knowledge on motivation of the secondary school teachers through diagnostic research.

Thirdly, as a result of the diagnostic research, it will attempt to identify the job characteristics which lead to motivation and greater job enjoyment for teachers.

Fourthly, it may provide administrators with valuable information which could enable them to provide a better workplace for the teacher.

Finally, it is an application of one of the most recent theories of motivation (Hackman and Oldham, 1976; 1980) to the study of secondary school teachers.

Organization of the Study

Chapter two, "Review of Literature", recapitulates views and findings concerning teachers, the human being behind the title. It also provides a description of a number of theories of motivation. Emphasis is placed on Job Characteristics theory, since it is highly significant to this research. A review of some of the relevant research is briefly presented at the end of the chapter.

Chapter three "Methodology" describes the sample, the diagnostic instrument, the data collection, the data analysis, and the limitations and considerations.

Chapter four "Analysis of Findings" reports and analyzes the findings of the data collected.

Chapter five "Conclusions and Implications" offers a summary of the findings. Questions and recommendations for future research are considered and presented.

Chapter 2

Review of Literature

Introduction

The concept of motivation, as it applies to business, has been widely researched since the 1930's. Herzberg (1968) reports a steady rise in research from one study between 1920 to 1924 period to sixty-seven studies between 1950 to 1954. The development of the most popular theories of motivation therefore originated in the 1940's and the 1950's. White (1959) believed that one important thrust of human motivation is getting to know what the world is like, shaping that world, and getting that which one wants from it. Gellerman (1963) stated that "The first and the most important thing to be said about motives is that everybody has a lot of them and that nobody has quite the same mixture as anyone else". He also suggested that there are people "Who work chiefly for money, others who work chiefly for security and still others who work because they enjoy it: there are even those who work chiefly because they wouldn't know what to do with themselves otherwise" (p. 175).

The term" satisfaction" is not to be confused in our literature. Smith and Kendall (1963) propose that job satisfaction is a function of the perceived characteristics of a job in relation to an individual's frame of reference. Satisfaction at work results when the individual can fulfill his personal needs and goals through the performance of his assigned tasks. A particular job condition can be a satisfier or dissatisfier. Satisfaction is then an attitude by which motivation is reached.

At the most general level, motivation refers to a process governing individual choices among different forms of voluntary activities (Vroom, 1964). Motivation involves the direction of behavior, the strength of response, and the persistence of behavior (Campbell & Associates, 1970). It consists of three basic components that activate, direct, and sustain human behavior. It is a sort of hedonism of the future (Steers & Porter, 1975). It also directs or channels behavior; that is, it provides a goal orientation. In education, the concept is not a new one but teacher motivation has not been sufficiently considered. Sergiovanni and Carver (1980) mentioned that motivation is an important word to educators. It is easier for the individual to claim that success and positive feelings are the result of his or her own achievements (motivation factors) and that

dissatisfaction does not arise from the person's own inadequacies but is caused by another person or by the surrounding conditions(hygiene factors)(Bass et al., 1981).

Individual motivation can be viewed as a function of a person's perception that his or her increased performance will result in certain rewards which will help attain personal goals. Needs also change over a period of time, and what motivates individuals at one period of life may be drastically different at another time. People enter the formal work structure with a multiplicity of needs; some are high and some are low in their need for achievement, affiliation, and power; some are mature individuals, and others are extremely dependent. From this aggregate, an enterprise must find the means by which it can motivate individuals to achieve and perform on the job (Bass et al., 1981, p. 74).

Motivation can be described as a complex process by which job satisfaction is obtained. Hoy & Miskel (1982) defined motivation as the complex forces, drives, needs, tension states, or other mechanisms that start and maintain voluntary activity toward the achievement of personal goals. Most psychologists according to Wlodkowski (1985) use the word motivation "to describe those processes that can arouse

and instigate behavior, give direction or purpose to behavior, continue to allow behavior to persist, and lead to choosing or preferring a particular behavior". Although the research by Johnson (1986) is far from conclusive, it suggests that the best way to motivate teachers and to design effective incentives policies have yet to be learned.

The review of literature attempts to summarize the related views and theories related to motivation. It is an attempt to identify the theory which will offer the best diagnostic means to indicate the motivation of teachers.

Theories of Motivation

Need Hierarchy Theory

Maslow's Need Hierarchy theory (1943) included the five basic need levels in the hierarchy. On the first level, they are identified as five physiological needs which consist of the fundamental biological functions of the human organism such as the need for clothing, food and shelter. The safety and security needs show the desire for a peaceful and stable society and the absence from pain, threatening circumstances or illness. The social drive considers relationship, belonging, love and social needs, all being important

elements in modern society. The next level reflects the esteem needs. Most people have the desire to be highly regarded by others and to obtain self-respect for themselves. Maslow identifies achievement, competence, status, and recognition as satisfiers to esteem needs. The fifth level is that of self-actualization, and self-fulfillment. Individuals will become discontent and restless unless they do what they are best suited for. Two postulates can be drawn from this theory, the fundamental being that higher-level needs become activated as lower-level needs become satisfied. The second reveals that the needs that individuals pursue are universal and are arranged in a hierarchy.

Porter (1961) modified the hierarchy theory to include autonomy needs, which lie between esteem and self-actualization needs. Porter claims that needs such as those for authority, independent thought and action, and participation are logically distinct from more common esteem items such as the need for prestige. Porter's studies were an attempt to operationalize Maslow's concept of need hierarchy in order to investigate how managers perceived the psychological characteristics of their jobs. Porter (1962) developed the Need Satisfaction Questionnaire (NSQ) to test Maslow's theory. It has since been modified for use in

specific organizational settings, including schools (Trusty & Sergiovanni, 1966, pp. 168-180). In an earlier study, they had reported that the largest deficiencies for professional educators were satisfying esteem, autonomy, and self-actualization needs. The NSQ questionnaire designed mainly to investigate satisfaction and not motivation will be disregarded for the purposes of the present study.

Beer (1966) concluded from a study of female clerks in an insurance company that the Maslow model was open to question as a theory of human motivation. However he did find the model to be a fairly reliable way of measuring the priority need of workers. In a longitudinal study, Hall and Hougaim (1968) collected data from managers over a five year period to test Maslow's theory. They conducted this study at the American Telephone and Telegraph Co. (AT&T) in which individual attitudes, need satisfactions and strengths were measured through annual interviews. Over the five year time span, they found little data to support the theory. Maslow (1968, p.27) himself offered little empirical support for his original propositions and, in fact, argued that his theory was primarily a framework for future research.

Alderfer (1969) had been able to partially test the need hierarchy concept by using cross-sectional data. His

approach was to correlate individual needs satisfaction with need strength both within and across needs levels. He was amongst the group who found little data to support the Maslow need hierarchy concept. Alderfer in collaboration with Schneider (1973) reaffirmed that Maslow's theory of personality development was difficult to put into operation in an organizational setting. They showed that with correlational analyses of worker's responses about their needs, needs tend to cluster into three rather than five areas: existence (safety and security), relatedness (love and affection), and growth (esteem and self-actualization).

Wahba & Bridwell (1973; 1976) agreed that Maslow's model presents an interesting paradox: the theory is widely accepted, but little research evidence exists to support it. In fact, the findings of a number of studies do not support the fundamental assumptions of a hierarchy of prepotency while others have found modest support. Furthermore, it is not clear whether Maslow's propositions have been operationalized adequately nor whether they are applicable to employees in an organizational setting.

Biranda (1978) reported on a study conducted a year earlier of 330 educators employed by the Calgary, Alberta public school system. His findings on prepotency differ from

the levels of need operation for educators he had reported
in an earlier study conducted with Rochester's educators.
The 1977 study reveals that esteem still appears as a
dominant area of perceived need deficiency but it is rivaled
by important increases in perceived need deficiencies at the
self-actualization level and security level. He concluded
that changes in the work demands of educators and in the
work environment may be contributors to these increases in
security needs. Goldsberrey et al. (1978) with Biranda
(1978) painted a dark portrait of teacher job satisfaction.
Their Illinois study showed substantial increases in the
social, esteem, autonomy, and self-actualization areas of
perceived need deficiency but not in security. They
concluded that teachers remain fairly hopeful, that teachers
are able to differentiate between conditions they face in
their own particular jobs and the general climate facing the
teaching professions as a whole with the former apparently
being better particular conditions than latter.

Williams (1978) in a further study attempted to
integrate Maslow's theory into the day-by-day problems of
teacher motivation outlining the implications for
administrators and teacher organizations. He concluded that
teachers are more likely to be motivated by activities and
incentives which will move them to a higher level of

satisfaction (p. 94). Another study conducted by Chisholm and her colleagues concentrated on administrators showing that these exhibit fewer need deficiencies than teachers in all five subscales: security, social, esteem, autonomy and self-actualization (Chisholm et al., 1980).

In a more recent investigation, Anderson and Iwanicki's (1984) findings are supportive of Trusty's and Sergiovanni's where they reported the largest deficiencies for professional educators were satisfying esteem, autonomy and self-actualization needs. However, the later study indicated a relatively large increase in the deficiency for security needs so they concluded that teachers' lack of self-esteem represents the largest source of need deficiency for them.

The need hierarchy theory speculates that the higher level needs continually motivate and should be considered as a means for understanding variations that exist from teacher to teacher rather than generalizing for everyone. In schools, teachers need to feel important as persons and as recognized, respected and competent professionals. School executives should be concerned with finding out at what levels teachers see themselves in the hierarchy ladder. Knowing the levels of prepotency of teachers is important because it does not make sense to motivate at the autonomy

level if teachers are insecure or to motivate at the
security level when they seek autonomy. Sergiovanni & Carver
(1980, p.85) noted that inexperienced school executives
often overestimate the operating-need level of teachers and
"scare them off" with ultraparticipatory self-actualizing
administration.

Basically, when the theory is operationalized into
practice it tends to underestimate individual differences
among workers, overestimate the prepotency feature which
suggests that a person is not motivated at a higher level
unless satisfied at lower levels, and oversimplify the
concept of need satisfaction. Maslow's characterization of
human needs is derived primarily from his own clinical
experiences and he did not intend to propose a motivational
recipe for administrative use, but rather a general
framework for analysis perhaps more akin to philosophy than
psychology. Maslow was speaking of needs as a whole and
humankind in general (Sergiovanni & Carver, 1980, p. 92-93).

Overall, attempts to establish evidence of Maslow's
hierarchy have failed. Maslow's theory has been more
interesting and more popular than true. Nevertheless, his
theory and his efforts to apply his theory to life sparked
the "human potential movement" which in turn influenced the

organizational development (Bass et al., 1981). Maslow clearly explained that individual differences affect his theory, yet his model frequently is interpreted too rigidly. A second misconception is that one need must be entirely satisfied before the next level of need emerges (Hoy & Miskel, 1987, p. 180).

Two conclusions appear reasonable. First, the need hierarchy theory is somewhat useful in understanding human motivation, although the debate concerning the number of need levels and their order of gratification is not yet finished. Second, since the data are so scant and based on a considerable extension questionnaire such as the NSQ, Maslow's theory may be more powerful and robust than the research testing it (Hoy & Miskel, 1987, pp. 181-182). Therefore, methods must be developed to satisfy more fully the higher-level needs of teachers.

Motivational-Hygiene Theory

Herzberg and his colleagues' theory of motivation (1959) has been variously termed the two-factor theory, the dual-factor theory and the motivational-hygiene theory. This theory is based partially on a study of industrial employee motivation to work. Interviews conducted with 203

accountants and engineers from the greater Pittsburgh area focused on each person's description of events experienced at work that had resulted in either a marked improvement or a significant reduction in job satisfaction. The behavioral implications of this theory are to be considered distinct entities. Extrinsic factors may prevent the onset of job dissatisfaction while intrinsic factors tend to increase job satisfaction.

Smith and Kendall (1963) have shown that a worker may dislike some aspects of his job, yet still think it is acceptable. They propose that job satisfaction is a function of the perceived characteristics of a job in relation to an individual's frame of reference. A particular job condition can therefore be a satisfier or dissatisfier. Vroom (1964) in reviewing the theory argued that the storytelling critical-incident method and in-depth interview methods accounted for the associations found by Herzberg et al. argued that other methods are required to adequately test the theory. "It is ... possible that obtained differences between stated sources of satisfaction and dissatisfaction stem from defensive processes within the individual respondent." Persons may be more likely to attribute the causes of satisfaction to their own achievements and accomplishments on the job. On the other hand, they may be

more likely to attribute their dissatisfaction not to personal inadequacies or deficiencies, but to factors in the work environment; i.e., obstacles presented by company policies or supervision" (Vroom, 1964, p. 129).

The original study has also been criticized by Ewen (1964) because he too found that it contains no measure of overall satisfaction. Malinovsky and Barry (1965) reported that it is possible that correlations between motivator items and between hygiene items in the evaluations of factors resulted from response-set effects and the tendency of the workers to respond in the same manner to like-worded statements. Freidlander (1966, p. 143) found that no data are presented by Herzberg to indicate a direct relationship between incidents involving intrinsic job characteristics and incidents containing self-reports of increased job performance.

Vroom (1966) summarized many arguments succinctly when he discussed the administrative implication of the distinction between recall of satisfying events and actual observation of motivated behavior. He, as many of his colleagues, argued that the satisfiers are also motivators, that those job content conditions which produce a high level of satisfaction also motivate the person to perform

effectively on his job (p. 11). Wernimont (1966) found situations in which hygiene factors were associated with job satisfaction. Whitsett and Wislow (1967) supported Herzberg's position while House and Wigdor (1967) seriously questioned the research methodology of the theory. Dunnette, Campbell and Hakel (1967) believe this theory to be grossly oversimplified; they conclude that satisfaction or dissastifaction can reside in the job content, or job context, or both jointly. The most important criticism involves the utilization of Herzberg's categorization procedure to measure job dimensions, the satisfiers and hygiene factors. The coding is not completely determined by the rating system and the data, but requires, in addition, interpretation by the rater. If the subject merely describes the supervisor's behavior, an evaluation by the rater is also necessary.

Sergiovanni (1967) conducted a study, based on Herzberg's theory, with teachers and administrators respectively. Several differences between industrial and educational groups were noted but the basic Herzberg conclusion was upheld. In the educational setting, employees tend to associate one set of factors with job satisfaction and a different set with job dissatisfaction. Herzberg (1968) concentrated on the psychological person in terms of

how the job affects basic needs. His work had a tremendous impact on stimulating thought, research and experimentation on motivation in the actual workplace as compared to the previous research conducted in laboratory settings. He advanced a theory that was simple to grasp, based on some empirical data, and offered specific action recommendations for managers to improve employee motivational levels.

