

HOW TEACHERS RESOLVE THEIR JOB-RELATED LEARNING NEEDS:
TOWARDS A PHENOMENOLOGICAL MODEL

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Peter Prystupa

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ABSTRACT

This was an exploratory study. Its purpose was to advance a phenomenological model of the process by which teachers resolve their autonomous job-related learning needs. More particularly, the problem was to identify and analyse theoretically the major classes of variables and the main kinds of dynamics involved in job-related learning.

In light of its exploratory status, this study was conducted as a fluid inquiry. First, insights derived by a priori means were used to posit an initial conceptualization of the phenomenon of job-related learning. This heuristic model guided the search for substantive data bearing on this phenomenon. Insights resulting from the intermediate stage of the inquiry were synthesized and then compared with evidence drawn from cognate disciplines. The propositions generated in the third stage of the inquiry were used to construct an original model of the process by which teachers resolve their professional learning needs.

The nature of the phenomenon chosen for investigation dictated that this study be guided by the interpretive paradigm. A fundamental assumption underlying this relatively novel approach to studies of human behaviour is that men are not only objects existing in the natural world, but also creators of a cultural world of their own. A further assumption of the interpretive paradigm is that these cultural creations are knowable from subjects' rationalizations of their actions, or inferrable from observations of their behaviour in everyday life.

The methodology used for sampling, collecting and analyzing the data, and reporting the findings was that common to grounded theory and ethnographic research. The population, a forty-four member staff who taught in a selected junior high school in Winnipeg in the 1975-76 year,

was chosen on the strength of a screening which indicated that it would be both able and willing to furnish relevant information. Survey instruments adapted from earlier research and theoretical sampling techniques were employed for singling out candidates for focused observation and in-depth interviewing. The observation guide and the interview schedule were developed from leads suggested in the heuristic model or from those gained in the pre- and early stages in the field. Constant comparative and deviant case analyses were the principal techniques used to interpret teachers' understandings of the process by which they resolved their job-related learning needs. Quasi-statistical techniques were used, where appropriate, to test the validity of relationships suggested by qualitative analyses. The natural history approach was used to present the findings of this study; that is, the evidence was presented in roughly the same order that it came to the attention of the researcher.

The more interesting conclusions substantiated in this study are summarized below:

1. Job-related learning involves an interplay between three major kinds of variables--those deriving from the biological makeup and background experiences of the learner, those stemming from the environment in which the learner works, and an interpretive intervening variable. This last-mentioned variable has been treated only obliquely in previous research.

2. Job-related learning is essentially a process of constructing personal meaning. This construction involves such dynamics as selective perception, evaluation of existential situation, and subjective evaluation of the magnitude and direction of potential correlates of learning.

While many of these kinds of dynamics have been identified in previous research, to the writer's knowledge this study is the first to have advanced a comprehensive grounded model illustrating how the various dynamics are interrelated.

The model generated in this study implies that efforts intended to assist teachers to grow professionally must rest with a clear understanding of the meaning that aspects of their perceptual field have for the individual learner.

Evaluation of the present research indicated the need for further study in two major areas: first, replications using different populations from the teaching profession or from other behavioural groups; and, second, inquiries designed to clarify such important concepts as action-orientation, psyche group, and random experiential learning. The use of the interpretive paradigm is recommended for such future undertakings.

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CHAPTER I

THE PROBLEM

I. DESIGN AND ORGANIZATION OF THE STUDY

The aim of this study was to generate basic insights into an important, but relatively unexplored, phenomenon--the process by which teachers resolve their autonomous job-related learning needs. The achievement of this aim entailed the use of a three-stage fluid inquiry design. Thus, the study began with an a priori conceptualization of job-related learning. This initial conceptualization guided the search for substantive information related to the phenomenon under investigation. The evidence generated in the intermediate stage was synthesized and examined in the light of germane theory. The insights resulting from this comparison of the empirical and theoretical evidence were used to construct a phenomenological model of the process by which teachers resolve their job-related learning needs.

The organization of this thesis generally parallels the three main stages of the inquiry. Chapters I to III are used to discuss several matters which were connected with the first stage of the inquiry. Specifically, Chapter I is used to give a rationale for the subject matter chosen for study, to delimit and describe the problem that was investigated, to provide a conceptual framework for looking at the phenomenon under consideration, to define the main terms used, to specify major underlying assumptions, and to spell

out apparent limitations.

Chapter II is used to further qualify the focus of the problem that was selected for study, and to obtain a pre-observational appreciation of the phenomenon that was to be investigated.

Chapter III is used to discuss important methodological issues that were encountered in this study. The opening part of this chapter is used to justify the employment of the interpretive research paradigm (as opposed to the more widely used natural science paradigm). The succeeding parts of this chapter are used to describe the tools and techniques that were employed, and to give a retrospective account of the procedures that were followed in both the in-field and report-writing phases of this study.

Chapters IV and V are used for purposes connected with the second stage of the inquiry. Chapter IV is used to generate and analyze teacher's perceptions relating to the kinds of variables that were involved in the process by which they resolved their autonomous job-related learning needs. The opening part of Chapter V is used to examine the influence upon autonomous learning of several serendipitously discovered variables. Chapter V is also used to describe and analyze the way that the various empirically grounded factors of learning impinged on the process by which teachers determined and resolved illustrative autonomous job-related learning projects.

The discussion of Chapter VI is connected with the third stage of the inquiry, namely: to synthesize the major findings generated in the study, and to use the resulting propositions to

construct a phenomenological model of the process by which teachers resolve their job-related learning needs.

The purpose of Chapter VII is to discuss the implications this study may have for continuing education practice and to advance some recommendations for further research.

II. NEED FOR THE STUDY

The issue of staffing our schools with competent teachers is a long-standing one. Measures to resolve this issue have taken many forms; for example, attracting more talented candidates into the profession, upgrading the quality of pre-service training, providing better supervision, developing more effective teaching materials, and improving continuing education practice.

In spite of their importance, however, many current practices which have been designed to promote the professional growth of teachers are not as effectual as they might be. The conclusion offered by Harris and Bissent over a decade ago (1965:8) underlines the poor repute in which teachers hold in-service, staff development, and other forms of continuing professional education--even to the present day: "No word is so likely to be met with a sigh or a groan as 'in-service'."

It was conjectured that the apparently pervasive disaffection of teachers with current continuing education practice might be symptomatic of an uncritical, if strongly conditioned, use by those involved in designing job-related learning opportunities for teachers of principles borrowed from pedagogy. Indeed, the literature generally upheld this conjecture. Finch (1975), Devore

(1971), Rubin (1971) and Cawood (1975) prescribed the use in the planning of professional development programs for teachers of andragogical (or, adult-centered) principles of learning.

It was further conjectured that the dysfunctions in many practices intended to foster the professional growth of teachers could be traced to an even more fundamental cause--the lack of appropriate insights into the phenomenon of autonomous learning. Again, the literature gave support to this conjecture. Mezirow (1971:135) concluded that:

There are few more debilitating influences in the field of continuing education than the absence of a body of practically useful theory upon which priorities [for guiding research into the phenomenon of autonomous learning] could be predicated.

Knowles in his address, "Research in Adult Education: Perspectives and New Directions," (Griffith, 1972) singled out the question of the way that adults diagnose their own needs for learning as "an area of investigation that cries out for innovation."

Thus, it was the aim of this study to fill a void in research on the continuing education of teachers; namely, to advance an empirically based research model which identifies and describes the major variables and dynamics involved in the process by which teachers resolve their autonomous job-related learning needs.

III. STATEMENT OF THE PROBLEM

The problem of this study was delimited to an inquiry into the phenomenon of job-related learning. The literature provided a preliminary set of perspectives through which to investigate this phenomenon. McLoskey (Boshier, 1973:257) observed that

participation in self-selected learning activities:

Appears to be a complex phenomenon that depends on a great many variables. All one can do [when conducting research into this phenomenon] is group the relative independent variables into those influences essentially internal (psychological and cognitive) and those derived from the individual's external environment.

Nattress (1970), Berry (1971), and Haefele (1971) advanced the common sense proposition that autonomous learning is a multi-phased process that consists of at least two discrete, albeit integrally related, phases--identification of a need, and resolution of that need.

Several researchers have produced evidence which suggests that the most appropriate perspective through which to view the way teachers deal with self-selected professional learning problems is through the perspective of the participant learner. Matthews (1954) found that direct feedback from participants was a more valid source of relevant information about the professional development of teachers than was information from peers or superordinates. Appropos to this finding, Kowalchuk (1975) observed that teachers and their superiors tended to be at variance with respect to both program goals and the way that these goals should be met. Shorey (1970) contended that as links between theory and practice teachers are potentially rich resources of information needed to plan productive in-service programs.

These predications from the literature--first, that autonomous job-related learning is a product of interacting internal and external influences; second, that it is a multi-phased process; and third, that it can be understood best if it is seen through the perceptions of the participant--are evidenced in the following

questions which guided the present inquiry:

1. How do teachers determine their job-related learning needs?

(a) What factors in their environment do teachers perceive as motives for learning?

(b) What factors in their personality and background do teachers perceive as motives for learning?

2. How do teachers resolve job-related learning needs?

(a) What factors in their environment do teachers perceive as influences in the way they deal with their learning needs?

(b) What factors in their personality and background do teachers perceive as influences in the way they deal with their learning needs?

IV. DEFINITION OF TERMS

The definitions given here are intended to clarify the more critical and frequently used terms in this study.

The term, job-related learning was used in a generic sense. It subsumed all the self-selected activities in which teachers participated during the 1975-76 school year and which they perceived as relevant to the maintenance or improvement of their effectiveness as professionals. This term included not only systematically planned learning activities (regardless whether these activities were planned by a teacher himself, or by others), but also randomly occurring activities that a teacher subjectively appreciated as

an opportunity to resolve a job-related learning issue. In the broadest sense, the term job-related learning also included leisure-time activities that a teacher may have initially perceived as a vehicle for personal growth and that he subsequently appreciated as a vehicle for resolving an on-going, or emergent, professional need. The term, job-related learning did not, however, include those contributions to personal or professional growth which could be traceable to maturation or other unconscious processes.

Leisure-time was defined as a time which a teacher had at his own disposal. Defined this way, leisure, like learning, was assumed to be a uniquely experienced phenomenon.

The term, phenomenon referred to an experience that was knowable through intuition, reason, and the senses and which is, hence susceptible to scientific description and explanation. Throughout this study, the designation, "phenomenon," served as a shorthand referent to any observed form of behaviour undertaken by a teacher with the intention of resolving a professional learning need.

A phenomenon can be studied more effectively and precisely once its boundaries are defined. The seminal work of Tough (1967 and 1971) guided the setting of the "boundaries" that were used in situations in this study where a particularized meaning of the general phenomenon of job-related learning was required. Thus a job-related learning activity that comprised of a cluster or sequence of similar acts that were not interrupted much by other activities and that were held together by a similarity of intent, location, and time frame (approximately thirty to sixty minutes) was termed a

learning episode. A job-related learning activity that consisted of two or more related episodes and that occupied a minimum time of seven hours during which time a teacher intentionally sought to gain and retain for at least two days certain clearly identifiable, knowledge, skills, and attitudes that he evaluated as necessary for the performance of his professional role was termed a learning project.

V. CONCEPTUAL FRAMEWORK

Two broad conceptualizations guided this study. Murray's Needs-Press Model guided the development and elaboration of an heuristic model of the process by which teachers resolve their job-related learning needs. Kelly's Personal Construct Theory was used to help explain major discrepancies between the model of job-related learning that was portrayed by the literature and the model that was inferred from an analysis of empirical data. The underlying postulates of these conceptualizations are discussed briefly below.

In trying to explain human behaviour, Murray (1962) took into account not only the needs patterns of individuals, but also the potential of the environment to resolve these needs. He suggested that certain aspects of the environment pose a threat to or frustrate an individual in his efforts to meet a given goal. He hypothesized that an individual affected this way would seek that type of environment which he perceives to have the potential to meet his needs. Conversely, an individual would shun an environment that he perceives as a threat to the achievement of his goal. More

explicitly, Murray suggested that forces within the individual (Murray labelled these forces as "needs" and defined them as "an organic potentiality to respond in certain ways under certain conditions . . . p. 62)" seek out or respond to various objects or total situations in the environment, which he labelled, "press".

But whereas Murray only hinted that learning is a subjectively mediated experience, Kelly made this assumption explicit. Indeed, the central postulate of his Theory of Personal Constructs echoes this assumption: "A person's processes are psychologically channelized by the way in which he anticipates events (Kelly, 1955: 46)." A close examination of this postulate reveals that it contradicts typical behaviourist conceptualizations of learning-- that learning is an accidental product of an interplay between variables in the learner's biological makeup and circumstances in his biography. Kelly, hearkening back to Dewey (1933), contended that learning should be seen as a purposive attempt to predict and make sense of the future: "Behaviour is man's way of changing his circumstances, not proof that he has submitted to them (Bannister and Fransella, 1971:191)."

VI. ASSUMPTIONS

This study was predicated on four underlying assumptions. One major assumption was that individuals have a unique meaning structure that influences their behaviour. This assumption is summed up in Thomas' dictum, "If we define a situation as real, it is real in its consequences (Rist, 1973: 17)."

A second assumption was that the constructions of reality by individuals regarding the process by which they resolve their job-related learning needs are directly knowable from their accounts about this process, or inferrable from surrogate data and observations of their behaviour in everyday situations.

A third basic assumption was that the process of job-related learning is a generalized process (i.e., operative under a large variety of conditions). The perceptions of reality by individuals about their job needs may vary; so, too, may their responses to the perceived needs: but the dynamics by which individuals resolve their job-related learning needs will remain constant.

A fourth basic assumption was that assurances to respect the psychic timetables of the subjects, and to treat information they provide confidentially are sufficient conditions for a free and unqualified disclosure of relevant information.

VII. LIMITATIONS

This study had several apparent limitations. These limitations and the steps that were taken to counteract them are outlined below.

One broad limitation was a methodological one. Each of the techniques that was used to collect the data had inherent weaknesses. For example, the response to an interview question may have been a reflection of an interviewee's unconscious bias towards the interviewer as much as it may have been a response to the question that was posed. To counteract this kind of limitation, a variety of validation measures were undertaken; for example; information secured

by means of the questionnaire was checked against information derived by other means of data collection. It was recognized, nevertheless, that these validation measures did not necessarily guarantee either the validity or the reliability of the information that was collected.

Another limitation of this study stemmed from its design, the fluid inquiry design. This kind of design entails the examination of a phenomenon over a period of time. As Schwab (1964) has noted, a researcher using this kind of design may not be able to detect some of the less perceptible changes that may creep in and materially influence the ultimate nature of the phenomenon being studied. Care was, therefore, taken to monitor constantly the processes under scrutiny and to take account of possible spurious influences.

Still another limitation stemmed from observer bias. Pelto (1970) contended that this kind of bias is virtually unavoidable. He suggested that it is, nevertheless, possible to minimize observer bias by two main expedients: by training oneself to recognize and expose to the reader's scrutiny one's preconceptions, on the one hand, and by using external validation, on the other hand. In deference to Pelto's instructions, the major ontological and epistemological preconceptions underlying this study were noted earlier in this chapter (under the heading, "Assumptions.") Meanwhile, the reading consultant who visited the subject school on a regular basis was called upon to validate representative observations made throughout the various stages in the inquiry.

Whether or not there was a further limitation in this study hinges on the way one defines the related concepts of objectivity

and replication. Boelen (Giorgi and others, 1971) proposed two meanings of objectivity that are germane to the present discussion. Objectivity may be understood, first, as a total independence between the observer and the observed; and, second, as a respectful openness to the whole of our existence. Thus, if one accepts only the first meaning of objectivity described by Boelen, one may assess this study as wanting, to some degree, in this requisite of scientific inquiry. (Albeit, a case has been made in Chapter III of this study that the problem selected for investigation practically precluded the degree of independence between the observer and the observed, which is the hallmark of studies guided by the natural science paradigm. Rather, the phenomenological orientation of this study dictated the use of the more appropriate scientific principle, that of disciplined subjectivity.) On the other hand, if one accepts the second and more appropriate (insofar as the aims of the present study were concerned) meaning of objectivity--namely, an attitude of respectful openness to the whole of our existence--one can conclude that this study has observed an important principle underlying scientific inquiry. As Boelen has argued, an attitude of respectful openness to the "world" one is investigating (in this case a phenomenal world) contributes to the likelihood that the reality of that world will reveal itself as it really (i.e., objectively) exists.

Further, Boelen (Giorgi and others, 1971) identified two meanings of the term "replication": identical replication and replication of general themes. Identical replication, Boelen rightly concluded, is impossible in studies in which unique experiences

constitute the data (this is not to deny, as Stebbins, 1975 has shown, that unique experiences cannot be shared). However, replication of general themes is not only possible, but also more appropriate in studies (the present one included) that are exploratory in intent, and that focus on a process that is assumed to be operative under a wide variety of conditions.

CHAPTER II

REVIEW OF RELATED LITERATURE

In their article, "The Role of Relevant Literature," Conway and McAlvey (1970:409) argued that a review of the literature should be regarded as a "constantly expanding body that permeates all aspects of the research process." Their argument is particularly valid when applied to studies which have a fluid inquiry design; for it is virtually impossible to anticipate the exact item of literature that will prove relevant as the resolution of the research problem proceeds.

Since the design of this study entailed several overlapping stages, the decision was made to abandon the more customary practice of concentrating the bulk of the review of the literature in one chapter, usually in Chapter II. Instead, the review was developed in such an order as to reflect the dominant concern in each major stage of the inquiry. There were three dominant concerns in the beginning stage of the inquiry: first, to clarify the focus of the problem and to indicate major implications this focus would have for the design of the study; second to relate the phenomenon chosen for study to the broader context of human behaviour, in general, and adult learning, in particular; and, third, to identify for heuristic purposes some variables presumed to impinge on the phenomenon chosen for study, the process by which teachers resolve their autonomous job-related learning needs.

I. STUDYING JOB-RELATED LEARNING: LESSONS FROM RELATED RESEARCH

A survey of the literature indicated that the bulk of early studies which were intended to advance our understanding of the way adults deal with problematic learning situations tended to have one or more of the following characteristics: they were predicated on the assumption that learning is, by and large, a normative enterprise; they focused on the act of participation, rather than on the process underlying the participation; and, they relied heavily on research tools borrowed from the natural sciences.

Several critics have shown that the above-noted characteristics of early studies rendered them inherently unsuited for an inquiry into the process by which the individual learner identifies and resolves his job-related learning goals. Brunner (1970) pointed out a critical flaw in research designs which focus on aggregate behaviour. He argued that such designs rest on the tenuous assumption that all members of a particular group will exhibit similar responses to similar learning opportunities. Collican (1974) criticized clientele analysis research on like grounds. She contended that these kinds of designs generally focus on differences among groups; in so doing, these kinds of designs tend to obscure differences within groups. Houle (1961) specified some key limitations that are inherent in research designs which use the act of participation, rather than the participant, as the starting point of research. He stated that

it [research which concentrates on the act of participation] deals with simple acts of individuals, not with their whole pattern of educational effort. It describes what men do and not what they think about why they do it. It delimits and routinizes

the scope and ventures into learning (p. 8).