Sergiovanni (1969) studied teachers and concluded that: "Achievement, recognition, and responsibility were factors which contributed ... to teacher satisfaction." He also felt that job satisfaction reinforced behavior and motivation of performance. In the empirical sense, the Herzberg's theory has been only concerned with job satisfaction and dissatisfaction and not with job behavior (Campbell et al., 1970, p. 381). Herzberg postulated the existence of two classes of work motivators. The first being extrinsic or hygiene factors such as pay, or salary increase; technical supervision, or having a competent superior; the human relations quality of supervision; company policy and administration; working conditions, or physical surroundings; and job security Secondly, he referred to intrinsic or motivation factors such as achievement, or completing an important task successfully; recognition, or being singled out for praise; responsibility for one's own

or other's work; advancement or changing status through promotion (Campbell et al., 1970, p. 354). Some articles by Backman (1971) strongly supported Herzberg's views and Armstrong (1971) reported more on the fact that job factor importance is linked with occupational level.

In Saskatchewan, Wickstrom (1973) carrying out his study of English teachers' satisfaction found that Herzberg's original sixteen factors were adequate. He discovered that all factors exhibited a bi-polar nature, being considered important in 10% or more of both categories. Locke (1975) noted that what we need is to push ahead to discover how employees actually make choices among real alternatives (pp. 457-480). It is suggested that a simpler model proposing that effort and performance are each influenced by a long list of variables be utilized. A more workable model could be constructed after variables are identified as more or less important. Lortie's work (1975) in teacher characteristics also yields valuable insights into teacher needs and satisfaction. One of his assumptions postulates that because extrinsic and auxiliary rewards in teaching show little change over time, they do not act as motivators. Teachers' major source of satisfaction comes from intrinsic or psychic rewards. Again, this bolsters the position that teachers are motivated by higher order

(intrinsic) needs (p. 174).

According to Steers & Porter (1975, p.88) in doing so,
Herzberg forced organizations to examine closely a number of
possible misconceptions concerning motivation. These authors
state that the theory has been instrumental to both
industrial managers and psychologists who have installed
management training and working-motivation programs.
However, the necessity for interpretations of the data by a
rater may lead to contamination of the dimensions so
derived. Second and closely related to the first
methodological problem, is the inadequate operational
definitions utilized by Herzberg and associates to identify
satisfiers and dissatisfiers (Steers & Porter, 1975, p. 105-
107). If the dual-factor theory were correct, we should
expect highly satisfied people to be highly motivated and to
produce more.

There seems to be general agreement among most
researchers that the effect of satisfaction on worker
motivation and productivity depends on situational variables
yet to be explicated by future research (Steers & Porter,
1975, pp. 109-110). Buchanan (1979) reported that Herzberg
tended to use the terms "job satisfaction" and "motivation"
synonymously, implying that job performance of the motivator

seeker who has found what he or she is looking for will be better either than that of one who has not, or that of a mere hygiene seeker.Miner (1980) observed that when motivator elements are present in work, positive feelings as well as improved performance will result. The hygiene factors can improve dissatisfaction and slightly improve performance.

Toupin et al., (1980), basing their study on Herzberg's work, researched the teacher's conception of an ideal work environment in the elementary, secondary, public and private French schools from across the province of Quebec. They reported 57% of French-speaking respondents listed the possibility for promotion as a factor in their overall job satisfaction.

The Herzberg theory has stimulated a great deal of argument and considerable research activity. The most meaningful conclusion that we can draw is that the theory has now served its purpose and should be laid aside.

Expectancy Theory

Vroom (1964) modified and popularized the expectancy theory which presents a complex view of individuals in

organizations. Steers and Porter (1975, p. 79) support the
theory and conclude that it provides a comprehensive
framework for dealing with complex employee behavior. They
state that if a person wanting to perform well does not feel
that his effort will result in good performance, he will
have no motivation to perform well. They believe that this
theory is a promising approach to understanding work
motivation.

Vroom saw individual motivation as a function of a
person's perception that his increased performance will
result in certain rewards which will help him attain
personal goals (Sergiovanni & Carver, 1980, p. 124).
Individual values and attitudes combined with environmental
aspects such as role expectations and organizational
climate, were found to influence behavior. In this theory,
job satisfaction is derived from performance. Satisfaction
from achievement, recognition, and responsibility are earned
as a result of accomplishing work (Sergiovanni & Carver,
1980). Miskel, Bloom and McDonald (1980) designed measures
to test the theory and they came up with four points which
should be kept in mind when using the theory. They found
that expectancy motivation of teachers was consistently
related to teacher job satisfaction, student attitudes
toward school, and perceived school effectiveness. The force

of motivation in an expectancy model has been demonstrated to be positively correlated with job satisfaction, effort, and performance in a variety of settings.

In a study of teachers in secondary schools and higher education, Miskel, DeFrain and Wilcox (1980) related the force of motivation to job satisfaction and perceived job performance. Graham (1980) while working with college students, found moderate to high support for the ability of expectancy theory to predict their satisfaction, participation in activities, and achievement. Miner (1980) agreed that the theory would be useful in providing understanding to work motivation.

Hoy and Miskel (1987) describe the three concepts, valence (V), instrumentality (I), and expectancy (E), which combine to make this theory. Valence is the strength of a person's desire for a particular reward. Feelings of competence, autonomy, recognition, accomplishment, and creativity represent valued work outcomes for educators. Instrumentality refers to the perceived probability that an incentive with a valence will be forthcoming after a given level of performance or achievement. Instrumentality might be high when teachers think that high student achievement in their classroom is likely to result in public recognition of

their teaching ability. Expectancy is the extent to which an individual believes that a given level of activity will result in a specified level of goal accomplishment. For example, if teachers feel that a high probability exists of improving student achievement by increasing their own efforts, then educators have a high expectancy level (Hoy & Miskel, 1987, p. 188). There is a multiplicative relationship and when expectancy, instrumentality, or valence falls to zero, effort becomes zero. According to Hoy & Miskel (1987) expectancy motivation is an important factor in effort and performance, but other factors in the environment are also important contributors (p. 190).

A frequent criticism of the theory is the combination of the three components in a multiplicative fashion. Another criticism is that it overemphasizes linearity. It assumes that when expectancy, valence, or instrumentality increases, then the motivation force becomes greater. The role of rationality, with the notion that individuals neither have the capacity to consider all alternatives nor select the best alternatives when deciding how to act, is also overemphasized. It is believed that, even though questions and criticisms surround this theory, with carefully designed studies, expectancy theory can make valuable contributions to educational administration (Hoy & Miskel, 1987, p. 193).

Goal Theory

Drucker (1954) introduced this theory. The major application as originally conceived by Drucker was management by objectives (M.B.O.) which was based on Maslow's higher—order needs and Herzberg's motivator factors. Many evaluation systems for school personnel are modifications of a management by objectives technique (M.B.O.). It refers to the process by which administrators or teachers jointly define common goals in terms of expected outcomes. This technique assumes that if employees are given increased responsibility for developing goals in relation to organizational goals, autonomy in achieving them, and method for evaluating their achievement, they will work harder and be more effective in their job. Yet, this technique often ignores the additional factors which influence performance, and does not explain the process by which it affects performance.

Raia (1965, 1966), and Carroll and Tosi (1973) confirmed that greater care should be given to insure that the final goal—setting program design is consistent with existing knowledge concerning the performance implications of the various task-goal attributes. Latham & Yukl (1975) showed that the evidence from field studies does indicate that goal theory is valid for describing employee behavior

in organizations such as schools (pp. 824-845).

Locke and his associates are generally recognized for the renewed interest in goal theory. It became, in the 1970's, a valuable analytic and practical tool for educational administration (Hoy & Miskel, 1982, p. 193). Goal theory is applied in several important school practices as it is a cognitive process approach of work motivation. The basic postulate of the theory is that intentions to achieve a goal constitute the primary motivating force behind work behavior (Hoy & Miskel, 1980 pp. 193-194). Specific performance goals elicit a higher level of performance than general goals such as telling individuals to do their best. The more difficult the performance goal, the more effort will be initiated if the individual accepts it. This holds true even if the goal is so difficult that virtually no one can achieve it. Locke (1980) further notes that the most fundamental effect of goals on mental or physical actions is to direct thought and overt behavior to one end rather than another.

The greatest deficiency is the failure of the theory to specify what determines goal acceptance and commitment. The processes of how goals are approached needs elaboration. Another weakness is that the mechanisms that explain how

goal acceptance, goal difficulty, and other variables combine to determine effort are not fully developed. A third problem reveals that the theory is better for predicting outcomes for simple jobs with concrete results, but is less effective when tasks are complex.

Much remains to be learned about the theory's processes and applications for administrative practice in industrial and even more so in educational organizations. It is not understood how various attributes in a goal—setting program affect an individual's motivational force to perform. More work is needed to test the applicability of motivational models to the goal—setting environment.

Job Characteristics Theory

This applied approach combines and unifies Maslow's need fulfillment theory of motivation, Herzberg's concern for job redesign and intrinsic motivation, and Vroom's expectancy theory into a theory of job design made popular during the late 1970's and early 1980's (Hoy & Miskel, 1982). This theory has its roots in a major study by Turner & Lawrence (1965), and by Hackman & Lawler (1971). Pioneer work of Blood & Hulin (1965), and by Hackman & Oldham (1975, 1976) provided valuable refinements to the theory. Turner & Lawrence ascertained the relationships between certain objective attributes of the jobs and employees' reaction to their work. They measured job characteristics by developing operational measures of seven dimensions: motor variety, object variety, autonomy, required interaction, optional interaction, knowledge and skill required, and responsibility.

Turner & Lawrence (1965) found that these task attributes were sufficiently interrelated to combine and they developed a summary measure called the "Requisite Task Attribute Index" (RTA Index). Objective task characteristics were measured with supervisory ratings for 47 job classifications in 11 companies under an assumption of

homogeneity within job classifications. The assumption of homogeneity simplifies measurement of objective task characteristics, but it is only valid if the companies studied have rigorous job classification systems. Many organizations are unlikely to have carefully defined job classifications and duties (Roberts & Glick, 1981, p. 194).

Hackman and Lawler (1971) provided evidence that job characteristics can directly affect employee attitudes and behavior at work. Employees with high measured needs for growth responded more positively to complex jobs than did employees low in growth need strength. In a study of telephone company jobs they focused on four job characteristics: variety, task identity, autonomy, and job-based feedback. Data was collected from 208 employees and 62 supervisors who worked in 13 different jobs. The authors predicted that if these characteristics were present in a job, favorable and positive reinforcement (internal-intrinsic motivation) would result for the jobholders encouraging them to continue good performances.

Hackman and Oldham (1975, 1976, 1980) revising the previous findings developed a conceptual framework for their theory (Figure 1).
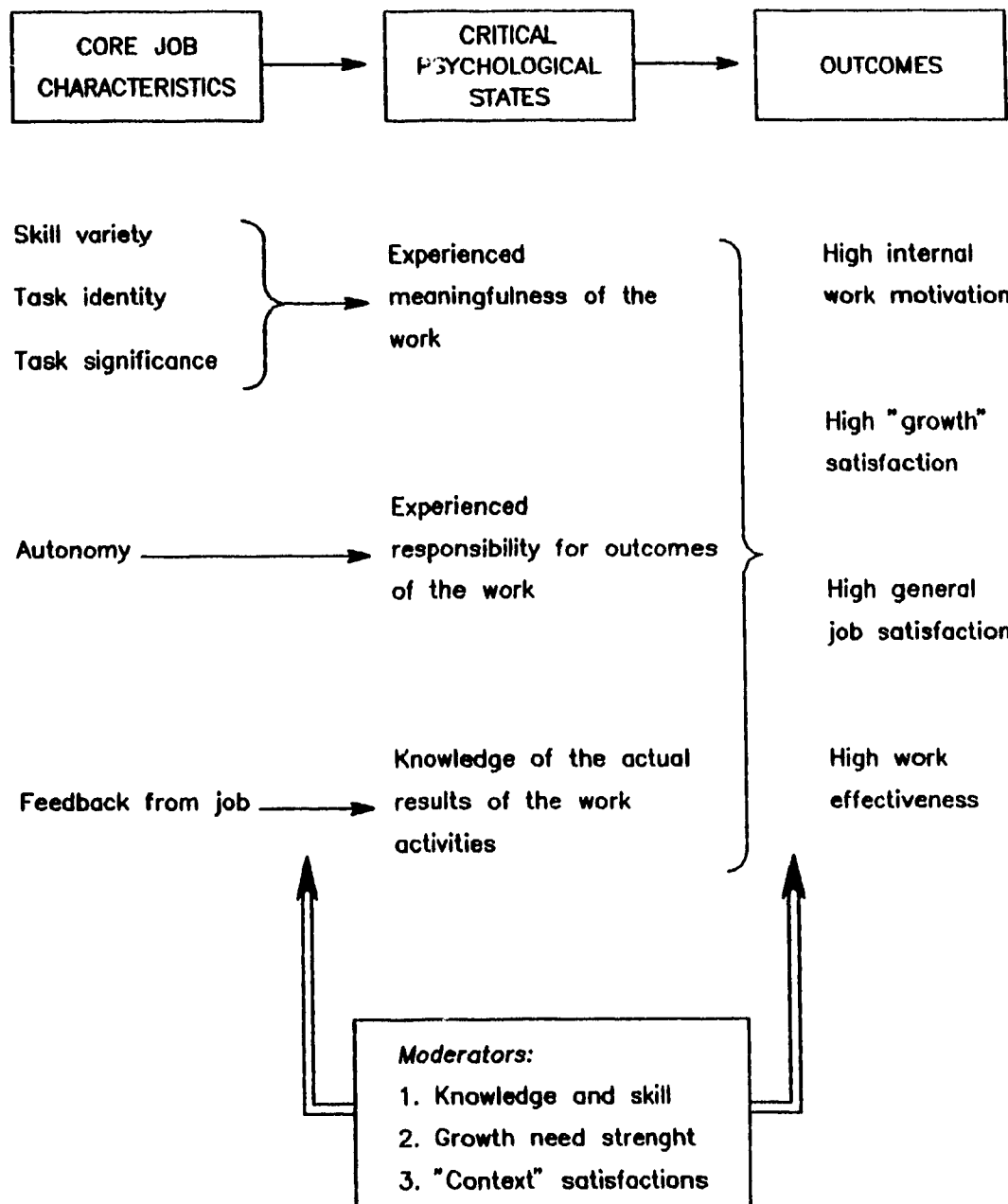
FIGURE 1: The Complete Job Characteristics Model

(Hackman & Oldham 1980, p. 90).

The basic idea they propose was to build into jobs those attributes and outcomes that create conditions for high internal work motivation, high "growth" satisfaction, and high work effectiveness. The authors examined these basic conditions that promote motivation and satisfaction and then worked backwards to determine how these conditions could be created.