Douglah (1970) acknowledged the utility of survey and correlational studies for validating hypothesized relationships between certain independent variables and educational effort. But, Douglah contended, these kinds of designs can contribute very little insight into the reasons behind such educational effort. For example, survey and correlational designs cannot explain why certain motivational forces influence some adults to take an active part in an educational program, but fail to bestir other adults to respond positively to a similar learning opportunity.

A survey of the literature further indicated that some progress has been made in countering inherent weaknesses in early research into the phenomenon of job-related learning. The refinements contributed by Tough are especially pertinent to the design of the present study. In one of his early works (1967) Tough developed a probing interview technique by which he was able to obtain more information about the extent of adults' autonomous learning efforts than would have been accessible through such conventional means as the questionnaire. In a later work Tough (1971), advanced the revolutionary concept of learning projects. The use of this way of operationalizing learning, when coupled with the use of the probing interview technique, enabled researchers to obtain more comprehensive first-hand information about an adult's whole pattern of educational effort than had hitherto been possible. On the substantive level, Tough delineated the major steps by which adults pursue self-planned learning projects. In this connection, he produced evidence which suggested that self-planned learning is in effect a form of self-

teaching. That is, the self-teacher sets objectives based on perceived needs, mobilizes resources intended to resolve these needs, and courts feedback about his progress. In the process, the self-teacher establishes a network of linkages with various aspects of his social and physical environment. The linkages thus established have important implications for the way adults conduct future learning projects.

Several researchers (McCatty, 1975; Miller and Botsman, 1975) have used refinements originated by Tough to study the continuing education efforts of a wide range of professional groups. Most directly related to the present inquiry, Fair (1973) investigated the way neophyte teachers respond to job-related learning issues. His study supplemented the probing interview technique developed by Tough with an empirically derived listing of some typical learning problems encountered by beginning teachers. This latter device proved to be an effective prod in helping the participants to recall many learning activities which might not otherwise have surfaced. Substantively, Fair confirmed the findings of Johnstone and Rivera (1966), Coolican (1974) and others, to the effect that teachers' learning efforts are by and large self-planned attempts intended to resolve individually perceived professional problems.

II. JOB-RELATED LEARNING: THE BROAD CONTEXT

Mezirow (1971) and Smith (1974), among others, exposed a grave lack of appropriate theory to guide research into the various aspects of adult learning, including the way adults resolve their job-related learning needs. Rubenson (Bergstern, 1977) offered the

common sense advice that, in the light of this situation, one must start from a wider frame of reference and use experiences from the behavioural sciences. Participation in job-related learning was seen as one of the various forms of social behaviour directed to achieving a specific personal goal. Two fields of behavioural science that were seen to have particular relevance to the aims of the present study were the fields of motivation and adult learning. Accordingly, a review of pertinent literature was undertaken. The more pertinent insights resulting from this review are discussed briefly. To facilitate reading, the key points in the discussion are underscored.

The Motivational Bases of Learning

Learning is a fundamental human response. What underlying forces/reasons impel learning? How are these basic forces/reasons affected by subjective experiences? The literature afforded several interesting, if relatively inconclusive, perspectives on these and other basic questions.

One of the more traditional views of human learning is the needs reduction theory. Developed by Freud and his followers, this theory holds that an organism's motivation to perform stems from the necessity to fulfill basic biological drives. A variation of this view is that human behaviour is motivated by the desire to avoid physical pain or anxiety.

The Third Force school of psychologists rejected the needs-reduction view of human learning on the grounds that such a view renders man as a victim spectator. Psychologists from this school

contended that man is a proactive creature, tending to growth and positive striving beyond the mere satisfaction of biological needs. For example, Shostrom (1964) noted that man's aggressive nature is matched by an innate capacity for intimate contact with others. Maslow (1968) evolved a hierarchy of prepotent needs which incorporated both lower level needs (physiological, safety, and social) and higher level needs (belonging, self-esteem, and self-actualization). Rogers (1969) was even more adamant in rejecting the needs-reduction theory; he suggested that if left to himself, man's innate forces for growth will emerge. For a final example, Kelly (Bannister and Fransella, 1971:19) argued that "man is not the victim of his autobiography though he may enslave [sic] himself by adhering to an unalterable view of what his past means. Thereby, he fixates his present."

Havighurst (1965) asserted that developmental tasks serve as motivators of behaviour. According to this development tasks theory, the individual learner is portrayed as passing through a life cycle in which his needs and the social roles he is expected to play change as he moves from one growth level to another. By analogy, it can be inferred that each level of professional growth is, likewise, accompanied by specific learning needs.

White (Sergiovanni and Carver, 1974) observed that an important thrust of human motivation is to know the world, to shape that world, and to get what one wants from it. The competence motive is expressed by teachers, as by other professionals, as a desire for job mastery. Teachers so motivated work to apply--indeed, to match--their skills, abilities, and competencies against the problems of the job. Gellerman (Sergiovanni and Carver, 1974) echoed

White's belief that the job provides the individual with the opportunity to match his skills against the environment. He spelled out some ways in which perceived situational factors modify this "matching." Where a particular task is perceived as neither absurdly easy, nor prohibitively complex, the competence motive may be exercised and a considerable reward may be enjoyed. Obversely, where a task is highly routinized or unduly difficult to perform adequately, a strong competence motive may lead to frustration, resignation, and even dependency.

A frequently cited concept in motivation literature is that of achievement syndrome. Rosen (1965) asserted that the achievement syndrome (which he believed to be a product of primary and secondary socialization) influences the individual learner to strive for excellence. In his extensive work, McClelland (1953) established empirically the importance of the achievement motive as a correlate of continuous efforts for self-improvement.

The cognitive dissonance theorists provided further insights into the complex phenomenon of motivation to learn. Bigge (1964) suggested that a person's needs cause a psychological tension which leads a person in the direction of the force in order to cope with it, or to surrender to it by altering his cognitive structure. Thus, in a job situation a teacher may try to respond to the motivational force impinging upon him (Say, a new curriculum.) through the attainment of further knowledge, through substitute efforts, or by rationalization.

Boshier (1971) proposed a novel addition to traditional cognitive dissonance formulations. He contended that there are some

people who knowingly seek out learning opportunities in order to disrupt their comfortable state of equilibrium. These people do this because they believe that the disequilibrium thus induced will eventuate in a higher level of equilibrium and, concomitantly, in a greater sense of personal growth and sense of accomplishment.

The theories reviewed to this point have focused on the individual learner. Because the teacher is a member of many "societies," it was thought beneficial to look at the question of motivation to learn from the perspective of social transaction. Lippitt and Fox (1971) asserted that, just as in the study of adolescent learning, so in the study of adult learning, the total context of the learning situation must be borne in mind. Lippitt and Fox added that heed must, therefore, be given to such factors as interactions among peers, administrative policies and socioemotional climate, physical ecology, grouping policies, and availability of learning materials; for these kinds of factors shape both the nature and the extent of learning that will occur.

Sullivan (1953) build his interpersonal theory on the assumption that man is a social animal. As a consequence of this nature, man's motivating patterns are governed by the dominant values of the particular society of which a given individual is a member. Man's cultural matrix, Sullivan elaborated, outlines his aspirations and provides the very symbols and concepts with which he thinks. Somewhat reminiscent of the needs reductionists, interpersonal theorists suggested that man's behaviour is the result of the search for relief from tensions brought on by the expectations of society. Anxiety was seen by interpersonal theorists as the most compelling of

such tensions; hence, it is a potentially powerful motive for learning behaviour.

Miller (1967), likewise, appreciated the cruciality of the social milieu in explaining learning behaviour. He argued that personal learning needs do not operate in a vacuum; rather, "they are shaped, conditioned, and channeled by the social structures and forces of the human society in which each individual is born (p. 11)." Moreover Miller contended, this "shaping" is a highly situational process. It is a function of the particular facilitating and inhibiting forces characterizing each interaction between the learner and his environment.

Adult Learning: Some Defining Characteristics

A critical evaluation of motivation literature suggested that life attributes associated with the age of a learner would impinge on the way the learner would define and resolve his learning needs. Reflections on insights gained by the researcher in the course of administering a continuing education program suggested a similar hypothesis. A search of the literature undertaken to "test" these ad hoc hypotheses brought to light several important ways in which adult learning tends to be different from adolescent or child learning. These distinguishing characteristics of the adult learner are discussed in the review below.

Writers from many disciplines have singled out autonomy as perhaps the most distinguishing mark of adult learning. Deriving his view from clinical practice, Rogers (Kidd, 1973:44) proclaimed:

I have yet to find an individual who, when he examines his situation deeply, and feels that he perceives it clearly,

deliberately chooses dependence, deliberately chooses to have the integrated direction of himself undertaken by another. When all the elements are clearly perceived, the balance seems invariably in the direction of the painful, but ultimately rewarding, path of self-actualization or growth.

Stensland, an early student of adult learning, stated (Sheats, 1955) that the difference between adult and other education lies in the origin of the educational effort. The adult learner, Stensland explained, not only selects, he also directs his own learning.

Angyl and Snygg, the personality theorists, noted (Kidd, 1967) that the human organism develops in certain predictable ways; that is, it seems to move away from reliance upon control from external forces towards greater self-responsibility, self-government, and autonomy. In like vein, Horney (Kidd, 1973:44) stated that "the ultimate driving force [behind adult learning] is a person's unrelenting will to come to grips with himself, a wish to grow and to leave nothing untouched that prevents growth."

Both the so-named participation and in-service research provide convincing empirical support for the view that adult learning is by and large a self-governed enterprise. Johnstone and Rivera (1965:37) found that "a much greater than anticipated proportion of adults [approximately forty percent]" in their nation-wide sample had been engaged in some form of self-planned learning.

Using broader operational definitions of learning and more sensitive data-collecting devices, a number of researchers found that the phenomenon of autonomous learning was even more extensive than that shown in Johnstone and Rivera's survey. By way of illustration, Bergevin (1967) classified learning into two main categories: systematically organized and random experiential.

Bergevin's analysis revealed that approximately two out of three learners in his study initiated and directed their learning outside a formal institutional framework. With the aid of focused, indepth interviews, Tough (1971) generated evidence which also revealed self-planned learning to be more common than was previously thought. Approximately seventy percent of his seven-population sample undertook self-planned learning projects in a twelve month period.

In his research Johnson (1971) pinpointed several predominant reasons why teachers participated in in-service activities, most being pragmatic and goal oriented: to improve performance in the classroom, to develop professional self-respect, and to make a contribution to research. Closely scrutinized, all these reasons are at least tangentially related to the principle of self-directed growth.

Similarly, Sergiovanni and Carver (1973) generated data which underlined the importance that teachers tended to place on the growth principle. Sergiovanni and Carver found that while teachers in their samples were generally satisfied with having met their lower level needs (namely, security and social warmth), they were appreciably less satisfied with the degree to which they had met their higher order needs (namely, esteem, autonomy, and self-actualization).

The literature further suggested that adult learning tends to be more goal-oriented and pragmatic than is characteristic of child or adolescent learning. In his study, Houle (1961) focused on the whole pattern of an adult's learning. On the strength

of his findings, Houle proposed a typology which classified learning into several predominant orientations. The most common type of orientation that he found among his subjects was goal-orientation. Houle explained that a learner so oriented uses education to accomplish fairly clearcut, personal objectives.

Based on data from their nation-wide sample, Johnstone and Rivera (1965) reached the following conclusion about the distinguishing marks of adult learning:

It was quite clear from the results of our study that the major emphasis in adult learning is on the practical . . . on the applied. . . . Subject matter directly useful in the performance of everyday tasks and obligations accounted for the most significant block of the total activities recorded (p. 3).

More specifically, respondents in Johnstone and Rivera's study cited the following as the most frequent reasons for participating in educational activities: to become a better informed person, to prepare for a new job or occupation, and to learn about the job they already had.

Much the same kind of conclusion--that adult learning is closely linked with pressing practical problems--has been reported in in-service literature. Brim and Tollet (1964) investigated the question of the way teachers themselves felt about in-service education. They found that nine out of ten teachers in their sample "agreed" or "strongly agreed" that "The teacher should have the opportunity to select the kind of in-service which he feels will strengthen his professional competence." The same proportion of teachers in this sample felt strongly that a primary purpose of in-service should be to upgrade on-the-job performance.

To cite further variations on the theme that adult learning is highly specific, pragmatic, and tangible, Devore (1971) and Kozol (1972) noted that teachers in their samples preferred learning opportunities that were oriented to specific, clientele-identified problems. Fair (1975) found that a large proportion of the deliberate learning efforts of neophyte teachers were motivated by the survival instinct; that is, by pressing job-related problems. Ward (1974) defended mini courses on the strength of his experience which showed that mini courses were better suited than were customary expedients for meeting on-going, individualized needs of teachers.

The literature suggested, still further, that the way adults view time and respond to experiences in their background, differentiates them from younger learners. Several writers elaborated on these differences in time perspective and/or examined the implications these differing perspectives had for the way these two populations identified and resolved their learning problems. Neugarten (1968) contended that the most basic attribute which distinguishes the adult from the younger learner is the way each views time. She stated that with adulthood there comes a re-structuring of time perspective. Instead of seeing life as time-since-birth, the adult begins to look at life as time-left-to-live. Accompanying such a re-structuring, Neugarten added, is a feeling on the part of adults that time is finite and that one has only so much time to accomplish something.*

*Gould (1972) referred to this press of time as "time squeeze." Sheehy (1976) had an equally ominous designation for the years between thirty-five and forty-five--"deadline decade."

The way that a shortened time perspective (among other factors associated with adulthood) influences adult learning behaviour has been extensively examined. Suffice it for present purposes to cite the proponents of two opposing viewpoints in an ongoing debate. Cumming and Henry (1961) represent the conception of adult learning which is epitomized in the folk idiom, "You can't teach an old dog new tricks." More to the point, Cumming and Henry posited the "Disengagement Theory." This controversial theory suggested that a foreshortened time perspective when coupled with other delimiting factors, such as social deprivation, decreases a receptivity to and capacity for significant learning.

Among the earliest challengers of the disengagement thesis was McClusky. He explained (1958) that when an adult protests that he is too old to engage in a particular learning venture, he may not be giving a true account of his physiological and mental functions; rather, he may be betraying a low estimation of his capacity to learn.

Neugarten (Kuhlen, 1967) offered a parallel qualifier of the disengagement thesis:

It becomes increasingly inescapable that what counts in adulthood, is not the level of a particular ability, but what the individual makes of the ability: and that is not the social or even biological condition that meets the eye of the observer, but what the individual himself interprets that condition to be. [Emphasis mine.]

Kidd (1973) summarized further evidence which rebuts the thesis that increasing age and other physiological factors attendant upon ageing are the major causes of the steady decline of learning activity on the part of adults. Kidd's evidence showed that a positive mental attitude could have a strong countervailing influence

upon an adult's capacity to learn throughout life.

One presumed result of the disengagement-engagement debate, has been a growing acceptance of the view that adulthood does not so much preclude further learning as it influences the nature of future learning. For example, Neugarten (1967) claimed that wider experience and other factors that come with maturity predispose the adult learner to bring a more fixed "set" and a greater emotional involvement to his learning projects than would be the case for more youthful learners.

For a further example, Whipple (1957), gave reasons why planners of adult programs should pay heed to past experiences of adult students. Not only does past experience provide life examples for generalizing, but by virtue of the emotional overtones of such experiences, it also affects how the adult will view future learning opportunities. Moreover, wider experience gives an adult an ability superior to youth in learning relationally. That is, adults have a greater capacity to perceive how newly learned facts may affect themselves or others.

For a final example, Knowles (1970) took a phenomenological tack in commenting how the fact of adulthood modifies the way adults learn. Knowles stated that as a person matures, he experiences a gradual drift away from a state of dependency and toward a state of increasing self-directedness. The condition of self-directedness inclines the adult to respond to learning needs connected with changing social roles and developmental tasks. Thereby, the adult changes his learning style from one of postponed application of

knowledge and reliance on subject-centered learning (which style characterizes pre-adult learning) to immediacy of application and experience-based learning.

III. CORRELATES OF JOB-RELATED LEARNING AS EVIDENCED IN THE LITERATURE

Consistent with fluid inquiry design, one of the first tasks of a researcher is to generate educated guesses about the kinds of variables that might be involved in the phenomenon he is investigating. The conceptual model suggested that the phenomenon of job-related learning could be understood in terms of two major classes of variables--those external to, and those inhering in the person of the learner. A survey of the literature yielded numerous examples of these two classes of variables. To facilitate reading, and to emphasize their heuristic status, the results of the survey are summarized in table form (see Tables I and II presented immediately below).

TABLE I

External Variables Presumed to Impinge on the
Process by Which Teachers Resolve Their
Job-Related Learning Needs

Variable	Bibliographic Sources
Historical imperatives	Cremin (Lortie, 1975); Selznick (O'Callaghan, 1976)
Cultural milieu in which the teacher works	Sullivan (1953); Miller (1967)
Societal expectations	Getzels and Thelan (Hyman, 1968)
Availability of suitable resources for good role performance	Rubin (1971); Fair (1975)
Rate and scope of curricular change	Wallen (Devore, 1971)
Local staffing and recruitment policies, communications and feedback channels, supervisory style and planned professional developmental opportunities	Sergiovanni and Carver (1973); Harris and Bissent (1969)
Accrued modes of solving problems	Lazarsfeld (1972)
Socioemotional climate and peer relations	Lippit and Fox (1971)
Internal interest groups	Jennings (Rubin, 1971)
Group needs disposition	Maslow (1968)

TABLE II

Personal Variables Presumed to Impinge on the
Process by Which Teachers Resolve Their
Job-Related Learning Needs

Variable	Source
Age	Kidd (1973)
Educational level	Kuhlen (1963)
Length of teaching experience	Shorey (1970)
Orientation to continuing education	Sheffield (Solomon, 1964)
Kinds of satisfactions preferred	Lortie (1975)
Responsiveness to novel learning tasks	Finch (1975)
Cognitive style	Messick (1976)
Need for achievement	McClelland (Sergiovanni and Carver, 1973)

IV. SUMMARY AND CONCLUSIONS

This overview of the literature served, first, to clarify the focus of the problem that was investigated in this study. The evaluations of related empirical research suggested that future inquiries into job-related learning should look at this phenomenon not so much as manifestations of aggregate behaviour, but more as individual patterns of response to self-perceived problems. These evaluations suggested, further, that future research should view job-related learning not as a unitary, reflex-like act, but as a complex, purposive phenomenon. Perhaps less directly, though no less crucially, these evaluations of previous research called for

openness and inventiveness on the part of the researcher in choosing a design and a methodology which will enable him to capture, interpret, and communicate findings about a phenomenal reality.