The internal work motivation refers to the degree to which an individual is self-motivated and experiences positive internal feelings when performing effectively on the job. A person experiences positive internal feelings when working effectively on the job, and negative internal feelings when doing poorly.

Growth satisfaction is the degree to which an individual is satisfied with opportunities for growth on the job; for example, "The amount of personal growth and development I get in doing my job".

High general satisfaction is an overall measure of the degree to which the employee is satisfied and happy with the job.

Work effectiveness includes both the quality and the quantity of the goods or services produced. When a job is

high in motivating potential, people perform well and produce high-quality work. If work is extremely routine and repetitive employees may resort to dysfunctional behaviors such as daydreaming or sleeping, taking unnecessary breaks, demanding the supervisors' help or restricting output. The individual's attendance at work may decline. It is expected that when jobs are motivationally improved, employees will find the workplace more attractive and will want to come to work more regularly. Therefore personal outcomes, work effectiveness, and attendance at work are a number of other personal and organizational outcomes that are often associated with motivating jobs. These are also outcomes that may be affected when the motivational structure of work is changed (Hackman & Oldham, 1980, p. 89).

The motivating potential of the job, the internal motivation, growth satisfaction and the general satisfaction combine to represent the personal outcomes. Individuals given the opportunities to experience these outcomes express relatively high general satisfaction.

The Job Characteristics Model (Figure 1) contains three psychological states. They are mentioned as three key conditions which when present mediate between the core job dimensions and the outcomes of the work:

First, the experienced meaningfulness of the work is the degree to which a person must have knowledge of the results of his or her work. The person has basis for feeling good about having done well or unhappy about doing poorly.

Secondly, the experienced responsibility for work outcomes refers to the degree to which a person must experience responsibility for the results of the work, believing that he or she is personally accountable for the work outcomes. The person can feel personally proud when the job is done well or sad when it is not.

Finally, the knowledge of the results is the degree to which the person must experience the work as meaningful, as something that "counts" in one's own system of values (Hackman & Oldham, 1975; p. 162, 1976; p. 256-257; 1980, p. 72). Internal work motivation is unlikely to develop if the work is seen as trivial. These three factors labeled "critical psychological states" need to be present for strong internal work motivation to develop and persist.

The five core job characteristics (Figure 1) foster the emergence of the psychological states. Three core characteristics -skill variety, task identity and task significance- contribute to the experienced meaningfulness

of work. Hackman and Oldham (1980, p. 78) describe them:

Skill variety is the degree to which a job requires a variety of different activities in carrying out the work, involving the use of a number of different skills and talents of the person.

Task identity is the degree to which a job requires completion of a "whole" and identifiable piece of work, that is, doing a job from beginning to end with a visible outcome.

Task significance is the degree to which the job has a substantial impact on the lives of other people, whether those people are in the immediate organization or in the world at large.

Autonomy, the fourth characteristic of jobs that creates feelings of personal responsibility for the work, is noted as the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out.

Job Feedback, the last characteristic affecting

directly knowledge of results, is the degree to which carrying out the work activities required by the job provides the individual with direct and clear information about the effectiveness of his or her performance.

The five characteristics were combined into a single index called motivating potential score (Figure 2) that reflects the overall potential of a job to foster internal work motivation on the part of job incumbents. A job high in motivating potential must be high on at least one (and hopefully more) of the three characteristics that prompt experienced meaningfulness, and high on both autonomy and feedback as well, thereby creating conditions that foster all three of the critical psychological states (Hackman & Oldham, 1980, p.81).

The Motivating Potential Score (MPS) is defined as:

$$\left[\frac{\text{Skill variety} + \text{Task identity} + \text{Task significance}}{3} \right] \times \text{Autonomy} \times \text{Job Feedback}$$

Figure 2: MPS

This MPS formula (Fig. 2) indicates that a very low score on either autonomy or feedback will reduce the overall MPS of the job very substantially. On the other hand, a low

score on one of the three job characteristics that
contribute to experienced meaningfulness cannot seriously
compromise the overall motivating potential of a job. The
lowest possible MPS for a job is 1 and the highest possible
is 343 (7 cubed).

Hackman & Oldham (1980) realized that there are many
attributes of people that affect how they respond to their
work but they are far too numerous to review. Three factors
identified as "moderators" are presented in Figure 1:

First, knowledge and skill refers to the concept that
when a job is low in motivating potential, then internal
motivation will be low, and one's feelings will not be
affected much by how well one does. But if a job is high in
motivating potential, then good performance will be highly
reinforcing and poor performance will lead to unhappy
feelings (Hackman & Oldham, 1980, p. 82).

Secondly, growth need strength (GNS) indicates that
some people have strong needs for personal accomplishment,
for learning, and for developing themselves beyond the
present situation they are now in. Growth need strength may
affect how people react to their jobs at two different
points in the model shown above. The first link specifies

that people with high growth need strength will experience
the psychological states more strongly when their objective
job is high in MPS than will their low growth need strength
counterparts. And the second link means that individuals
with high growth need strength will respond more positively
to the psychological states, when they are present, than
will low growth need individuals (Hackman & Oldham, 1980, p.
85).

Thirdly, Hackman & Oldham (1980) expect that
individuals experiencing "Context" satisfactions are
individuals who are relatively satisfied with pay, job
security, co-workers, and supervisors, will respond more
positively to enriched and challenging jobs than individuals
who are dissatisfied with these aspects of the work context.
And if individuals who are satisfied with the work context
also have relatively strong growth need strength, then a
very high level of internal work motivation would be
expected.

Knowledge and skill, growth need strength and "context"
satisfactions are the three characteristics of people which
the authors have selected to moderate hypothesized
relationships. Three psychological states combine to assure
high internal work motivation, high "growth" satisfaction,

high general job satisfaction and high work effectiveness. These important elements join to make work successful and enjoyable but moderators act as the variables which may change the environment and the working conditions.

Research results are far from conclusive but according to Hackman & Oldham (1980) each of these factors may affect the responses of a person to a job, but they become especially significant when they occur in combination. The negative personal results and work outcomes would be predicted when the individual is only marginally competent to perform the work, has low needs for personal growth at work and is highly dissatisfied with one or more aspects of the work content. On the other hand, the outcomes should be beneficial if the individual is competent to carry out the work required by a complex, challenging task, has strong needs for personal growth and is well satisfied with the work content.

The theory that is proposed specifies the condition under which individuals will become internally motivated to perform effectively on their jobs (Hackman & Oldham, 1976). The Job Characteristics Model examines individual responses to jobs as a function of job characteristics moderated by individual characteristics. The interaction of job and

individual characteristics determines job responses. The model states that task characteristics-job response relations are moderated by the job incumbent's needs (Roberts & Glick, 1981). It provides measures and guidelines that can be used in diagnosing and implementing job redesign for professional employees.

A number of researchers have noted people with high growth need strength (GNS) respond more positively to jobs high in motivating potential than do individuals with weaker GNS. These studies employed static correlations between job characteristics and outcome measures (Hackman & Lawler, 1971; Brief & Aldag, 1975; Hackman & Oldham, 1976; Oldham, 1976; Sims & Szilagyi; Zierden, 1975). Seeborg (1976) and Rousseau (1977) concluded that a person's perception of his or her job is no doubt caused by that individual's other reactions to the work and the organization. Research was conducted with 201 employees in a large metropolitan bank. In general, the results show that changes in job characteristics do affect employee reactions to their work as predicted. Employees on jobs that increased in motivating potential gained in internal work motivation and growth satisfaction; the reverse was true for employees whose jobs deteriorated in motivational potential; and little change was obtained for employees whose work was redesigned in a

way that minimally altered the MPS of their jobs (Hackman, Pierce & Wolfe, 1978, p. 301). While results of some investigations provide inferential support for this proposition, there have been no studies in which measured need for personal growth has been shown to vary directly with changes in job characteristics (Hackman, Pierce & Wolfe, 1978, p. 291).

Certain criticisms have been made of this theory. Reviews by Pierce & Dunham, 1976; Steers & Mowday, 1977; Roberts & Glick, 1981; Aldag, Barr & Brief, 1981; Stone, 1986, have argued that most of the available data in the area of job design cannot serve as a valid basis for assessing the objective characteristics and individual responses. The available empirical research suggests that task design often has a positive relationship with various worker responses. Neither the measurement of task design nor the theoretical integration is complete. The boundaries of task design-response relationships have not yet been completely identified (Pierce & Dunham, 1976, p.93).

Hackman & Oldham, in a test of the job characteristics model, obtained data from 658 employees working in 62 different jobs in seven organizations. The jobs were highly heterogeneous and included blue collar, white collar, and

professional work (Hackman & Oldham, 1976, p. 259). Other studies have failed to support the model and tend to suggest smaller numbers of dimensions than are predicted by the model. Skill variety, task significance, and job autonomy might be part of one dimension because of high possible cross-factor amongst the items of these dimensions (Dunham, 1976; Dunham et al., 1977; Champoux, 1978; Fried & Ferris, 1986). A few studies have focused directly on the issue of whether the psychological states mediate the relationships between the core job dimensions and criterion variables (Hackman & Oldham, 1976; Arnold & House, 1980). The results of these studies provided indirect information through correlational data on the relationships between psychological states and work outcomes.

O'Reilly, Parlette & Bloom (1980) indicated that personal factors such as age, income, tenure in the unit, father's income, education or attitudes towards one's profession affect how employees perceive their task characteristics. Roberts & Glick (1981) suggested that stronger relationships would be obtained between job characteristics and critical psychological states than between critical psychological states and psychological and or personal outcomes.

Caldwell & O'Reilly (1982) indicated that the level of job satisfaction affects perceptions of job characteristics. It has failed to conduct sufficiently comprehensive and systematic reviews and analyses of the data concerning different components of the job characteristic model. None of these reviews has provided a comprehensive summary of the model as a whole and all of the published reviews on job characteristics research are narrative in nature a fact which can lead to vague or erroneous conclusions. These results led the researchers to conclude that perceptions of task characteristics vary with the employee's frame of reference and job attitudes. They reported that most of the data from studies of job characteristics are correlational in nature, derived from a single questionnaire (p. 288-289).

In education, Pastor and Erlandson (1982), while not testing the overall theory, appear to be the first authors to have used part of the instrument which goes with the theory with a sample of secondary school teachers. Miskel (1982) found no other studies that tested the model in educational settings (p. 79). Sergiovanni and Carver (1980, p. 126), Miskel (1982, p. 79), and Barnabe (1987, p.331) are the sole authors, according to our knowledge, who have discussed the theory of job characteristics by Hackman and Oldham (Barnabe, 1988). Since then Robertson (1988) looked

at the job characteristics of the school principal. The findings of his study indicate that there is definitely room for the school principal's job to be significantly improved in an effort to increase the motivational potential, and consequently the quality of the school principal's working life.

This review clearly indicates that little research has been conducted in the field of teacher motivation using the job characteristics theory. The need for teacher motivation research in all our school exists yet more emphasis and time have been devoted to job satisfaction. Acknowledging the above criticisms we can still apply the job characteristics theory to research in teacher motivation since researchers Pierce & Dunham (1976) stated that the latest and most complete refinement of an instrument to measure task characteristics may be found in the Job Diagnostic Survey of Hackman & Oldham. Some of the more recent work in the area of motivation has been on its relationship with job design and following Miskel's suggestion to use better motivational theories (1982, p. 81), this study will assess the motivation factors of high school teachers by using the Job Characteristics Theory.

Chapter 3

Methodology and Procedure

The Sample

This study is based on a voluntary sample of full-time teachers, from two anglophone high schools, members of the Lakeshore Teachers Association (LTA) of Quebec, Canada. From a possible theoretical population of 156 teachers, 95 returned the questionnaire (61% return rate). All but two questionnaires presented usable data. These two were, therefore, disregarded leaving 93 questionnaires from which analysis could be drawn.

The researcher, being a full-time teacher at one of the institutions, took every possible precaution to retain each respondent's anonymity. Each school provided the author with a list of their full-time teachers. Working with one list at a time, a student-teacher volunteered to assign a random number to each of the teachers and to distribute the corresponding questionnaire in each teacher's mail box. The questionnaires were collected by another teacher and then returned to the author.

Table 1 indicates the breakdown of returns and representation by high schools have been identified arbitrarily. School A was given 73 questionnaires and returned 54 (58.7%) a higher return than school B who received 83 and returned only 38 (41.3%).

TABLE 1

REPRESENTATION BY HIGH SCHOOL

SCHOOL	NUMBER OF QUEST.: DISTRIBUTED	RETURNED	PERCENT OF SAMPLE
A	73	54	58.7
B	83	38	41.3
TOTAL	156	93*	100.0

*93 USABLE QUESTIONNAIRES

Table 2 shows that 35 (37.6%) of the respondents were female, while 58 (62.4%) were male. This table is not indicative of the actual schools' gender distribution. School A has 47 male and 24 female teachers while school B has 49 male and 35 female teachers.

TABLE 2

DISTRIBUTION BY GENDER FOR
SAMPLE OF SCHOOL TEACHERS

GENDER	NUMBER	PERCENT
FEMALE	35	37.6
MALE	58	62.4
	--	----
TOTAL	93	100.0

In Table 3, twenty-nine (31.6%) school teachers were 39 years of age and under, while sixty-three (68.4%) were 40 years of age and over. An interesting point to note was that only 3 respondents were between the age of 20 and 29. This manifest that there has been very little "new blood" entering the schools' system.

Table 3

DISTRIBUTION BY AGE FOR
SAMPLE OF SCHOOL TEACHERS

AGE IN YEARS	NUMBER	PERCENT
20-29	3	3.3
30-39	26	28.3
40-49	29	31.5
50+	34	36.9
	--	----
TOTAL	92*	100.0

*MISSING CASES -1

Table 4 revealed that the distribution by years of teaching experience in education shows that thirty-seven (40.3%) of the respondents had 16 or less years of experience, and fifty-five 59.7%) had seventeen or more years of experience.

TABLE 4

DISTRIBUTION BY YEARS OF
TEACHING EXPERIENCE FOR
SAMPLE OF SCHOOL TEACHERS

YEARS OF EXPERIENCE	NUMBER	PERCENT
1-4	8	8.7
5-8	3	3.3
9-12	11	12.0
13-16	15	16.3
17-20	21	22.8
21-24	13	14.1
25+	21	22.8
TOTAL	92*	100.0

*MISSING CASES =1

Table 5 presents the distribution by years of teaching experience with LTA indicates that forty-seven (51.1%) of the respondents had 16 or less years of experience, and forty-five (48.9%) had 17 or more years of experience.