The review served, second, to bring a light or to underscore basic, if oblique knowledge related to the process by which teachers (qua adults) resolve their professional learning needs. To summarize, the literature substantiated the common sense generalization that the origins of learning are multi-causal. Put in classical terminology, the literature depicted learning as a product of an interplay between a variety of biological, psychological, and social forces. Further, the literature specified the important ways in which motives express themselves. For one pertinent example, the literature suggested that motives may have a proactive, as well as a reactive, nature. But more importantly insofar as the definition of the problem in this study was concerned, the literature gave notice that whatever way motives express themselves (indeed, whether they manifest themselves at all), they seem to be influenced to a greater degree than has hitherto been explicitly acknowledged in empirical research by highly subjective considerations.

The review served, third, to bring to light several defining characteristics of adult learning. The findings from a large body of empirical research suggested that adult learning differs in degree, if not in essence, from the learning of children and adolescents. This research showed that adult learning tends to be more autonomous, more directly related to the solution of immediate, self-perceived problems, and more deeply rooted in background experiences (More

correctly, in the meaning adults have wrested from given experiences) than is characteristic of the ways children and adolescents learn.

The review served, finally, to identify a wide range of variables presumed to impinge on the process by which teachers resolve their autonomous job-related learning needs.

CHAPTER III

METHODOLOGY: ISSUES AND RESPONSES

The broad purpose of this chapter is to discuss major philosophical and methodological issues implicit in the decision to investigate a subjective phenomenon, specifically, the process by which teachers resolve their job-related learning needs. The more specific purposes of this chapter are as follows: first, to present and justify the interpretative research paradigm that guided the present study; second, to discuss specific tools and techniques that were appropriated in order to isolate and systematically manage foreshadowed problems in collecting and analyzing the data, and in presenting the findings; and, third, to detail problematic methodological issues that were encountered in the various stages of the study and to discuss the measures that were taken to deal with the more thorny issues.

I. THE INTERPRETIVE PARADIGM: A RATIONALE

Kuhn (1970) and Phillips (1971), among others, counselled researchers to adapt their research methodology to the nature of the problem they are investigating. Since the problem of this study was to examine a subjective phenomenon, the decision was made to be guided primarily by the interpretive paradigm. The review which follows provides a justification for this decision.

The major attributes of the natural science paradigm are

generally well known. As Shipman (1970) has noted, a study guided by the natural science paradigm typically comprises of a sequence of clearly distinguishable stages. A theoretical perspective, such as that of functionalism, is adopted from the biological or physical sciences. Propositions and hypotheses are deduced, and independent and dependent variables are identified. Suitable statistical tests are chosen, and appropriate data-gathering instruments devised. If the study is an experimental one, controls are incorporated into the design. Data are collected, tabulated, counted, and analyzed. The analysis provides the basis, first, for accepting or rejecting the research hypotheses and, ultimately, for confirming or modifying the theory under scrutiny. Further, Shipman pointed out, studies following the natural science paradigm are evaluated by several strict canons: namely, parsimony of design, stringency of controls, freedom from subjective contamination, and susceptibility to public verification, replication, and prediction.

Doubtless, these and other hallmarks associated with the natural science paradigm help to account for the continuing good repute in which this paradigm is held by the empirical research community at large. Indeed, as Apps (1972) has testified, there is still prevalent the attitude that "unless the classical scientific approach is followed when doing empirical research, then true knowledge hasn't been obtained (p. 59)."

The ritualistic adherence to classical norms of inquiry, especially in studies of human behaviour, has been extensively criticized in the last decade or two. To cite some representative schools of criticism, one group of critics disputed an assumption

that is taken for granted by supporters of the natural science paradigm; namely, that this approach is a virtual guarantee of objectivity. Nagel (1961:12) offered the following criticism about the supposed objectivity of classical science methods:

Nor should . . . the formula be read as claiming that the practice of the scientific method effectively eliminates every form of personal bias or source of error which might otherwise impair the outcome of the inquiry.

Kelly (1955) contended that incantatory insistence on being purely "objective" does not enable the researcher to escape the moral issues which are implicit in the study of human behaviour. The declared aims of pure science--prediction and control--take on moral connotations immediately that we realize that it is human beings that we are proposing to predict and control. A theory of human behaviour is, therefore, not only a statement about people, but also an attitude towards them and a way of relating to them. Fabian (1971) offered a related criticism of the supposed objectivity of scientific investigation. Methods in themselves aside, Fabian pointed out that in certain genres of investigation (for example, ethnographic investigations) "objectivity lies neither in the logical consistency of theory nor in the givenness of data, but in the foundation of human intersubjectivity (p. 12)."

Another group of critics exposed several representative kinds of limitations that could result when researchers attempt to apply designs borrowed from the natural sciences to studies of human behaviour. Selznick (1966) criticized purists' insistence on using cause-effect designs in sociological studies. This emphasis, Selznick suggested, deters researchers from probing into the causes of

unanticipated occurrences that may be uncovered in the course of an inquiry. Speier (1973) exposed a similar shortcoming that results when cause-effect designs are carelessly appropriated from the natural sciences in research dealing with human phenomena. Speier contended that the over-reliance on cause-effect designs leads not only to the disregard of the conditions of the moment, but also to the foreclosure of potentially fruitful inquiries into ongoing human behaviour.

Still another group of critics spelled out some typical negative outcomes that have resulted from the unreflecting use by social scientists of various aspects of the natural science paradigm. Mills (1959) blamed this use for the dominance in the research world of a sterile, abstracted empiricism. Runciman (1972) stated that one result of carelessly appropriating the tools and techniques of the natural sciences to the study of psychology and sociology has been the proliferation of elaborate analyses of dubious merit. Using caricature, Malville (1975) showed how subservience to a given norm of scientific inquiry, (in this case, the single-minded quest for pure facts) could lead to counterproductive outcomes.

. . . we spend all our time gathering these brightly coloured rocks--the fact with which we have become infatuated, of late. Into higher and higher piles we gather these facts, never wanting to stray too far away for fear someone might take them away from us. And so we remain, trapped by our own pebbles, unable to use them because we are too busy collecting others, and we are unable to explore the rest of the world (p. 14).

In the passage quoted below, Von Eckartsberg (Giorgi and others, 1971:329-330) illustrated how wholesale borrowings from the natural sciences (in this case, the laboratory experiment) for the study of human social behaviour could actually distort the goals of

science.

Considering the contrived nature of the experiment itself, the deception involved in creating social pressure, the built-in restrictions that isolate the subject socially without recourse to actively seeking confirmation and social support, we can ask whether conclusions thus demonstrated bear any resemblance to that manifested in everyday situations in which social isolation seldom prevails and categorical judgement in the face of a silent present majority is rarely required. Does following such procedures not lead to empty abstractions and truths operationally defined? Or, consider the matter of scientific control and "predictive power." We may try to predict the performance in statistical averages of groups of people with known homogeneous characteristics in high controlled circumstances, but we cannot in confidence make generalizations or specific predictions regarding any single individual or any situation without having to relativize everything by including idiosyncratic, contextual considerations which put us right back into the realm of everyday life.

But one of the earliest and most convincing arguments for disqualifying the wholesale application of the natural science paradigm to studies of human behaviour was advanced by Polyani (1959). He asserted that the natural science paradigm is predicated on a tenuous assumption--that human behaviour is necessarily repetitive, mechanistic, and, by implication, incapable of creative, self-initiated change.

Thus critics have exposed several problems in employing the natural science paradigm for research on human behaviour. Such criticism has, doubtless, contributed to the legitimation of a relatively new approach to the study of human behaviour. This new paradigm, which is discussed in detail below, both justified the phenomenological perspective on reality and accredited the use of the so-named "soft," or qualitative research methodology.

Phenomenology has been variously defined; indeed, it is still in the process of being defined. Nevertheless, for the purposes of

this study, it was deemed to have several major characteristics which help to distinguish it from the more traditional ways of looking at reality. First, its concern for the subject that is being studied differs from the concern typically shown by adherents of the natural science paradigm. Psathas (Ritzer, 1975:121) summed up this argument upon which this distinction turns:

The distinction between the natural sciences and the social sciences . . . is based on the fact that men are not objects existing in the natural world to be observed by the scientist, but they are also the creators of a world, a cultural world of their own. Their overt behaviour is only a fragment of their total behaviour. Any social scientist who insists that he can understand all of man's behaviour by focusing only on that part which is overt and manifest in concrete, directly observable acts is naive. . . . The challenge to the social scientist who wishes to understand social reality, then, is to understand the meaning that the actor's act had for him. If the observer applies his own categories or theories concerning the meanings of acts, he may never discover the meanings these same acts had for the actors themselves. Nor can he ever know how social reality is "created" and how the subsequent acts of human actors are performed in the context of their understanding.

Second, supporters of phenomenology claim that they focus more sharply, than do the followers of the natural science paradigm, on paramount reality and natural attitude. Schutz (Ritzer, 1975:122) defined "paramount reality" as "a reality so basic and mundane that we are not directly cognizant of it." In this state, Schutz explained, "Man is oblivious to the fact that it is he who constitutes the social world." As a corollary of this belief, the phenomenologist does not grant social facts an objective existence; unlike the logical positivist, the phenomenologist postulates that such "facts" have only the appearance of objective facticity. Such "facts," to paraphrase Kelly (1955), are reflections of the way man has construed reality.

A third distinguishing characteristic of the phenomenological

outlook follows logically from the two forementioned characteristics. Phenomenologists prefer a microscopic focus. They believe that it is at the face-to-face level of interaction that reality construction proceeds. Schutz (Ritzer, 1975) and Berger and Luckman (1966) were of like mind in their rationalization of the micro focus in the study of human behaviour. They argued that face-to-faceness has the irreplaceable character of non-reflectivity and immediacy that furnishes the fullest possibility of truly entering the life, mind, and definitions of the other.

The acceptance of the phenomenological thesis as an interpretation raised critical methodological issues insofar as the present study was concerned. The discussion which follows identifies two of the more basic of these issues and provides the rationales behind the measures that were taken to resolve them.

One basic issue that had to be reckoned with was the selection of a mindset that would permit optimal access to a subjective (moreover, relatively uncharted) phenomenon--the process by which teachers resolve their job-related learning. Common sense suggested that an attitude of open-minded respect for all types of data that come into the researcher's purview during the course of an inquiry would be in order. Similarly, Blumer (1969) urged researchers to respect the nature of the empirical world that they were investigating. Researchers can show such respect, Blumer cautioned, not by substituting pre-formed images for firsthand knowledge, but by getting close to the area they elect to study and digging deeply into it. Phillips (1973) proposed a similar mental attitude towards inquiries into psychosociological phenomena. Central to his proposal

is an evocative concept of play. "Play," Phillips contended, "is different from the usual and the everyday in that it is not engaged in for the sake of some final goal (p. 162)." Because it is engaged in for its own sake, a play(ful) approach to sociological inquiry would allow us (i.e., researchers)

to confront our own experience, to pay attention to what we have seen, heard, felt and wondered about, and what we already know. By assuming a more playful stance, we can perhaps free ourselves from the dogmatism of method . . . and see things as if for the first time.

Another critical issue that had to be resolved was that of selecting an appropriate mode of explanation, namely one that would make sense of each of the major kinds of empirical data that were generated in this study. Phillips (1973) provided particularly instructive viewpoints on this issue. Specifically, Phillips differentiated between two main understandings of the term "explanation." Citing the work of Weber, Phillips noted that one kind of explanation, erklarendes verstehen (or more commonly, covering law explanation), is achieved when a behaviour in question can be designated as part of an understandable (i.e., logical) sequence of actions. Applying this usage of explanation to qualitative studies, a phenomenon would be deemed to have been explained if it can be shown that its occurrence can be extended beyond the case in question. Put in other words, an explanation is said to have been achieved when an observed phenomenon is a behavioural manifestation of an underlying pattern, function, cause, or motive. Another kind of explanation,

actuelles verstehen, (or, more commonly, empathetic understanding*), is achieved by presenting arguments which justify a behaviour in question. Consistent with the actuelles verstehen mode of explanation, are explanations which cite, appeal to, or impute to subjects satisfactions, desires, motives, reasons, and purposes as possible grounds for observed behaviour. As Phillips concluded, "Behaviour is thus described, explained, and evaluated by arguing that the situation entitled the actor, or actors, to act in a certain manner (p. 171)."

II. TOOLS AND TECHNIQUES USED

Both the rationale for choosing to be guided by the interpretive research paradigm and the broad methodological issues this decision implied have been explained in the foregoing part of this chapter. The purpose of this part of Chapter III is to describe and justify the main** tools, instruments and techniques that were used to collect and analyze data related to the phenomenon by which teachers resolve their job-related learning needs.

Data Collection

The resolution of the problem of this study required the use

*Ritzer (1975) rightly pointed out that this kind of understanding is predicated on the observer's having special training and skills which allow him to see things which would escape the layman. In the vernacular of Mills (1959), such an observer would have to possess a "sociological imagination."

**Tools and techniques that were devised to cope with emergent data collection and data analysis problems are discussed contextually in Chapters IV and V.



of two major kinds of data collection techniques--those designed to elicit information about the factors which impinge on the job-related learning of teachers; and those designed to elicit teachers' understandings of the way the factors thus substantiated were related to the major phases of the process by which they resolve their job-related learning needs. The discussion below focuses on the utility of several key techniques and tools that were used in this study to obtain the requisite kinds of data.

Documents. Wiseman and Aron (1970) advised that reliable detail about a phenomenon one is investigating could be inferred from a variety of usually readily available surrogate sources. These kinds of second hand sources, while they have only a quasi-legal status, nevertheless have the power to "govern" much of the social behaviour of a subculture. By virtue of this power, analyses of such sources of information as interdepartmental memoranda, bulletin board announcements, in-house newsletters, policy manuals, school timetables, supervisory assignment sheets and grafitti can (indeed, did) provide useful data about several concomitants of teacher's learning; for example, group expectations and reward systems.

Fact sheets. Shorey (1970) and Dickinson (1971), among other researchers into adult learning, have shown that information about life attributes can provide important clues regarding the likelihood, if not the manner, in which teachers resolve their job-related learning needs. Accordingly, where this was permitted, fact sheets were used to obtain such information as age, academic qualifications, teaching experience, and avocational interests.

Questionnaires. The "Continuing Education Orientation Index" was used to select the initial group* of candidates for indepth observation and interviewing. Sheffield (Solomon, 1964) the designer of this instrument, found a positive relationship between "learning" and "personal goal" orientations of adults and their tendency to participate in continuing education activities.

As well, questionnaires were utilized to generate data for testing ad hoc hypotheses related to the central problem of this study. For example, Ingham's "Leisure Activity Index" and his "Leisure Satisfaction List" (Solomon, 1964) were used for identifying major kinds of leisure-time pursuits of the subject population. The resulting insights (In particular, information linking leisure-time activities and the personal and professional growth of teachers) helped, in turn, to guide the construction of the interview schedule.

Non-participant observation. Collins (Denton, 1974) stated that clues into human behaviour can be inferred from observations of people in everyday situations. These situations, Denton noted, can be studied from three different perspectives--first, second, and third person. The first person perspective yields findings about the inner realities of the actor. This kind of data is discoverable through such techniques as in-depth interviewing. The second person perspective provides information about a shared reality. This kind of data can be inferred from an analysis of dialogue. The third

*Following the principles of theoretical sampling, this list was expanded to include other subjects who could provide pertinent information.

person perspective provides information about institutional norms. People relate to one another on the basis of certain shared expectations regarding roles. These kinds of relationships, Denton concluded, are discoverable to a greater or lesser degree through intensive and repeated non-participant observation.

Illustrations of the kinds of questions that were used to probe into the inner realities of individual subjects in this study can be found in the interview schedule (See Appendix E, pp 214-221). Given immediately below are illustrations of the kinds of questions that were posed to guide observations, first, about realities shared between individual members, and, second, about the realities shared among the staff members of the subject school. From the second person perspective:

Given an opportunity to consult any one of a number of peers regarding a professional problem, whom does a given individual consult? When a further need for consultation presents itself, does this same teacher consult the same peer? If not, is it because he has through previous experience lost faith in this particular peer's ability to help him? Or, is it because the teacher in question has been confronted by an entirely different problem?

From the third person perspective:

At a staff meeting, who initiates motions for concrete plans for change? How does the administrator field these kinds of motions? How do individual members view such motions? If the reactions are ones of approval, is the approval consistent with their previous reactions to essentially similar issues raised in the past? What other evidence is there that the membership at large ascribe similar meanings to the issue of change?

Interviews. The data collection instruments and techniques discussed to this point were suited for unveiling the major kinds of factors that influenced teachers to participate in job-related learning. But a further aim of this study was to generate and

analyze data relating to the understandings* teachers had about the way the substantiated kinds of factors bore on the process by which they identified and resolved their professional learning problems. The discussion below focuses on the way the interview technique was adapted in order to meet both of these broad aims.

As Glaser and Strauss (1967) have recommended, some of the first tasks of an investigator who is involved in basic research are as follows: to conduct a cursory analysis of the area of interest; to cull out irrelevant categories of data; to formulate a series of propositions about the phenomenon selected for study; and then to develop an interview schedule that maps out the major areas of inquiry. The resulting guide (see Appendix E, p. 213) helps the investigator to focus on pertinent experiences of each subject. The following excerpt from an actual interview transcript demonstrates how the focused interview was used to substantiate the influence of external normative forces upon the subjects' job-related learning. The specific issue in this instance was a proposal by the school board to institute a new staffing policy. The two purposes of the line of questioning sketched below were, first, to elicit teachers' perceptions about the controversial proposal and, second, to test the provisional hypothesis that teachers would construe this proposal as

*Blau and Scott (Lofland, 1971) stated that two main kinds of "accounts" may be used to explain (more appropriately insofar as the design of this study is concerned, to give reasons for) observed actions--dispositional and situational. The dispositional accounts provide clues to the question, What are the past experiences and characteristics of a participant which foster a given educational action? Situational accounts, on the other hand, shed light on the conditions in the immediate environment/situation that promote certain kinds of educational endeavours.

a spur to do something (say, acquire more effective ways to integrate reading into content area teaching) that would be likely to improve their professional stock. The wording of the queries was as follows:

Interviewer: I understand that the Kildonan North School Division has adopted, or is about to adopt, a new staffing policy, the unit staffing policy. Have you heard any details about this proposal?

.

What, in your opinion, may have prompted the school board to change their long-standing staffing policy at this time? Do you think that the architects of this new policy saw it as a way to counteract the effects of inflation?

.

Do you think that the new policy will have implications for you personally? Namely?

The group interview was used to complement the focused interview technique. One advantage of the group technique is its power to reveal ambiguities and conflicts in group norms and values. A further advantage of this basically unstructured technique is that it often yields serendipitous findings, particularly on highly sensitive topics which subjects may not want to discuss openly without peer support. In the present study, group interviews were conducted in a variety of situations in the subject school--in the staff lounge during noon break, at team meetings, at emergency task group meetings, and in informal get-togethers in the hallway. As well, group interviews were conducted in a variety of situations outside the school--at a team meeting in the home of a team member, at an "after four" session in a local beverage room, and at the annual camping field trip in a provincial park. On most such occasions, prior to joining a given group, a series of questions and ad hoc hypotheses

relating to the problem of this study were prepared. On other occasions, opportunities were seized to direct the content and flow of discussion towards the model-building aims of this study.