TABLE 5

DISTRIBUTION BY YEARS OF
TEACHING EXPERIENCE WITH LTA FOR
SAMPLE OF SCHOOL TEACHERS

YEARS OF EXPERIENCE	NUMBER	PERCENT
1	8	8.7
1-4	12	13.0
5-8	2	2.2
9-12	8	8.7
13-16	17	18.5
17-20	22	23.9
21-24	13	14.1
25+	10	10.9
TOTAL	92*	100.0

*MISSING CASES=1

The distribution by level of education in Table 6 indicates that one (1.1%) had received a diploma, forty-eight (52.2%) had a bachelor's degree, forty-two (45.7%) had a master's degree, and only one (1.1%) had obtained their doctorate's degree.

TABLE 6

DISTRIBUTION BY LEVEL OF
EDUCATION FOR SAMPLE OF
SCHOOL TEACHERS

LEVEL OF EDUCATION	NUMBER	PERCENT
DIPLOMA	1	1.1
BACHELOR	48	52.2
MASTER	42	45.7
DOCTORATE	1	1.1
TOTAL	92*	100.0

*MISSING CASES=1

Therefore, the sample of respondents had a higher male representation (62.4%), only 3.3% of teachers were 29 or under, that 81% had eleven years of experience or more, that 67.4% had more than thirteen years of experience with LTA and that 46.7% had obtained more schooling than the required bachelor's degree.

Diagnostic Instrument

The Job Diagnostic Survey (JDS) (Appendix A) was the
data collection instrument for this study because it is the
measurement tool proposed by the authors of the Job
Characteristics Theory. The JDS was also selected since it
represents the most comprehensive instrument for the
measurement of job characteristics and it was constructed by
the authors to tap dimensions in the Job Characteristics
Model (Hackman & Oldham, 1974, 1975, 1976, 1980).

The Job Diagnostic Survey (JDS) itself has undergone
three major revisions over a two year developmental period.
In its various forms, it has been taken by over 1,500
individuals working on more than 100 different jobs in about
15 different organizations. Revisions of the instrument
were based on both psychometric and substantive
considerations (Hackman & Oldham, 1975, p. 161). JDS has
been used extensively in research and change projects over
the last few years. Further data were obtained and compiled
from 6930 employees who worked on a wide variety of jobs in
56 organizations throughout the United States. The means and
standard deviations provide a relatively stable set of
standards for use in interpreting JDS diagnostic results
(Hackman & Oldham, 1980, p. 317, p. 106).

The instrument of the Job Characteristics Theory measures 21 jobs dimensions of which 19 are part of the present study. These dimensions cover each major class of variables in the as described in the previous chapter. Two concepts in the theory are not assessed by the JDS: the level of employee knowledge and skill, and employee work effectiveness. These factors are idiosyncratic to particular work settings, and therefore defy meaningful measurement across organizations (Hackman & Oldham, 1980, p. 103). Two supplementary dimensions which have been helpful in understanding jobs and employee reactions to them are described as:

First, feedback from agents, is the degree to which the employee receives clear information about his or her performance from supervisors or from co-workers. It supplements information about the feedback from the job itself and the effectiveness of his or her performance.

Secondly, dealing with others, defines the degree to which the job requires the employee to work closely with other people in order to carry out the work activities.

Individual growth need strength yielded two separate measures: The first, "would like format" where respondents

are asked to indicate how much they would like to have a number of specified conditions present in their jobs some of which focus on growth-relevant aspects of the work; the other "job choice format" where respondents show their relative preference for jobs. The would like format was measured on a ten (10) point scale which was transposed to a seven (7) point scale during analysis. Most of the JDS items are expressed on a seven (7) point scale, where 1 was low and 7 was high. The instrument measures a number of job characteristics that have been shown to affect the work motivation and satisfaction of job holders. It provides the overall motivating potential score (MPS) of a job, as described in the previous chapter, ranging from 1 to 343 (7 cubed).

Hackman and Oldham (1980, p. 303-304) suggested cautions in the use of JDS:

1- Job characteristics, as measured by the JDS, are not independent of one another. We should be careful not to overinterpret JDS scores for any single job characteristic considered alone. Often when a job is high in one characteristic it is also high in others.

2- It is just as good empirically, and usually better

simply to add up the scores of the five motivating job characteristics to get an overall estimate of the motivating potential of a job, rather than to use more complex formula for the motivating potential score (MPS).

3- The validity of some JDS scales remains unestablished. While it is to the credit of the instrument that it discriminates well between jobs, it takes many research studies relating a concept to other variables to firmly establish the meaning of that concept.

4- The survey warns that there is a relative ease with which respondents who are so inclined can "fake" their scores, deliberately distorting their answers to JDS items. The questionnaire was therefore anonymous to protect the confidentiality of the respondent and to encourage truthfulness.

5- The instrument is not appropriate for use in diagnosing the jobs of single individuals. The instrument was constructed so that the reliabilities of the job characteristic measures would be fully satisfactory when the responses of five or more individuals who work on the same job are averaged.

Careful and appropriate applications of JDS should result in a useful and informative diagnostic tool. The JDS was slightly modified for the purposes of this study.

Data Collection

The principal of each school was contacted personally requesting permission to conduct the survey in their school. A letter outlining the intent and the procedures was provided as both principals required their school council's permission (Appendix B). Once the approval was granted, each respondent received a letter informing them that their principal and school council had approved the survey and that they would soon be receiving the questionnaire (Appendix C). Soon after, each teacher received a package containing the following items:

1- A covering letter (Appendix D) which explained the study, why they had been chosen, an explanation of the ethical concerns, the name and place to return the questionnaire and the request for their co-operation.

2- The questionnaire, "Job Diagnostic Survey" (Appendix

A) in a booklet form.

3- The consent form which also guaranteed their anonymity (Appendix E).

The questionnaires were distributed at each school and the completed ones returned in the board's internal mail service to a third party teacher. Returns were monitored using the coding system incorporated into the questionnaire.

A letter (Appendix F) was forwarded to all the respondents two weeks after each questionnaire was distributed. This letter thanked those who had completed it and reminded the others of the importance of their return. A week later a personalized note was posted in the respective teachers' lunch room, serving as a further reminder.

Data Analysis

A review of the raw data prior to analysis showed that two (2) of the ninety-five (95) questionnaires had been improperly completed or not filled. Ninety-three (93) questionnaires were therefore used in this study. The calculations were done with the aid of STATPAC available at

McGill University. Frequency distributions were generated to identify independent dimensions: representation by high school, gender, age, years of teaching experience, years of teaching experience with LTA and level of education (Tables 1 to 6). Scores for the nineteen (19) job dimensions measured by the JDS were calculated using the american scoring key provided by Hackman & Oldham (1980, p. 303-306). The individuals results were tabulated to produce means and standard deviations for the sample and for individual independent dimensions within each classification. These scores can then be compared with the appropriate American norms provided by Hackman & Oldham (1980, p. 317).

In order to identify the relationships within groupings or between levels of independent dimensions with relation to a dependent dimension a one-way analysis of variance was conducted. The one-way analysis of variance permitted the comparison of two or more means in order to establish significant differences between them. A statistically significant F-value at the $p < 0.05$ level of significance indicated that there was evidence suggesting a difference between the means. The F-test requires that the probability of obtaining a given F-value be determined by comparing it to a sampling distribution of F based on two values for degrees of freedom associated with the numerator and the

denominator in the F-ratio. This allows the differences among the mean scores for the sample to be evaluated relative to any overlap in the sample distribution (Hinkle et al., 1979, p. 244-262).

Limitations and considerations

The population chosen for this study was limited to two public anglophone schools in the Lakeshore School Board. In the past few years, english teaching establishments have endured a turbulent period due to the change in government and have suffered an enormous drop in enrollment but these two schools have lately shown stability and even an increase on both teacher and pupil population. The teacher population of these two school represents more than half of the LTA's entire high school teacher population.

As an exploratory study based on the expectations and perceptions of voluntary participants the results are subjective and the findings must be interpreted with caution. Indeed, even when used for its intended purposes, special care should be taken to ensure that respondents believe that their own best interests will be served if the data they provide accurately reflect the objective

characteristics of the jobs and their personal reactions to them (Hackman & Oldham, 1980, p. 314).

Further limitations and considerations beyond those already mentioned are:

1- The selection of two anglophone public high schools prevented generalization related to their respective school board as well as other school boards.

2- The questionnaire method was considered appropriate as it is an efficient tool to collect data with relative ease, within a reasonable time frame and at modest monetary costs.

3- Valid responses depend on the clarity of the questions and linguistic competency of the respondents.

4- The questionnaire may contain topics that may not be appropriate to a particular situation or setting.

All limitations and considerations associated with this study were carefully cogitated as the results were interpreted.

Chapter 4

Analysis and Findings

Introduction

In this chapter the data collected will be presented and analyzed. An analysis of the demographic dimensions of the sample will be presented.

The research questions will be addressed through the one-way analysis of variance. Consideration will only be given to significant differences within groupings or between levels of independent dimensions. The research revealed only five dimensions where significant differences were indicated. It seems that these dimensions matter the most, even though it may appear to teachers that other dimensions which matter to them are present in their work.

The one-way analysis of variance of JDS scores for school teachers by age, gender, as well as by name of the school for all independent variables did not reveal any significant differences, so they will not be presented.

The findings relating to the first research question

1. Which are the job characteristics which motivate

   teachers?

Hackman and Oldham (1980) describe 5 core job characteristics as skill variety, task identity, task significance, autonomy and feedback from job. The first three contribute to the experienced meaningfulness of the work, autonomy contributes to experienced responsibility for outcomes of the work while the last, feedback from the job, contributes to knowledge of results of the work activities.

In an effort to assess the job characteristics which motivate teachers Table 7 shows the means and standard deviations for the job characteristics for our total sample of Lakeshore school teachers, the American means and deviations listed under the professional or technical category, (the word technical has been disregarded in the above table for the purposes of this study). Thirdly, it only shows the American means for the national average since the standard deviations were not provided by the original authors.

There was no attempt to test significant differences in

this analysis but the raw data (Table 7) indicate that most of the dimensions were higher than the professional norms and\or the national averages. According to Hackman & Oldham (1980) the higher the score of the dimensions the more important it becomes for the incumbents. Autonomy (6.0) was the highest Quebec mean and was therefore important to the teachers while task identity (4.8) the lowest, was slightly lower than the professional but higher than the national American norm. Task identity was identified a problematic area that matters most to teachers.

TABLE 7

MEANS AND STANDARD DEVIATIONS FOR TOTAL SAMPLE OF
SCHOOL TEACHERS AND AMERICAN NORMATIVE DATA
FOR CORE JOB CHARACTERISTICS

JOB DIMENSIONS	SAMPLE: QC. SCH. TEACHERS*		NORM: PROFESSIONAL**		NATIONAL AV.***	
	MEAN	S.D.	MEAN	S.D.	MEAN	S.D.
JOB CHARACTERISTICS						
SKILL VARIETY:	5.6	0.99	5.4	1.00	4.7	-
TASK IDENTITY:	4.8	1.5	5.1	1.20	4.7	-
TASK SIGNIFICANCE:	5.8	1.0	5.6	0.95	5.5	-
AUTONOMY:	6.0	0.85	5.4	1.00	4.9	-
FEEDBACK FROM JOB:	5.3	1.03	5.1	1.10	4.9	-

* QUEBEC SCHOOL TEACHERS=93
** HACKMAN & OLDHAM 1980, p. 317
*** HACKMAN & OLDHAM 1980, p. 105

The findings relating to the second research question

2. Do the psychological states, the motivating potential
   score, the internal work motivation, the feedback from
   agents and dealing with others matter to teachers?

Hackman & Oldham (1980) described these dimensions; the
three psychological states as experienced meaningful work,
experienced responsibility for outcomes of the work, and
knowledge of the actual results of the work activities. The
two related core characteristics, were not in their theory
but were also measured, the first being "feedback from
agents" to supplement information on feedback from the job,
the other "dealing with others" to provide information to
what extent the job is interconnected with other jobs. When
someone has a nice sense of accomplishment or feels good
about themselves and what they are producing, this state of
affairs is termed internal motivation. It appears that
strong internal work motivation will develop and persist on
the job when all three of the psychological states are
present.

There was no attempt to test significant differences in
this analysis but the raw data (Table 8) indicate that the
lowest score is feedback from agents (3.4), and the second

lowest is knowledge of results (4.9). These, respectively, appear to matter most to teachers. The highest score, dealing with others (5.8), is the same as the professional norm and slightly higher than the national average.

TABLE 8

MEANS AND STANDARD DEVIATIONS FOR TOTAL SAMPLE OF
SCHOOL TEACHERS AND AMERICAN NORMATIVE DATA
FOR PSYCHOLOGICAL STATES AND
OTHER DIMENSIONS

JOB DIMENSIONS	SAMPLE: QC. SCH. TEACHERS*		NORM: PROFESSIONAL**			NATIONAL AV.***	
	MEAN	S.D.	MEAN	S.D.	MEAN	MEAN	S.D.
CRITICAL PSYCHO. STATE:							
EXPERIENCE MEANINGFUL WORK:	5.6	.89	5.4	.87		5.2	-
EXPERIENCE RESPONSIBILITY:	5.5	.79	5.8	.72		5.5	-
KNOWLEDGE OF RESULTS:	4.9	.96	5.0	.99		5.0	-
OTHERS							
FEEDBACK FROM AGENTS:	3.4	1.41	4.2	1.40		4.1	-
DEALING WITH OTHERS:	5.8	1.24	5.8	.96		5.6	-
INTERNAL WORK MOTIVATION:	5.7	.70	5.8	.65		5.6	-

* QUEBEC SCHOOL TEACHERS=93
** HACKMAN & OLDHAM 1980, p. 317
*** HACKMAN & OLDHAM 1980, p. 105

The JDS provided the motivating potential score (MPS) to assess whether the respondents, regardless of how they felt personally about their job, perceived the job of school teacher as having the potential to motivate them. The MPS is a combination of the five characteristics into a single index that reflects the overall potential of a job to foster internal work motivation on the part of the incumbents.

The MPS of the sample group of 174 points, out of a possible 343, was higher than the American professional norm (154) reported in Table 9. This indicated that the school teachers' job provided an slightly above average potential to motivate them.

TABLE 9

MEANS AND STANDARD DEVIATIONS FOR TOTAL SAMPLE OF
SCHOOL TEACHERS AND AMERICAN NORMATIVE DATA FOR
"MOTIVATING POTENTIAL SCORE"

	SAMPLE: QC. SCH. TEACHERS*		NORM: PROFESSIONAL**		NATIONAL AV.***	
OUTCOMES	MEAN	S.D.	MEAN	S.D.	MEAN	S.D.
MOTIVATING POTENTIAL SCORE	174	65	154	55	128	--

* QUEBEC SCHOOL TEACHERS=93
** HACKMAN & OLDHAM 1980, p. 317
*** HACKMAN & OLDHAM 1980, p. 105

The findings relating to the third research question

3. Do the respondents vary on the basis of the demographic dimensions?

Table 10 shows the means related to years of experience with LTA. Skill variety which is the degree to which a job requires a variety of different activities in carrying out the work showed the lowest score for respondents who had 5 to 8 years and the highest degree for respondents who had 1 to 4 years of teaching experience with LTA. If the target job's scores are less than one standard deviation away from the normative mean, this suggests that an insignificant difference between the two scores may exist. If the target score is (plus or minus) two or more standard deviations from the focal norm, it suggests that the target job is quite discrepant from the normative base. For example, assume that a target teaching job has a task significance score of 2.10 and this score is more than two standard deviations away from the reported mean, this may suggests that action to improve the task significance of the job might be appropriate (Hackman & Oldham, 1980, p. 316).