As anticipated, the validity of data obtained by the group technique was at times jeopardized by group pressures. When instances of this kind were detected, the suspect data were validated against data obtained from supplementary sources.

Data Analysis

A major aim of this study was to generate a phenomenological model of the process by which teachers meet their autonomous job-related learning needs. The implications this aim had for eliciting germane data have been noted above. The purpose of this section of Chapter III is to discuss the procedures and tools that were used to permit the researcher to draw valid inferences from the data that were collected.

Theory-building--a model. A basic tool that undergirded the analytical process in this study was an adapted version of Zetterberg's model of theory-building (1965). According to this model, the most rudimentary building unit is a discrete experience. Such experiences, when they are rendered into an abstraction, constitute a concept. A series of related concepts in antecedent-consequent relationships, meanwhile constitutes a proposition. Interrelated propositions make up a theory.

To accommodate the phenomenological bias of this study, Zetterberg's model was modified in one important respect. The notion of entitlement was used in place of the notion of antecedent-consequent

relationship. As discussed earlier in this chapter (p.42), a given behaviour may be "explained" by imputing to subjects certain motives or purposes, or by arguing that a particular situation entitled an actor to behave in a certain manner.

Analyzing subjective data: basic tools and techniques. The analysis in this study required the researcher to make progressively higher levels of inferences about an amorphous body of subjective experiences. The procedures that were followed and the representative kinds of techniques that were used in order to accomplish this multi-step task are described briefly below.

A critical first step in the treatment of subjective data was to try to understand the welter of unique experiences that came to the attention of the investigator. In this study, several techniques developed by Glaser and Strauss (1967) and by several ethnographers were appropriated to this end; namely, gestalt polarization, typification, and matrix formulation. These techniques served to classify the data into various categories based on the similarities (or dissimilarities) among individual experiences. In essence, each of these techniques entailed the isolating of a datum and then placing it into a particular category (or cell, in the case of matrices) through inductive reasoning. The end product from this step in the analysis is a theme, pattern, or concept.

The purpose of the succeeding step in the analysis was to describe the relationships between the different categories of experiences generated in the preliminary step. This step was accomplished by the use of two complementary techniques borrowed from

grounded theory research methodology--constant comparative analysis and negative instance analysis. Constant comparative analysis entails the researcher's making observations about a phenomenon, (say, job-related learning), constructing a tentative hypothesis about a relationship between certain variables (say, between a new tenure policy and the decision to complete a course leading to a bachelor's degree) involved in the phenomenon being investigated, developing an observation schedule which incorporates these factors, and then proceeding to gather and analyze data about them. This cycle of ad hoc hypothesizing, collecting, and analyzing was continued until data suggested by the provisional hypotheses was no longer forthcoming.

To permit possible falsification of a finding yielded by way of constant comparative analysis, a search for negative evidence was conducted. Where negative evidence was found, the original hypothesis was reconstructed so as to make it congruent with the new evidence. The process of constant comparative analysis was then repeated and continued until theoretical saturation was reached. But, where no negative evidence could be found to contradict, or otherwise warrant qualifying, a provisional hypothesis, it was concluded that the relationship suggested by this hypothesis was in all probability a valid one. Abstractions resulting from this step in the analysis are called propositions.

In the third step of the theory-building process, induction procedures and techniques described in conjunction with the preceding steps were used to make higher order abstractions about the inter-relationship between the various propositions. These higher-order

abstractions are given the status of theory.

III. IN THE FIELD: A RETROSPECTIVE LOOK

Prior to entering the field, a number of measures were taken to isolate and systematically manage a large variety of acute philosophical and methodological problems that tend to impede a researcher's ability to obtain a body of verifiable observational data. The more prepotent of these measures have been discussed in the two preceding sections of this chapter. However, as Wax (1971), among other noted fieldworkers had forewarned, it is virtually impossible to anticipate in an a priori way specific ethical and other kinds of issues that a researcher will encounter once in the field. Given these kinds of circumstances, it was thought prudent to heed this common sense advice given by Fabian (1971:25):

What is urgently required [to resolve unanticipated issues] is a genuinely dialectical position, one in which analytical procedures [not to neglect data collection and data presentation procedures] are determined by reflection on the nature of the encountered phenomenon and on the nature of that encounter.

The purpose of this section of Chapter III is to recall illustrative problematic issues that were encountered during the course of the investigation to explain the measures that were taken to deal with them. To facilitate reading, the discussion follows a primarily logical organization.

Selecting the site for the study. A priori reasoning and related research experience suggested the broad criteria for choosing an appropriate site for this study. First, the site had to be psychically accessible; that is, both formal and informal groups in a

prospective site had to show evidence of at least passive interest in becoming the subjects of the study. Second, the site had to have a sufficiently representative populations in terms of such previously substantiated correlates of adult learning as age, academic qualification, and length of professional experience. Third, the site had to evidence a clear-cut thrust towards job-related learning. The literature (Rosenthal and Jacobson, 1968) suggested a further criterion for selecting a site for a case study; it had to have characteristics such that would minimize possible experimental effect.

With these criteria in mind, overtures were made to superintendents in Winnipeg area schools for permission to explore the feasibility of using a school in their jurisdiction as a site for the present study. Subsequent reconnaissance visits intended to narrow down the list of eligible sites (according to pre-established criteria) brought to the fore a methodological dilemma: whether the supposed gains (for example, the reduced risk of biased reporting) to be derived from working in a "strange" situation would offset the supposed gains (for example, more efficient recovery of germane data) to be realized from working in familiar surroundings (i.e., in the school division in which the researcher had been employed for twelve years immediately preceding the year that the present study was initiated).

The literature suggested that the possible loss of objectivity which might result when a researcher conducts an inquiry in a familiar setting could be offset by countervailing gains. Lofland (1971) contended that pre-existing conditions of trust afford a researcher an enormous advantage over a researcher new to a surrounding. The

researcher familiar with a surrounding can move about freely and collect relevant data, unrestricted by socially defined constrictions. Similarly, Wiseman and Aron (1970) intimated that a researcher who is acquainted with an organization or behavioural system is in a better position, than is a researcher not so-acquainted, to appreciate the more subtle ways that forces inherent in a system bear on the phenomenon under investigation.

The literature also suggested some counter measures researchers who are conducting their study in a familiar setting can take in order to minimize the possibility of personal bias creeping into their work. Erickson (1975) proposed the notion of "disciplined subjectivity" as an antidote for possible personal bias. By this Erickson meant that the researcher approaches his locus of interest "as if for the first time." Smith (1974) argued that fore-knowledge about a situation or phenomenon one wishes to study can enrich the research process--if this previous knowledge* is used in dialectic counterpoint to knowledge discovered in the field.

These predicted advantages, coupled with the anticipated economy of time, influenced the decision to choose a school familiar to the researcher as the site for the study. The question, which particular school to use for the study, was resolved by putting into play two further common sense criteria: one, the overt and genuine (as opposed to polite) interest on the part of the staff as a whole

*Previous knowledge referred not only to that knowledge which had been acquired before the researcher had begun fieldwork, but also the knowledge obtained from the literature that came to the attention of the researcher during and after the time spent in the field.

and of the administration to participate in the study; and, two, the judgement of the researcher as to which of the schools that were willing to participate would also be the most likely to be able to provide theoretically relevant information. The small "p" political issue was handled by way of a letter (See Appendix A, p. 196) to the principals of the four junior high and three senior high schools in the local school division. The letter sought permission to address the respective staffs of these schools with a view to explaining the nature of the problem that would be investigated and inviting their cooperation in resolving this problem. The replies from the principals indicated that three of the invitee schools would not be in a position to give the desired degree of cooperation. Accordingly, arrangements were made to address the staffs of the four remaining schools. Analysis of the responses to these addresses brought down to two the number of schools that were deemed eligible (according to the pre-condition of real interest to participate in the study).

A further screening was then undertaken with the intent to choose a site that showed the most promise of providing information both about the correlates of learning and the way teachers perceive these correlates to be related to the process by which they meet their job-related learning needs. This screening entailed the use of a specially constructed survey, the purpose of which was to gauge the degree of manifest disposition towards job-related learning (See Appendix B, p. 197⁶). The screening also included informal conversations with individual staff members of the two schools in question. Taken together, these and earlier screenings indicated that one of the schools, henceforth to be known as Mossdale Junior

High School, possessed to a greater degree than did any of the other schools the important features that would make it amenable to a productive ethnographic study. To cite perhaps the three most critical of these features, Mossdale Junior High had a reputation within the local school division as a trailblazer in innovative practices and reflexive thinking. It was believed that this feature would increase the likelihood of the researcher's locating numerous and varied instances of job-related learning. It was further believed that this feature would permit better rationalizations by the subjects of their learning decisions.

Another critical feature which influenced the decision to use Mossdale Junior High as the site for this study was Mossdale's record of continuous visits* by interested educators from both inside and outside the system. It was believed that this feature would minimize the chances for the contamination of data through experimental effect.

Still another feature which favoured Mossdale as the preferred site for the present study was the clear-cut indication by staff as a whole of a real interest in the problem that was posed and of becoming co-partners in efforts designed to resolve this problem. This high level of expressed interest was deemed an important condition for increasing the likelihood of a free and full disclosure of

*It was appreciated that this record of continuous visits could result in a reluctance on the part of the staff as a whole or of individual teachers to accommodate yet another intrusion. However, reconnaissance trips yielded no evidence that this would be the case.

theoretically relevant information.