Significant differences were found between the following group means. Teachers with less than a year of

experience with LTA perceived that they had less skill variety in their job than the teachers who had 1 to 4 years of experience (p< .01). Skill variety was less for the teachers who had 9 to 12 years, and those who had 21 to 24 years (p<. 05). Teachers with 1 to 4 years of experience with LTA perceived that they had more skill variety in their job than the teachers who had 5 to 8 years (p< .01) and more than the teachers who had 13-16 years (p< .05). Teachers with 5 to 8 years of experience with LTA perceived that they had less skill variety in their job than the groups of teachers who had more than 9 years of experience (p<.05).

Table 11 indicates that the only significant dimension for the "context satisfactions" was satisfaction with job security. The lowest mean was experienced by the employees who had been teaching with the board for 1 to 4 years (3.45) while the highest was with teachers of 25 and more years (5.95).

There were significant differences between the following group means. Teachers with less than a year of experience with LTA perceived that they had less satisfaction with their job security than the teachers who had 9 to 12 years, and the groups who had more than 17 years of experience (p< .05).

TABLE 10

ONE-WAY ANALYSIS OF VARIANCE OF JDS SCORES BY YEARS OF EXPERIENCE WITH LTA FOR "SKILL VARIETY"

YEARS OF EXPERIENCE WITH LTA	CORE JOB CHARACTERISTICS "SKILL VARIETY"		
NO.	MEAN	S.D.	NO. OF RESPONDENTS
LESS THAN 1 YEAR	4.87	0.686	8
1-4	6.19	0.783	12
5-8	3.83	1.655	2
9-12	5.95	0.864	8
13-16	5.42	0.779	17
17-20	5.50	1.072	22
21-24	5.89	0.918	13
25+	5.76	1.134	10

In Table 11, teachers with 1 to 4 years of experience with LTA perceived that they had less satisfaction with their job security than the teachers who had 9 to 12 years ($p < .01$), less than those who had 13 to 16 years ($p < .05$), and less than the groups of teachers who had more than 17 years ($p < .01$).

TABLE 11

ONE-WAY ANALYSIS OF VARIANCE OF JDS SCORES
BY YEARS OF TEACHING EXPERIENCE WITH LTA
FOR "SATISFACTION WITH JOB SECURITY"

YEARS OF EXPERIENCE WITH LTA	"CONTEXT SATISFACTIONS" "SATISFACTION WITH JOB SECURITY"		
NO.	MEAN	S.D.	NO. OF RESPONDENTS
LESS THAN 1 YEAR	3.62	2.280	8
1-4	3.45	2.136	12
5-8	3.50	3.536	2
9-12	5.87	0.694	8
13-16	5.11	1.485	17
17-20	5.15	1.606	22
21-24	5.50	1.907	12
25+	5.95	1.301	10

The other "context satisfactions", satisfaction with pay, compensation, co-workers, and supervisors did not show any significant differences but Hackman & Oldham (1980, p.86) remind us that individuals who are relatively satisfied with the above satisfactions will respond more positively to enriched and challenging jobs than individuals who are dissatisfied with these aspects of the work context. Individuals who are satisfied with the work context also have relatively strong growth need strength, and expect a very high level of internal motivation.

Table 12 indicates how the respondents with the lowest score (2.62) on satisfaction with the job security had recently joined the profession. The highest (5.90) was reached by teachers with 25 and more years of teaching experience.

There were significant differences between the following group means. Teachers with 1 to 4 years of teaching experience perceived that they had less satisfaction with job security than the teachers who had 13 to 20 years (p< .001); less than the teachers who had 21 to 24 years (p< .01); and less with the teachers who had 25 years and more (p< .000). Teachers with 5 to 8 years of teaching experience perceived that they had less satisfaction with job security than the group of teachers who had 13 to 24 years of teaching experience (p< .05) and less than the teachers who had more than 25 years (p< .01).

Hackman & Oldham (1980, p. 86) noted that how satisfied people are with aspects of the work "context" may affect their willingness or ability to take advantage of the opportunities for personal accomplishment provided.

TABLE 12

ONE WAY ANALYSIS OF VARIANCE OF JDS SCORES
BY YEARS OF TEACHING EXPERIENCE FOR
"SATISFACTION WITH JOB SECURITY"

YEARS OF EXPERIENCE WITH ANY BOARD	"CONTENT SATISFACTIONS" "SATISFACTION WITH JOB SECURITY"		
NO.	MEAN	S.D.	NO. OF RESPONDENTS
LESS THAN 1 YEAR	2.62	1.705	8
5-8	2.66	2.887	3
9-12	4.72	1.752	11
13-16	5.30	1.634	15
17-20	5.09	1.700	21
21-24	5.00	1.871	13
25+	5.90	1.242	20

Table 13 indicates that the lowest mean reported for "feedback from agents", which is the degree to which the employee receives clear information about his or her performance from supervisors or from co-workers, was for respondents with 9 to 12 years of teaching experience (2.08) and the highest was 13 to 16 years (4.16). There were significant differences between the following groups. Teachers with 9 to 12 years of experience perceived that they had less feedback from agents than the following groups of teachers: 1 to 4 years (p< .001); 13 to 16 years (p< .01);

17 to 20 years (p< .001); 21 to 24 years (p< .01); and for

teachers with more than 25 years (p<. 05). Teachers with 13

to 16 years of experience perceived that they had more

feedback from agents than the teachers who had 21 to 24

years (p< .01). Teachers with 21 to 24 years of experience

perceived that they had less feedback from agents than the

teachers who had 25 years and more (p< .05).

TABLE 13

ONE WAY ANALYSIS OF VARIANCE OF JDS SCORERS BY YEARS OF TEACHING EXPERIENCE FOR "FEEDBACK FROM AGENTS"

YEARS OF EXPERIENCE WITH ANY BOARD	A RELATED CORE CHARACTERISTICS "FEEDBACK FROM AGENTS"		
NO.	MEAN	S.D.	NO. OF RESPONDENTS
1-4	3.93	1.022	8
5-8	2.77	0.836	3
9-12	2.08	0.882	11
13-16	4.16	1.456	15
17-20	3.48	1.396	21
21-24	2.76	1.314	13
25+	3.87	1.393	21

Table 14 indicates that respondents with 1 to 4 years

of experience had the lowest GNS score (4.61) or the needs

for personal accomplishments, for learning, and for

developing themselves beyond where they are now. They may
not recognize the existence of opportunities provided, or
may not value them, or may even find them threatening and
balk at being "pushed" or stretched too far by their work
(Hackman & Oldham, 1980, p.85). Respondents with 17 to 20
years of experience indicated the highest level of GNS
(5.64).

There were significant differences between the
following group means. Teachers with 1 to 4 years of
experience perceived that they had less (GNS) than the
groups of teachers between 13 to 20 years (p< .05). Teachers
with 17 to 20 years of experience perceived that they had
more GNS than the teachers who had 21 to 24 years (p< .05).

Table 15 indicated that male respondents had a slightly
higher level of feedback from agents. There was a
significant difference between the following group means.
Female teachers perceived that they had less feedback from
the agents than the male respondents (p< .05). Teachers
appear to feel that they are not receiving information from
supervisors or from co-workers about his or her performance
enough of the time. This is not to say that they would or
would not like to receive any more. The answer to this
question would have to be further reviewed.

TABLE 14

ONE-WAY ANALYSIS OF VARIANCE OF JDS SCORES BY YEARS OF TEACHING EXPERIENCE FOR "GROWTH NEED STRENGTH"

YEARS OF EXPERIENCE WITH ANY BOARD	MODERATOR "GROWTH NEED STRENGTH"		
NO.	MEAN	S.D.	NO. OF RESPONDENTS
1-4	4.61	1.713	8
5-8	5.00	0.553	3
9-12	5.29	0.613	11
13-16	5.36	0.794	15
17-20	5.64	0.630	21
21-24	4.87	0.735	13
25+	5.16	0.525	21

TABLE 15

ONE-WAY ANALYSIS OF VARIANCE OF JDS SCORES FOR MALE AND FEMALE SCHOOL TEACHERS FOR "FEEDBACK FROM AGENTS"

RESPONDENTS	A RELATED CORE CHARACTERISTICS "FEEDBACK FROM AGENTS"		
GENDER	MEAN	S.D.	NO. OF RESPONDENTS
FEMALE	3.00	1.380	34
MALE	3.68	1.409	58

This chapter reported and analyzed the data and findings collected from the voluntary sample of secondary school teachers. In an attempt to assess teacher motivation, the research questions have been addressed and it would appear that some of the dimensions in the Job Characteristics Model matter slightly to teachers while others matter greatly. One-way analysis of variance of JDS scores included are: years of experience with LTA for skill variety and for satisfaction with job security; years of experience for satisfaction with job security, for feedback from agents, and for growth need strength; for male and female school teachers for feedback from agents. A summary of the findings will be presented in the next chapter.

Chapter 5

Summary, Implications and Conclusions

Introduction

There have been many changes in our culture, our attitudes, and our technology. Numerous studies showed that much time and effort have been devoted to analyze and explore the amount and kind of motivation that a child needs in order to learn. Today's society requires a highly motivated teacher who can teach while displaying creative, and innovative behaviors. Assessing and improving teacher motivation has become a continuing concern of educational leaders. Therefore the purpose of this study was to assess the motivation for a group of school teachers using the "Job Characteristics Model" and the "Job Diagnostic Survey presented by Hackman & Oldham (1980).

The voluntary sample consisted of secondary school teachers in anglophone schools in the Lakeshore school board. A one-way analysis of variance was used to identify the significant differences between the means of respondents grouped by demographic variables.

Summary of the Findings

Three questions served as guide for this study:

1. Which are the job characteristics which motivate teachers?

2. Do the psychological states, the motivating potential score, the internal work motivation, the feedback from agents and dealing with others matter to teachers?

3. Do the respondents vary on the basis of the demographic dimensions?

Based on remarks from Hackman & Oldham (1980), the following findings and observations were made for the research questions:

The first question as it relates to core job characteristics indicated autonomy as the highest score for school teachers, followed by task significance, skill variety, feedback from the job and lastly task identity. It would appear that teachers of the study could possibly attain the greatest level of motivation when their job provided substantial freedom, independence, discretion in

class scheduling, and in determining the procedures to be used. Then, teachers seemed to think that it was motivationally important that their job had a substantial impact on the lives of other people, followed by the fact that their job in carrying out the work, required a variety of different activities which involved the use of a number of different skills and talents. The next dimension which mattered most motivationally to teachers looked at how carrying out the work activities required by the job provided them with direct and clear information about the effectiveness of their performance. The least motivating characteristic was related to the fact that very often they did not find their work meaningful since they were not responsible for each of their students as a "whole."

In question two, of the critical psychological states, experience meaningful work was the highest degree, followed by experience of responsibility, and knowledge of results. It would appear that teachers perceive that they are responsible for their work, that it "counts", and serves a purpose. Then, teachers seem to perceive that they were personally accountable for the work outcomes. Their own initiatives or efforts could have made them personally proud when they did well or sad when they did not. Apparently, it did not seem to matter as much to teachers whether they knew

if they performed well or poorly. Hackman & Oldham (1980) mentioned that it appeared necessary for all three of these psychological states to be present for strong internal work motivation to develop and persist. Therefore, it could be concluded that the teachers in the study had relat\`ively high internal motivation but there was still room for improvement.

The other dimensions revealed dealing with others as a relatively high score, followed closely by internal work motivation and finally was feedback from agents with the lowest score of all. The results would indicate that it is important for teachers that their job requires that they work closely with administrators and other teachers. They would appear to have had more personal responsibility for successes and failures that occur on the job and were more willing to accept personal accountability for the outcomes of their work. Feedback from agents was not in their job which could have been an indication that the teachers may want some -so it matters to them. Knowledge of the results of one's work is affected directly by the amount of feedback the person receives from doing the work and secondly by feedback from the agents.

The MPS score of 174, out of a possible 343, was higher

than the American professional or technical norm of 154. The teachers' job were high on at least one of the three characteristics which prompt experienced meaningfulness, and high on both autonomy and feedback as well, thereby creating conditions that foster all three of the critical psychological states (Hackman & Oldham, 1980, p. 81).

The third question revealed that the respondents varied on the basis of some demographic dimensions. Those reported were skill variety, satisfaction with job security, feedback from agents, and growth need strength. The only significant differences revealed were with years of teaching experience, years of teaching experience with LTA, and gender. Age, sex of the respondents and name of the school where they taught did not prove to be significantly different.

Implications

As a direct result of the study conducted with the Job Characteristics Theory and looking at teacher motivation in the two schools of the Lakeshore school board, it is apparent that there is room for improvement. In an effort to increase the motivating potential for the school teachers and offer them a better working place, various implications

may possibly be presented to assist the administrators. The problem of motivating staff is complex and no easy solutions applicable to the teachers and their tasks have been developed. It is recommended that future research could include more schools in the board, or a further study be done to compare the motivation of elementary school teachers with the study conducted at the secondary level.

The values of our society have become increasingly unstable and the rapid change in what people believe has become the norm. People of all ages now have difficulty in deciding what is really worthwhile in life. People now desire a fuller sampling of life and distribute their waking hours among numerous at-work and away-from-work interests. A greater diversity of recreational activities can possibly mean a decrease in the amount of effort available for the job.

Grant (1982) reported that Protestant work ethic has foundered and stumbled in recent years. Fewer individuals believe that hard work is the mark of a righteous person. Fewer believe that all good automatically comes to those who work hard. People are not taking great pride in their work. Hard work and quality individual output are no longer widely viewed as synonymous with personal success. For employees to

be motivated, they must receive valuable outcomes for high effort and rewards must have high values.

The rise of unions, increased organizational size, and increased specialization may have decreased the employee's identification with the educational system. The absence of a sense of obligation to the profession may reduce motivation. Teachers lacking loyalty may not internally accept educational goals while teachers with high loyalty may feel commitment to these goals as they feel they owe a fair day's work for a fair day's wage and that the school deserves their best effort.

Hackman & Oldham (1971) observed that the job must allow a worker to feel personally responsible for a meaningful portion of his work (autonomy), provide outcomes which are intrinsically meaningful or otherwise experienced as worthwhile (task identity and variety), and provide feedback about performance effectiveness (responsibility). In the study of the five job characteristics of the theory, principals must recognize that the teachers considered autonomy as the most important dimension of their job, then came task significance, skill variety, feedback from the job, and task identity. The administrators must continue to allow and encourage teachers to exercise autonomy in making

decisions, to increase individual responsibility in developing and implementing teaching programs, and to develop professional skills.

As Scott (1966) recommended today it is also probably advisable that administrators permit some moderate level of variety simply to keep the teachers from being bored with his or her work so that once this is achieved, experienced meaningfulness of the work could possibly vary directly with the amount of task identity present. A report issued by the U.S. Department of Health, Education, and Welfare (1973) supported that long-term work on simple, routine tasks can reduce an individual's desire for personal growth and development.

Teachers have often regarded achievement, recognition and responsibility as high attitude sequences and administrators must encourage these aspects to foster and grow. Teachers must be given the opportunity to show what they can do. Their efforts must be recognized and rewarded to the extent that this is possible within the system. It comes down to treating people with respect for their individuality and consideration for their feelings. It means caring about others, about their personal well-being. It means giving them a chance to show what they can do even if

that is sometimes inconvenient. It means encouraging and helping them to meet their full potertial in their careers. If a person's work per se adds to his or her happiness, then the job in itself becomes the ultimate motivator. The administrators should attract the keenest minds. the finest personalities, and the most humane people.

Some authors including Milbourn, Jr. (1980) believe that money is a means to attract, hold, and motivate employees toward organizational objectives. Money has the ability to help satisfy human needs at several levels. Money seems to matter to those who don't have it or fall short of personal goals. Johnson (1986) states that the best teachers stay in teaching because of intrinsic rewards, although they may be forced to leave because of poor salaries or working conditions. At some universities where professors' salaries are published, the morale and motivational level of many reach the low point of the year when their pay is printed in the paper. Then, it may be advisable for all administrators not to make salaries of individuals known. The study revealed that it is important to teachers but it did not offer any significant differences within and between the groups.

Other considerations for the administrators connected

with the study, may be that they want to continue their staff's opportunity of setting their own goals, of designing tasks which are more interesting. Administrators could encourage teachers to participate in the decision making process which gives them a greater latitude in the way they do their job, and to take part in more professional development training so they can increase their professional competence.

Conclusions

The two secondary schools in the study proved to be homogeneous in many respects and as a result revealed only a few significant differences described earlier. Creating a climate which will inspire teachers to achieve above the fullest extent of their capabilities is a problem shared by many administrators who are concerned that the teachers reach their full potential. It is highly probable that the obtained results in the study were due to the high organizational climate of the schools.

Hoy & Miskel (1987) described organizational climate as a broad term that refers to teachers' perceptions of the general work environment of the school; it is influenced by

the formal organization, informal organization, by the
personalities of participants, and organizational
leadership. It is a broad concept that denotes members'
shared perceptions of tone or character of the workplace; it
is a set of internal characteristics that distinguishes one
school from another and influences the behavior of people in
school.

The two schools probably have similar shared values, a
high degree of thrust and esprit, and low disengagement.
This may suggest a climate in which both the principal and
faculty are genuine in their behavior. The teachers probably
work well together and seem committed to the task at hand.
Teachers are more than likely not burdened with paperwork,
are not supervised closely, nor boggled down by a myriad of
rules and regulations. The schools are probably not
preoccupied exclusively with either task achievement or
social needs satisfaction, but rather both emerge freely and
without coercion. Hackman & Oldham (1980) mentioned that the
respondents in this situation should respond eagerly and
positively to the opportunities provided by enriched work.

The obtained results of the study may be related to the
organizational culture of the schools. Concern for the
culture of the work group is not a new concept and in order

to better understand motivation in the schools it was reviewed. Organizational culture (Hoy & Miskel, 1987) is typically defined in terms of shared orientations that hold the unit together and give it a distinctive identity. It is another attempt to get at the feel, sense, atmosphere, character, or image of an organization. It may be probable that what is shared by the teachers in the schools of the study and probably in their board. Norms, values, philosophies, perspectives, beliefs, expectations, attitudes, myths, or ceremonies are very similar.

Supposing that the organizational climate and culture were similar in both schools, it may be possible that the principals in the study have a similar leadership style. Numerous definitions have been given for leadership but Stogdill (1950) described it as the process of influencing the activities of an organized group toward goal setting and goal achievement. He (1948) classified the personal factors associated with leadership as capacity (intelligence, alertness, verbal facility, originality, judgment), achievement (scholarship, knowledge, athletic accomplishments), responsibility (dependability, initiative, persistence, aggressiveness, self-confidence, desire to excel), participation (activity, sociability, cooperation, adaptability, humor), and status (socioeconomic position).

The concept of leadership implies that there are followers but the situations under which different groups and individuals will follow vary considerably. Leadership depends on the position, behavior, and personal characteristics of the leader and\or the character of the situation. It may have also been possible that the department heads displayed similar leadership styles. The most successful leaders are always those who pay most attention to the people who follow them. If a leader cares about what happens to his\her followers, his\her followers will care about what happens to him (The Royal Bank of Canada). It is important for leaders to remember that the teacher works best under certain types of educational structure as a proud and professional human being.

Administrators who make a serious effort to understand their teachers become better-motivated themselves, because they come closer to fulfilling their own ego and self-expression needs in the process. Motivation must, in fact, work two ways because superiors must be open to their subordinates' influence if they expect the subordinates to be open to theirs. The cross-motivation that comes from healthy superior-subordinate relationships gives rise to an ideal working climate, not only for the people directly concerned, but for the organization as a whole (The Royal

Bank of Canada).

Numerous researchers have shown that people, from newborn infants to mature adults, seek out occasions to explore and manipulate their environments and to gain a sense of efficacy by testing and using their skill (Kagan, 1972; and White, 1959). The curriculum prescribed by the Ministry of Education contains compulsory and optional objectives. It should be adapted for various aspects of enrichment, personalization, and teaching approaches appropriate to the school population served. The school board needs to make every possible effort to preserve and renew the effectiveness and efficiency of both teachers and administrators to make the most of their years of experience and their wisdom. Spitzer (1980) recommended various ways to motivate the teachers and achieve these goals.

Every school has complex relationships, power, structures and traditions. The needs and interests of students are at the heart of teachers' work but teachers are not full-time psychologists, social workers, police officers, annual curriculum revisers, computerized geniuses, or duplicating clerks as they are asked to be. It requires bondless energy, enthusiasm, knowledge, skill, understanding, a sense of humor and above all, time (Groves,

1984). The best ways to motivate teachers for sustained and improved work are apparently a complicated puzzle and have yet to be learned.

References

Aldag, R. J., Barr, S. H., Brief, A. P. (1981). Measurement of Perceived Task Characteristics. Psychological Bulletin, 90, 415-431.

Alderfer, C. P. (1969). A New Theory of Human Needs. Organizational Behavior and Human Performance, 4, 142-175.

Anderson, M. G. , & Iwanicki, E. F. (1984). Teacher Motivation an Its Relationship to Burnout. Educational Administration Quarterly, 20, 109-132.

Armstrong, T. B. (1971). Job Content & Content Factors Related to Satisfaction for Different Occupational Levels. Journal of Applied Psychology, 55, 57-65.

Arnold, H. J., House, R. J. (1980). Methodological and Substantive Extensions to the Job Characteristics Model of Motivation. Organizational Behavior and Human Performance, 25, 161-183.

Asher, J. W. (1976). Educational Research and Evaluation Methods. Boston: Little, Brown & Co.

Atkinson, J. W. (1958 (b)). Thematic Apperceptive Measurements of Motives Within the Context of a Theory of Motivation. In J. W. Atkinson (Ed.), Motives in Fantasy, Action, and Society.

Atkinson, J. W. (1983). Personality, Motivation and Action. Selected Papers. New York: Praeger Publishers.

Backman, J. B. (1971). The Herzberg Controversy. Personnel Psychology, 24, 155-189.

Barnabe, C. (1987). La motivation et la satisfaction du personnel en relation avec le rendement, In C. Barnabe et H. Girard (Ed.). Administration scolaire: theorie et pratique, 319-340. Chicoutimi: Geatan Morin, Editeur.

Barnabe, C. (1988). La theorie des characteristiques des emplois appliquee a l'etude de la motivation au travail des enseignants du Nouveau-Brunswick. Canadian Journal of Education, 13, (3), 391-403.

Bass, B. N., Barrett, G. V. (1981). People. Work and Organizations. (2nd ed.) Boston: Allyn and Beacon.

Beer, M. (1966). Leadership, Employee Needs and Motivation.
Columbus, Ohio: The Ohio State University.
Bendix, R. (1956). Work & Authority in Industry.
New York: Wiley.

Biranda, R. W. (1978). Educator Aspirations, Perceived Need
Deficiencies, and Response to Organizational Rewards.
Master's Thesis, Department of Educational Administration.
University of Calgary, Alberta.

Blood, M. R., and Hulin, C. L. (1967). Alienation,
Environmental Characteristics and Worker Responses.
Journal of Applied Psychology, 51, 284-290.

Borg, W. R. & Gall, M. D. (1983). Educational Research: An
Introduction (4th ed.). New York: Longham.

Brief, A. P., & Aldag, R. J. (1975). Employee Reactions to
Job Characteristics: A Constructive Replication.
Journal of Applied Psychology, 60, (3), 182-186.

Buchanan, D. A. (1979). The development of Job Deseign
Theories and Techniques. Westmead, Farnborough, Hants.,
England: Saxon House, Teakfield Limited.

Caldwell, D. F., O'Reilly, C. A. (1982). Task Perceptions and
Job Satisfaction: A Question of Casualty. Journal of
Applied Psychology, 67, 361-369.

Campbell, J. P., Dunnette, M. D., Lawler III, E. W., & Weick,
K. E. (1970). Managerial Behavior, Performance, and
Effectiveness. New York: McGraw-Hill.

Carroll Jr., S. J. & Tosi, H. L. (1973). Management by
Objectives Applications and Research. New York: Macmillan.

Champoux, J.E. (1978). A Preliminary Examination of Some
Complex Job Scope-Growth Need Strength Interactions.
Proceedings of the Academy of Management, 38, 59-63.

Chisholm, G. B., Washington, R., & Thibodeaux, M. (1980).
Job Motivation and the Need Fulfillment Deficiencies of
Educator. Paper presented at the annual meeting of the
American Educational Research Association in Boston.

Drucker, P. (1954). The Practice of Management. New York:
Harper.

Dunham, R. B. (1976). The Measurement and Dimensionality of Job Characteristics. Journal of Applied Psychology, 61, 404-409.

Dunham, R. B., Aldag, R. J., Brief, A. P. (1977). Dimensionality of Task Design as Measured by the Job Diagnostic Survey. Academy of Management Journal, 20. 209-223.

Dunnette, M. D., Campbell, J. P., & Hakel, M. D. (1967). Factors Contributing to Job Satisfaction and Job Dissatisfaction in Six Occupational Groups. Organizational Behavior and Human Performance, 11, 143-174.

Ewen, R. B. (1964). Some Determinants of Job Satisfaction. A Study of the Generality of Herzberg's Theory. Journal of Applied Psychology, 48, 161-163.

Fried, Y., Ferris, G. R., (1986). The Dimensionality of Job Characteristics: Some Neglected Issues. Journal of Applied Psychology, 71, 419-426.

Fried, Y., & Ferris, G. R. (1987). The Validity of the Job Characteristics Model: A Review and Meta-Analysis. Personnel Psychology, 40 (2), 287-323.

Friedlander, F. (1966). Characteristics as Satisfiers and Dissastifiers. Journal of Applied Psychology, L, (a), 143-152.

Gellerman, S. W. (1963). Motivation and Productivity. New York: Vail-Balou.

Goldsberrey, L., Henderson, R., & Sergiovanni, T. J. (1978). Perceived Need Deficiencies of Teachers in 1978 as Compared with 1968. Department of Educational Administration and Supervision. University of Illinois, Urbana-Champaign.

Graham, L. L. (1980). Expectancy Theory as a Predictor of College Student Grade Point Average, Satisfaction, and Participation. Ph.D. Dissertation, University of Kansas.

Groves, C. (1984). What Teachers Are and Are Not. The ATA Magazine, 32-35.

Hackman, J. R., & Lawler III, E. E. (1971, June). Employee Reactions to Job Characteristics. Journal of Applied Psychology Monograph, 55, (3). Yale University.

Hackman, J, R., & Oldham G. R. (1975). Development of the Job Diagnostic Survey. _Journal of Applied Psychology_, _60_, 159-170.

Hackman, J. R., & Oldham, G. R. (1976). Motivation Through the Design of Work: Test of a Theory. _Organizational Behavior and Human Performance_, _16_, 250-279.

Hackman, J. R., Pierce, J. L., & Wolfe, J. C. (1978). Effects of Changes in Job Characteristics on Work Attitudes and Behaviors: A Naturally Occurring Quasi-Experiment. _Organizational Behavior & Human Performance_, _21_, 289-304.

Hackman, J. R., & Oldham, G. R. (1980). _Work Redesign_. Don Mills, Ontario: Addison-Wesley Publishing Company.

Hall, D. T., & Nougaim, K. E. (1968). An Examination of Maslow's Need Hierarchy in an Organizational Setting. _Organizational Behavior and Human Performance_, _3_, 12-35.

Herzberg, F. (1968). One More Time: How do you Motivate Employees? _Harvard Business Review_, _46_, 53-62.

Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). _The Motivation to Work_ (2nd ed.). New York: John Wiley.

Hinkle, D. E., Wiersma, W., & Jurs, S.C. (1979). _Applied Statistics for the Behavioral Sciences_, Boston: Houghton Mifflin Company.

Holsti, O. R. (1968). Content analysis. In G. Lindzey & E. Aronson (Eds.), _The Handbook of Social Psychology: 2, Research Methods_ (2nd ed., 596-692). Reading, MA: Addison-Wesley.

House, R. J., & Wigdor, L. A. (1967). Herzberg Dual-Factor Theory of Job Satisfaction and Motivation. _Personnel Psychology_, _20_, 369-390.

Hoy, W., & Miskel, C. (1982). _Educational Administration: Theory, Research and Practice_ (2nd ed.). New York: Random House.

Hoy, W., & Miskel, C. (1987). _Educational Administration. Theory, Research and Practice_ (3rd ed.). New York: Random House.

Johnson, S. M. (1986). Incentives for Teachers: What Motivates, What Matters. _Educational Administration Quarterly_, _22_, (3), 54-79.

Kagan, J. (1972). Motives and development. <u>Journal of Personality and Social Psychology</u>, <u>22</u>, 51-66.

Latham, G. P., & Yukl, G. A. (1975). A Review of Research on the Application of Goal Setting in Organizations. <u>Academy of Management Journal</u>, <u>8</u>, 824-845.

Locke, E. A. (1975). Personal Attitudes & Motivation <u>Annual Review of Psychology</u>, <u>26</u>, 457-480.

Locke, E. A. (1980). Another Look at the Relationship of Expectancy and Goal Difficulty to Task Performance. <u>Organizational Behavior and Human Performance</u>, <u>25</u>, 419-440.

Lortie, D. C. (1975). <u>Schoolteacher. A Sociological Study</u>. Chicago. University of Chicago Press.

Malinovsky, M. R., & Barry, J. R. (1965). Determinants of Work Attitude. <u>Journal of Applied Psychology</u>, <u>XLIX</u>, 446-451.

Maslow, A. H. (1943). A Theory of Human motivation. <u>Psychological Review</u>, <u>50</u>.

Maslow, A. H. (1968). <u>Toward a Psychology of Being</u> (2nd Ed.) New York: Van Nostrand Reinhold.

Matthews, K. M., & Holmes, C. T. (1982). A Tool for Principals. A Method for Assessing Teacher Motivation. <u>NASSP Bulletin</u>, <u>66</u>, 458.

Milbourn, G. Jr. (1980). The Relationship of Money and Motivation. <u>Compensation Review</u>, <u>12</u>, <u>2</u>, 33-44.

Miner, J. B. (1980). <u>Theories of Organizational Behavior</u>. Hinsdale, Illinois: Dryden.

Miskel. C. G., Bloom, S., & McDonald, D. (1980). <u>Structural Coupling, Expectancy Climate, and Learning Strategies Intervention Effectiveness: A Pilot Study to Establish the Reliability and Validity Estimates for the Measurement System</u>, (pp. 70). Final Report for the Learning Disabilities Institute. University of Kansas.

Miskel, C. G., DeFrain, J., & Wilcox, K. (1980). A Test of Expectancy Motivation Theory in Educational Organizations. <u>Educational Administration Quarterly</u>, <u>16</u>, 70-92.

Oldham, G. R. (1976). Job Characteristics and Internal Motivation. The Moderating Effect of Interpersonal and Individual Variables. Human Relations, 29, 559-569.

O'Reilly, C. A., Parlette, G. N., & Bloom J.R. (1980). Perceptual Measures of Task Characteristics: The Biasing Effects of Differing Frames of Reference and Job Attitudes. Academy of Management Journal, 23, 118-131.

Pastor, M. C., & Erlandson, D. A. (1982). A Study of Higher Order Need Strength and Job Satisfaction in Secondary Public School Teachers. Journal of Educational Administration, 20, 172-183.

Pierce, J. L., & Dunham, R. B. (1976). Task Design and Literature Review. Academy of Management Review, 1, 83-97.

Porter, L. W. (1961). A Study of Perceived Need Satisfactions in Bottom and Middle Management Jobs. Journal of Applied Psychology, 45, 1-10.

Porter, L. W. (1962). Job Attitudes in Management I. Perceived Deficiencies in Need Fulfillment as a Function of Job Level. Journal of Applied Psychology, 46, 375-384.

Raia, A. P. (1965). Goal Setting and Self Control. Journal of Management Studies, 2, 34-53.

Raia, A. P. (1966). A Second Look at Goals and Controls. California Management Review, 8 (4), 49-58.

Roberts, K. H., & Glick, W. H. (1981). The Job Characteristics Approach to Task Design: A Critical Review. Journal of Applied Psychology, 66, 193-217.

Robertson, J. K. (1988). A Study of the Job Characteristics, of the School Principal's Job. Masters Thesis, Montreal: Faculty of Education, McGill University.

Rousseau, D. M. (1977). Technological Differences in Job Characteristics, Employee Satisfaction, and Motivation: A Synthesis of Job Design Research & Socio-Technical Systems Theory. Organizational Behavior & Human Performance, 19, 18-42.

Schneider, B., & Alderfer, C. P. (1973). Three Studies of Measures of Need Satisfaction in Organizations. Administrative Science Quarterly, 18, 489-505.

Scott, W. E. (1966). Activation Theory & Task Design. Organizational behavior & Human Performance, 1, 3-30.

Seeborg, I. S. (1976). The Influence of Employee Participation in Job Redesign. New Haven, CT. Technical Report No. 12, School organization & Management, Yale University.

Sergiovanni, T. (1967). Factors Which Affect Satisfaction and Dissatisfaction of Teachers. Journal of Educational Administration, 5, 66-82.

Sergiovanni, T. J. (1969). Factors Which Affect Satisfaction and Dissatisfaction of Teachers, in F. D. Carver & T. J. Sergiovanni (eds.), Organizations & Human Behavior. Focus on Schools. New York: McGraw-Hill.

Sergiovanni, T., & Carver, F. D. (1980). The New Executive. A Theory of Administration (2nd ed.). New York: Harper & Row Publishers.

Sims, H. P., & Szilagyi, A. D. (1974). Individual Moderators of Job Characteristic Relationships. Unpublished manuscript. Graduate School of Business, Indiana University.

Spitzer, D. R. (1980). 30 Ways to Motivate Employees to Perform Better. Training\HRD, 51-56.

Smith, P. A., & Kendall, L. (1963). Cornell Studies of Job Satisfaction. Unpublished Manuscript.

Staff. (1980, January). The Mysteries of Motivation. The Royal Bank of Canada Monthly Letter, 61, (1).

Steers, R. M., & Mowday, R. T. (1977). The Motivational Properties of Tasks. Academy of Management Review, 2, 645-658.

Steers, R. M., & Porter, L. (1975). Motivation and Work Behavior. New York: McGraw-Hill.

Stogdill, R. M. (1948). Personal Factors Associated with Leadership: A Survey of the Literature. Journal of Psychology, 25, 35-71. In Hoy & Miskel, Educational Administration: Theory Research and Practice (3rd ed.) New York: Random House.

Stogdill, R. M. (1950). Leadership, Membership, and Organization. Psychological Bulletin, 47, 4. In Hoy & Miskel, Educational Administration: Theory Research and Practice (3rd ed.) New York: Random House.

Stone, E. F. (1986). Job Scope-Job Satisfaction and Job Scope-Job Performance Relationships. In Locke, E.A.(Ed). Generalizing from Laboratory to Field Settings. Lexington, M.A.: Lexington Books, 189-206.

Toupin, L., Lessard, C., Cormier, R. A., & Valois, P. (1980). Les enseignants et enseignantes du Quebec: Une etude Socio-pedagogigue. Volume 5. Gouvernement du Quebec. Ministere de l'Education. Service de la recherche.

Trusty, M., & Sergiovanni, T. (1966). Perceived Need Differences of Teachers and Administrators - A Proposal for Restructuring Teachers Roles. Educational Administration Quarterly, 2, 168-180.

Turner, A. N., & Lawrence, P. R. (1965). Industrial Jobs and the Worker. Harvard University Graduate School of Business Administration.

U.S. Department of Health, Education and Welfare. (1973). Work in America: Report of a Special Task Force to the Secretary of Health, Education, and Welfare. Cambridge, M.A.: MIT Press.

Vroom, V. H. (1964). Work and Motivation. New York: Wiley.

Vroom, V. H. (1966). Some Observations Regarding Herzberg's Two-Factor Theory. Paper presented at the American Psychological Association Convention, New York.

Wahba, M. A., & Bridwell, L. G. (1973). Maslow Reconsidered: A Review of Research on the Need Hierarchy Theory. Proceedings of the 33rd Annual Meeting of the Academy of Management. Academy of Management, 514-520.

Wahba, M., & Bridwell, L. (1976). Maslow Reconsidered: A Review of Research on the Need Hierarchy Theory. Organizational Behavior and Human Psychology, 15, 212-240.

Wall, T. D., Clegg, C. W., & Jackson, P. R. (1978). An Evaluation of the Job Characteristics Model. Journal of Occupational Psychology, 51, 183-196.

Wernimont, P. F. (1966). Intrinsic and Extrinsic Factors in Job Satisfaction. Journal of Applied Psychology, L, 41-50.

Wickstrom, R. A. (1973). Sources of Teacher Job Satisfaction. The Canadian Administrator. 13, 1-5.

White, R. W. (1959). Motivation Reconsidered: The Concept of Competence. Psychological Review, 66, (2), 297-329.

Whitsett, D. A., & Winslow, E. K. (1967). An Analysis of Studies Critical of the Motivation-Hygiene Theory. Personnel Psychology, 20, 391-416.

Williams, R. T. (1978, December). Application of Research Teacher Motivation and Satisfaction. NASSP Bulletin, 62, (422).

Wlodkowski, R. J. (1985). Making sense out of motivation: A Systematic model to consolidate motivational constructs across theories. Educational Psychologist, 16, (2), 101-110.

Zierden, W. E. (1975). The Person, The Manager, The Job. Interactive Effects on Job Related Satisfactions. Unpublished Doctoral Dissertation. Yale University.

JOB DIAGNOSTIC SURVEY
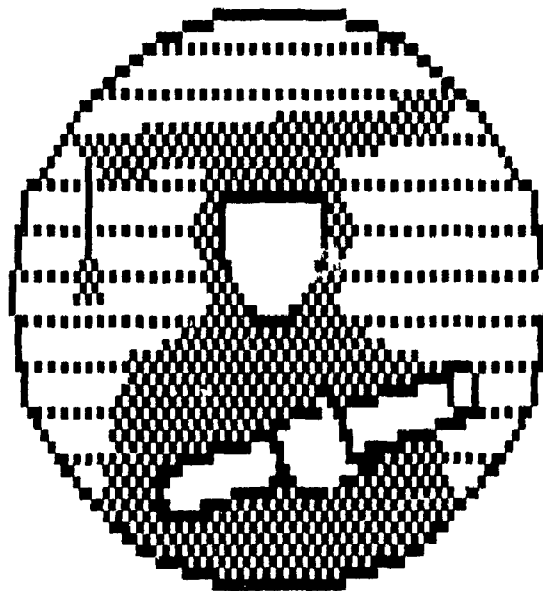
McGill University 1988

Department of Administration
and Policy Studies in Education
McGill University

Questionnaire:The Job Diagnostic Survey

Questionnaire to be completed by teachers
of The Lakeshore School Board

Please return it by inter school mail to:

Mrs Linda Gendron
John Rennie High School
501 St John Blvd.
Pointe Claire, Quebec
H9R3J5

April 1988

SECTION ONE

This part of the questionnaire asks you to describe your job as objectively as you can.

Please do not use this part of the questionnaire to show how much you like or dislike your job. Questions about that will come later. Instead, try to make your description as accurate and as objective as you possibly can.

A sample question is given below

A. To what extent does your job require that you work with mechanical equipment ?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Very little; the job   Moderately   Very much; the job
requires almost no   requires almost
contact with mechanical   constant work with
equipment of any kind   mechanical equipment

You are to circle the number which is the most accurate description of your job.

If for example your job requires you to work with mechanical equipment a good deal of the time - but also requires some paperwork - you might circle the number six, as done in the example above.

Once these instructions are clear please turn the page and begin.

JOB DIAGNOSTIC SURVEY
(Modified)

This questionnaire is a modified JDS. Some changes have been made to the original questionnaire so that it is better suited to the field of education. The original JDS was developed as part of a Yale University study of jobs and how people react to them.

On the following pages you will find several different kinds of questions about your job. Specific instructions are given at the start of each section. Please read them carefully. It should take no more than 25 minutes to complete the entire questionnaire. Please move through it quickly.

The questions are designed to obtain your perceptions of your job and your reactions to it.

There are no trick questions. Your individual answers will be kept completely confidential. Please answer each item as honestly and frankly as possible.

Thank you for your cooperation

SECTION ONE

This part of the questionnaire asks you to describe your job as objectively as you can.

Please do not use this part of the questionnaire to show how much you like or dislike your job. Questions about that will come later. Instead, try to make your description as accurate and as objective as you possibly can.

A sample question is given below

A. To what extent does your job require that you work with mechanical equipment ?

       1   2   3   4   5   6   7

Very little; the job   Moderately   Very much; the job
requires almost no   requires almost
contact with mechanical   constant work with
equipment of any kind   mechanical equipment

You are to circle the number which is the most accurate description of your job.

If for example your job requires you to work with mechanical equipment a good deal of the time - but also requires some paperwork - you might circle the number six, as done in the example above.

Once these instructions are clear please turn the page and begin.

1. To what extent does your job require you to **work closely with other people** (either "clients" or people in related jobs in your organization) ?

1	2	3	4	5	6	7

Very little; dealing
with other people is
not at all necessary
in doing my job

Moderately;
some dealing
with others
is necessary

Very much; dealing
with other people
is an absolutely
essential and
crucial part of
doing the job

2. How much **autonomy** is there in your job ? That is, to what extent does your job permit you to decide **on your own** how to go about doing your work ?

1	2	3	4	5	6	7

Very little; the job
give me almost no
"say" about how and
when the work is done

Moderate autonomy;
many things are
standardized and
not under my
control but I can
make some decisions
about the work

Very much; the job
gives me almost
complete responsi-
bility for deciding
how and when the
work is done

3. To what extent does your job involve doing a **whole and identifiable piece of work** ? That is, is the job a complete piece of work that has an obvious beginning and end ? Or is it only a small part part of the overall piece of work, which is finished by other people ?

1	2	3	4	5	6	7

My job is only a tiny
part of the overall piece
of work; the results of
any activities cannot be
seen in the final product
or service

My job is a modera-
te-sized "chunk" of
work; my own contri-
bution can be seen
in the final outcome

My job involves
doing the whole
piece of work, from
start to finish;
the result of any
activities are seen
in the final
product or service

4. How much <u>variety</u> is there in your job ? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents ?

	1	2	3	4	5	6	7

Very little; the job requires me to do the same routine things over and over again

Moderate variety

Very much; the job requires me to do many different things using a number of different skills and talents

5. In general, how <u>significant or important</u> is your job ? That is, are the results of your work likely to significantly affect the lives or well-being of other people ?

	1	2	3	4	5	6	7

Not very significant; the outcomes of my work are not likely to have important effects on other people

Moderately significant

Highly significant; the outcomes of my work can affect other people in very important ways

6. To what extent do <u>superiors or co-workers</u> let you know how well you are doing your job ?

	1	2	3	4	5	6	7

Very little; people almost never let me know how well I am doing

Moderately; sometimes people may give me feedback; other times they may not

Very much; superiors or co-workers provide me with almost constant feedback about how well I am doing

7. To what extent does <u>doing the job itself</u> provide you with information about your work performance ? That is, does the actual <u>work itself</u> provide clues about how you are doing-aside from any "feedback" co-workers or supervisors may provide ?

	1	2	3	4	5	6	7

Very little; the job itself is set up so I could work forever without finding out how well I am doing

Moderately; sometimes doing the job provides feedback to me; sometimes it does not

Very much; the job is set up so that I get almost constant feedback as I work about how well I am doing

SECTION TWO

Listed below are a number of statements which could be used to describe a job.

You are to indicate whether each statement is an accurate or an inaccurate description of your job.

Once again, please try to be as objective as you can in deciding how accurately each statement describes your job - regardless of whether you like or dislike your job.

Write a number in the blank beside each statement, based on the following scale:

How accurate is the statement in describing your job ?

1	2	3	4
Very inaccurate	Mostly inaccurate	Slightly inaccurate	Uncertain

5	6	7
Slightly accurate	Mostly accurate	Very accurate

_____ 8. The job requires me to use a number of complex or high-level skills.

_____ 9. The job requires a lot of cooperative work with other people.

_____ 10. The job is arranged so that I do not have the chance to do an entire piece of work from beginning to end.

_____ 11. Just doing the work required by the job provides many chances for me to figure out how well I am doing.

_____ 12. The job is quite simple and repetitive.

_____ 13. The job can be done adequately by a person working alone - without talking or checking with other people.

_____ 14. The supervisors and co-workers on this job almost never give me any "feedback" about how well I am doing in my work.

_____ 15. This job is one where a lot of other people can be affected by how well the work gets done.

_____ 16. The job denies me any chance to use my personal initiative or judgment in carrying out the work.

_____ 17. Supervisors often let me know how well think I am performing the job.

_____ 18. The job provides me the chance to completely finish the pieces of work I begin.

_____ 19. The job itself provides very few clues about whether or not I am performing well.

_____ 20. The job gives me considerable opportunity for independence and freedom in how I do the work.

_____ 21. The job itself is <u>not</u> very significant or important in the broader scheme of things.

SECTION THREE

Now please indicate how you personally feel about your job.

Each of the statements below is something that a person might say about his or her job. You are to indicate your own personal feelings about your job by marking how much you agree with each of the statements.

Write a number in the blank for each statement, based on this scale:

How much do you agree with the statement ?

1	2	3	4
Disagree strongly	Disagree	Disagree slightly	Neutral

5	6	7

_____ 22. It's hard, on this job, for me to care very much about whether or not the work gets done right.

_____ 23. My opinion of myself goes up when I do this job well.

_____ 24. Generally speaking, I am very satisfied with this job.

_____ 25. Most of the things I have to do on this job sees useless or trivial.

_____ 26. I usually know whether or not my work is satisfactory on this job.

_____ 27. I feel a great sense of personal satisfaction when I do this job well.

_____ 28. The work I do on this job is very meaningful to me.

_____ 29. I feel a very high degree of personal responsibility for the work I do on this job.

_____ 30. I frequently think of quitting this job.

_____ 31. I feel bad and unhappy when I discover that I have performed poorly on this job.

_____ 32. I often have trouble figuring out whether I'm doing well or poorly on this job.

_____ 33. I feel I should personally take the credit or blame for the results of my work on this job.

_____ 34. I am generally satisfied with the kind of work I do in this job.

_____ 35. My own feelings generally are not affected much one way or the other by how well I do on this job.

_____ 36. Whether or not this job gets done right is clearly my responsibility.

SECTION FOUR

Now please indicate how satisfied you are with each aspect of your job listed below. Once again, write the appropriate number in the blank beside each statement.

How satisfied are you with this aspect of your job ?

1	2	3	4
Extremely dissatisfied	Dissatisfied	Slightly dissatisfied	Neutral

5	6	7
Slightly satisfied	Satisfied	Extremely satisfied

_____ 37. The amount of job security I have.

_____ 38. The amount of pay and fringe benefits I receive.

_____ 39. The amount of personal growth and development I get in doing my job.

_____ 40. The people I talk to and work on my job.

_____ 41. The degree of respect and fair treatment I receive from my direct supervisor.

_____ 42. The feeling of worthwhile accomplishment I get from doing my job.

_____ 43. The chance to get to know other people while on the job.

_____ 44. The amount of support and guidance I receive from my superior

_____ 45. The degree to which I am fairly paid for what I contribute to this organization.

_____ 46. The amount of independent thought and action I can exercise in my job.

_____ 47. How secure things look for me in the future in this organization.

_____ 48. The chance to help other people while at work.

_____ 49. The amount of challenge in my job.

_____ 50. The overall quality of the supervision I receive in my work.

SECTION FIVE

Now please think of the other people in your organization who hold the same job you do. If no one has exactly the same job as you, think of the job which is most similar to yours.

Please think about how accurately each of the statements describes the feelings of those people about the job.

It is quite all right if your answers here are different from when you described you own reactions to the job. Often different people feel quite differently about the same job.

118

Once again, write a number in the blank for each statement, based on this scale:

How much do you agree with the statement ?

1	2	3	4
Disagree strongly	Disagree	Disagree slightly	Neutral

5	6	7
Agree slightly	Agree	Agree strongly

_____ 51. Most people on this job feel a great sense of personal satisfaction when they do the job well.

_____ 52. Most people on this job are very satisfied with the job.

_____ 53. Most people on this job feel that the work is useless or trivial.

_____ 54. Most people on this job take a great deal of personal responsibility for the work they do.

_____ 55. Most people on this job have a pretty good idea of how well they are performing their work.

_____ 56. Most people on this job find the work very meaningful.

_____ 57. Most people on this job feel that whether or not the job gets done right is clearly their own responsibility.

_____ 58. People on this job often think of quitting.

_____ 59. Most people on this job feel bad or unhappy when they find that they have performed the work poorly.

_____ 60. Most people on this job have trouble figuring out whether they are doing a good or bad job.

SECTION SIX

Listed below are a number of characteristics which could be present on any job. People differ about how much they would like to have each one present in their own jobs. We are interested in learning how much you personally would like to have each one present in your job.

Using the scale below, please indicate the degree to which you would like to have each characteristic present in your job.

NOTE: The number on this scale are different from those used in previous scales.

4	5	6	7	8	9	10

Would like having
this only a moderate
amount (or less)

Would like
having this
very much

Would like having
this extremely
much

_____ 61. High respect and fair treatment from my supervisor.

_____ 62. Stimulating and challenging work.

_____ 63. Chances to exercise independent thought and action in my job.

_____ 64. Great job security.

_____ 65. Very friendly co-workers.

_____ 66. Opportunities to learn new things from my work.

_____ 67. High salary and good fringe benefits.

_____ 68. Opportunities to be creative and imaginative in my work.

_____ 69. Quick promotions.

_____ 70. Opportunities for personal growth and development in my job.

_____ 71. A sense of worthwhile accomplishment in my work.

SECTION SEVEN

People differ in the kinds of jobs they would most like to hold. The questions in this section give you a chance to say just what it is about a job that is most important to you.

> For each question, two different kinds of jobs are briefly described. You are to indicate which of the jobs you personally would prefer - if you had to make a choice between them.

In answering each question, assume that everything else about the jobs is the same. Pay attention only to the characteristics actually listed.

Two examples are given below.

JOB A   JOB B

A job requiring work   A job requiring work
mechanical equipment   with other people most
most of the day   of the day

1	2	3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

If you like working with people and working with equipment equally well, you would circle the number 3, as has been done in the example.

Here is another example. This asks for a harder choice - between two jobs which have some undesirable features.

JOB A   JOB B

A job requiring you to   A job located 200 miles
expose yourself to   from your home and
considerable danger   family

1   2   3   4   5

Strongly   Slightly   Neutral   Slightly   Strongly
prefer A   prefer A   prefer B   prefer B

If you would slightly prefer risking physical danger to working far from
your home, you would circle number 2, as has been done in the example.

Before continuing please be sure that you understand exactly how to do
these questions, then continue.

JOB A   JOB B

72. A job where the pay   A job where there is
     is very good   considerable opportunity
                                          to be creative and
                                          innovative

1   2   3   4   5

Strongly   Slightly   Neutral   Slightly   Strongly
prefer A   prefer A   prefer B   prefer B

JOB A   JOB B

73. A job where you are   A job with many pleasant
     often required to make   people to work with
     important decisions

1   2   3   4   5

Strongly   Slightly   Neutral   Slightly   Strongly
prefer A   prefer A   prefer B   prefer B

JOB A | JOB B

74. A job in which greater
responsibility is given
to those who do the best
work

A job in which greater
responsibility is given
to loyal employees who
have the most seniority

1	2	3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

JOB A | JOB B

75. A job in an organization
which is in financial trouble
and might have to close down
within the year

A job in which you are
not allowed to have any
say whatever in how your
work is scheduled, or in
the procedures to be
used in carrying it out

1	2	3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

JOB A | JOB B

76. A very routine job

A job where your
co-workers are not very
friendly

1	2	3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

JOB A | JOB B

77. A job with a supervisor
who is often very critical
of you and your work in
front of other people

A job which prevents you
from using a number of
skills that you worked
hard to develop

1	2	3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

JOB A
                                                  JOB B

78. A job with a supervisor   A job which provides
who respect you and treats   constant opportunities
you fairly   for you to learn new and
                                 interesting things

1	2	3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

JOB A   JOB B

79. A job where there is a   A job with little chance
real chance you could   to do challenging work
be laid off

1	2	3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

JOB A   JOB B

80. A job in which there is   A job which provides
a real chance for you   lots of vacation time
to develop new skills   and an excellent fringe
and advance in the organization   benefits package

1	2	3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

JOB A   JOB B

81. A job with little freedom   A job where the working
and independence to do   conditions are poor
your work in the way you think
best

1	2	3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

JOB A   JOB B

82. A job with very   A job which allows you
    satisfying teamwork   to use your skills and
                                               abilities to the fullest
                                               extent

1	2	3	4	5
Strongly	Slightly	Neutral	Slightly	Strongly
prefer A	prefer A		prefer B	prefer B

        JOB A   JOB B

83. A job which offers little   A job which requires you
    or no challenge   to be completely isola-
                                               ted from co-workers

1	2	3	4	5
Strongly	Slightly	Neutral	Slightly	Strongly
prefer A	prefer A		prefer B	prefer B

SECTION EIGHT

Biographical Background

84. Are you male _____ or female _____ ?

85. Age group:

    _____ 20 - 29;   _____ 30 - 39;   _____ 40 - 49;   _____ 50 and more

86. What is the highest level of education you have finished ?

    ____ Bachelor's degree   ____ Master's degree

    ____ Doctorate's degree

87. How many years of teaching experience do you have ?

    _____ 1 - 4   _____ 13 - 16   _____ 25 and more

    _____ 5 - 8   _____ 17 - 20

    _____ 9 - 12   _____ 21 - 24

88. What levels have you taught ?

_____ Primary (elementary)   _____ Secondary

89. What is the name of the school in which you are teaching ?

_____

90. How many years of experience in the actual organization do you have ?

_____ Less than 1   _____ 9 - 12   _____ 21 - 24

_____ 1 - 4   _____ 13 - 16   _____ 25 and more

_____ 5 - 8   _____ 17 - 20

THANK YOU FOR YOUR COOPERATION

Appendix B

McGill University

Administration and Policy Studies in Education

March 21, 1988

The principal
_____
_____
_____
_____

Dear ————————

In the near future, as a Masters student from McGill University, I will be conducting research for a thesis entitled: "Motivation in secondary public school teachers". Your permission to conduct the study is required to survey the teachers from your high school. They will be asked to complete a questionnaire concerning numerous factors which influence their work.

Please be assured that both the name of your school and the identities of your teachers will be kept confidential. The results will be used only for my thesis purposes.

Your cooperation with this project would be greatly appreciated. Should you have any inquiries regarding any aspects of the research, please do not hesitate to contact me personally or at 695-3214.

Respectfully yours

Nicole Fournier(Miss)
Graduate Student
McGill University

Appendix C

McGill University

Administration and Policy Studies in Education

March 28, 1988

The teacher

_____

_____

Dear Participant

Within the next few weeks you will be receiving a questionnaire from McGill University graduate student who is conducting research on factors which influence your work. Your input is very important to this study. It is essential to this research to receive an adequate number of responses and I would appreciate you taking time out from your busy schedule to complete the questionnaire and return it within the shortest delay possible.

Thanking you for your understanding and your valuable cooperation,

Yours sincerely

_____

Signature of the principal

Appendix D

McGill University

Administration and Policy Studies in Education

April 11, 1988

Memo: To the teacher

From: Miss Nicole Fournier

Re: Questionnaire from McGill University

Dear participant

Your principal has kindly granted permission for me to survey teachers in your school concerning teacher motivation in their work as part of my research for my M.A. degree from McGill University. The information received will provide the primary data for my thesis entitled: "Motivation in secondary public school teachers".

Your valuable experience as a teacher with the Lakeshore School Board will provide us with important information which will contribute greatly to this study and to research on teacher motivation. We would appreciate you taking the time to complete the enclosed questionnaire assuring you that your responses will be kept confidential.

In order to avoid any bias on the researcher's part, a third party will assign an identification number to each teacher in your school. This person will gather the consent forms and the questionnaires and after verification will turn over the surveys to the reseacher.

We hope to start the analysis in the near future and we hope that you would return the questionnaire by April 29, 1988 through the inter school mail to Linda Gendron at John Rennie High School.

We appreciate the time and effort you took in completing the questionnaire. Your cooperation will make this study possible and should you have any questions please do not hesitate to contact me at 697-3210.

Respectfully yours

Nicole Fournier(Miss)
Graduate student
Dr. C. Barnabe

Appendix E

McGill University

Administration and Policy Studies in Education

Declaration of Informed Consent

I hereby consent to participate in the research study on teacher motivation to be conducted in the Spring of 1988. The purpose of the research and the procedures to be followed have been described to me an I clearly understand my commitment.

I agree to allow the information from my questionnaire to be used in the research report on the understanding that my identity will be kept confidential. I also understand that it is my prerogative to withdraw from the study at anytime.

_____   _____
Date   Signature

Thank you to all participants and I assure you that the information I receive will be used strictly for the purposes of the research and that your identity will not be revealed.

Nicole Fournier(Miss)
Graduate Student
McGill University

Appendix F

McGill University

Administration and Policy Studies in Education

April 30, 1988

The Teacher

_____

Dear participant

    You recently received a questionnaire entitled
"Job Diagnostic Survey". I requested your assistance
with my research and many of you have already been kind
enough to complete it and have promptly returned it. I
would like to take this opportunity to thank you for
both the time and effort you devoted this project.

    If you have not yet completed the questionnaire, I
would urge you to take a few minutes from your very
busy schedule to do so as your co-operation and
contribution is vital to this study.

    Once completed, the questionnaire can be returned
in the inter school mail envelope to Linda Gendron's
attention at J.R.H.S.

                              Thanking you

                              Nicole Fournier(Miss)
                              Graduate Student
                              McGill University