Gaining entry, building rapport, and mapping. Wiseman and Aron (1966), among other students of ethnographic methods, have warned of difficulties that might be encountered in gaining entry into a site, more particularly into the culture of the site one proposes to study. In light of the precautions that were taken in selecting the site, it did not come as a surprise, however, when the foreshadowed difficulties failed to materialize. Indeed, only a handful of remarks to the effect that "administration must be up to something again" surfaced. To forestall murmurings of this kind, care was taken during the succeeding phases of the study to avoid giving cause for the charge of being an accomplice of either the administration, or of another faction in the school.

In keeping with the ethnographic tradition, the first days in the field were spent in setting the groundwork for good rapport and in getting a "feeling" for the site. For a period of approximately two weeks regular visits were made to Mossdale with a view to learn who was who in the school; to explore the physical plant; to uncover normative patterns of behaviour; and, in general, to obtain a composite picture of Mossdale as a distinct behavioural system. These reconnaissance visits revealed the expected: that the senior staff members (in years of tenure at the school) were the acknowledged leaders in interpreting the school's educational philosophy; that the library was regarded by many of the staff as a symbolic affirmation of Mossdale's belief in individualized learning; and that Mossdale seemed to be in the throes of re-discovering its mandate. Reflections

on these illustrative "first impressions," indicated that they closely paralleled the impressions that had been acquired from incidental visits to Mossdale over a span of several years prior to the year in which this study was undertaken. This close paralleling of "findings" raised the possibility that flawed observational techniques were being used. Indeed, a cursory analysis confirmed that two factors could account for the observed consonance between pre-study and beginning-of-study impressions--the inertia to use a normative frame of reference, and an inclination to give undue weight to first impressions.

The evaluations of initial trial efforts intended to describe subjective reality influenced the research strategy that was followed in the succeeding stages of this study. These evaluations confirmed the viability of the interpretive paradigm; they demonstrated that the best framework by which to understand a subject's thinking concerning a given phenomenon is that of the subject, not that of the researcher. Accordingly, deliberate care was taken to validate each datum in order to ensure that it reflected faithfully the subject's own understanding of a phenomenon in question.

A further important lesson that was learned in the initial encounters with the subject population (and which eventually paid dividends in the form of theoretically relevant information) was the necessity to heed Bruyn's advice (1966), that the researcher should respect not only the formal, but also the informal, psychic schedules of those he observes. This lesson was demonstrated by the unexpected refusal of the members of one department to become candidates for focused observation and in-depth interviewing. This refusal was

surprising in that members of this particular department had earlier both voted in favour of permitting the use of Mossdale as a study site, and had given other indications of a bona fide interest in the aims of this study. It was discovered somewhat later that these requests for greater involvement in the study were construed by the individual members of this department as ill-timed impositions on the time and energy required to organize the annual field trip. Once this obstacle was overcome, each member of the department in question acceded to requests for (and in some instances, volunteered) pertinent information.

Sampling. Prior knowledge and information gathered in the first two weeks in the field were used to construct provisional hypotheses regarding the way teachers would perceive personal and environmental factors to have impinged on their job-related learning. The objective of the succeeding period of observation was to generate data by which to test the provisional hypotheses. To meet this objective, a way had to be found to single out subjects in the population who not only would, but also could, furnish theoretically relevant information. This issue was resolved by using sampling procedures borrowed from the natural science paradigm, on the one hand, and from the interpretive research paradigm, on the other hand.

The initial list of prospects for focused observation and in-depth interviewing was obtained by analyzing responses to a survey instrument ("Continuing Learning Orientation Index") which was administered to members of the staff who were present at the school on a pre-selected date (May 19, 1976). As already mentioned (p. 57)

three members of one department balked at the invitation to participate and, accordingly, did not complete the "Index." Two other members did not complete the survey because they happened to be away on an out-of-town field trip on the day the survey was distributed. One other member who happened to be absent on the day the form was distributed was given an opportunity to complete it, but "didn't get around to it." In all, therefore, thirty-eight of the forty-four member staff completed the form.

With the two-fold objective of reducing the list of prospects for more intensive study to a manageable limit, and while minimizing the chance of biasing the results, a number of criteria were brought into play. The rank order score on the learning orientation measure* in the "Continuing Learning Orientation Index" was used on the assumption that this measure would reflect a subject's degree of involvement in job-related learning. A further assumption behind using rank order scores on the learning orientation measure was that those subjects who had high scores would be more likely, than would those subjects who had low scores, to provide extensive, theoretically relevant information. Life attributes were used as a criterion on the belief that these factors have the power both to modify the selection of learning goals and to influence the manner in which a subject resolves a learning problem. Organizational attributes were taken into consideration in selecting candidates for more intensive study on the strength of the reconnaissance visits to the subject

*This instrument provided two further measures related to adult learning--social orientation and personal goal.

school: these visits suggested that certain kinds of formal and informal arrangements in the school would be more likely, than would other kinds of arrangements, to foster job-related learning.

The screening yielded what was, in effect, a stratified, judgemental sample consisting of fifteen* teachers and representing such potential modifiers of learning as degree of learning orientation, life attributes (for example, age, gender, years of formal schooling, and teaching experience), and organizational attributes (for example, department membership, interdisciplinary team membership, and status).

The method used to select the candidates for more direct involvement in the study was an oblique illustration of theoretical sampling. As described by Glaser and Strauss (1967), theoretical sampling entails studying a number of similar situations, identifying qualitative similarities and differences between them, and then testing the supposed (hypothesized) relationships through fieldwork. Looked at more closely, theoretical sampling is a process whereby the researcher concurrently collects, codes, and analyzes data before deciding what data to collect next and where to find more information in order to test emerging theory. The criterion for determining when to stop sampling is the category's theoretical saturation.

Thus the sampling in this study was adapted to meet specific

*Four of the teachers in this sample preferred for a variety of reasons, to be excluded from more focused observation and interviewing. Their places were assigned to four stand-by candidates who matched the personal characteristics of those teachers who opted out of more direct involvement in the study.

problems encountered in the field. In the beginning stage of the fieldwork a form of statistical sampling was devised to help to identify subjects thought to be bearers of representative attributes related to the phenomenon of job-related learning. Theoretical sampling principles were then applied in guiding the theory-building thrust.

Collecting and analyzing the data. Observations made during the mapping period of the study indicated that the majority of the subjects regarded the concluding months of the school year as "hectic times, indeed." Care was, therefore, taken to forestall possible detrimental effects of the pressure of time and other similar circumstances upon the researcher's ability to collect a body of theoretically relevant data.

In spite of these kinds of precautions, there were still several instances when ad hoc measures had to be taken in order to salvage the likely loss of potentially critical data. For example, the members of one of the interdisciplinary teams agreed to provide information concerning their perceptions about the relationship between interdisciplinary team organization and aspects of job-related learning. When the researcher arrived for the appointment, he was met with a "Please, oh no, not now!" look. It was evident that a dispute had occurred and that the individuals involved were embarrassed about it. Because this conflictful situation was seen by the researcher as an occasion to test previously constructed hypotheses about the influence of interdisciplinary teaming upon job-related learning, the decision was made to go on with the group

interview, as scheduled. However, on the judgement that the meeting could turn out to be counter-productive, a provision was made in the opening remarks to the group for a diplomatic exit. After a delay of approximately ten minutes, it became evident that this particular meeting would not be fruitful for anyone concerned and that it would be prudent to arrange for another meeting date. Eventually another meeting did take place--this time under more auspicious circumstances. A probe into the reasons for the previously exhibited hostility revealed that the adversaries held different, but apparently reconcilable, philosophies about such issues as truancy, accounting to parents, and chaperoning of students on out-of-town field trips. More importantly, insofar as the present study is concerned, the data thus salvaged served as building blocks in formulating propositions about the way different forms of conflict deriving from teaming or other formal arrangements impinge on the job-related learning of teachers.

Another illustration of a methodological issue which had to be reckoned with during the data collection and data analysis period was that of dealing with unsolicited offers of information or chance discoveries of information that on the face of it did not appear to have direct significance for the present study. Common sense and the counsel of ethnographers (Glaser and Strauss, 1967; Pelto, 1970) suggested that the thing to do in these kinds of circumstances was to bank such happenstance information, pending an opportunity to study more closely its possibilities for shedding light on the phenomenon being investigated.

This solution (banking) hinged on solving two more basic

problems. One problem was to find a method for recording the different entries--data seen as having the potential for informing or qualifying theory on the one hand, and data seen as definite building blocks of grounded theory on the other hand. The second problem was to find a way to compare these two types of data so as to maximize the wresting of critical understandings related to the phenomenon of job-related learning. The first of these basic problems was met by employing fairly standard ethnographic procedures outlined by Lofland (1971), for example, by establishing separate files for the different types of data; by complementing where possible the written record with tape recordings, and by following a strict regimen of setting aside a part of each day in the field to reflect on the possible significance to the problem of the present study of interesting happenstance data.

The second basic problem, that of deriving meaning from happenstance data was met by figure ground analysis. This analytic technique* is predicated on an assumption held by critics of art (for example, Slade, 1970), that human beings have an innate tendency to oscillate between two complementary kinds of patterns. The simplest of these patterns, according to Slade, is the off-on, light or dark, yin and yang of figure and ground. To explain how this technique was applied in the present study, specific data were treated as figure (or as having direct significance for the question at hand) in one

*It is important to remember in connection with this technique that the question as to which pattern is to be treated as figure and which pattern is to be treated as ground cannot be resolved by looking at the inherent qualities of a given pattern.

instance of analysis and as ground (or as having indirect importance for the question at hand in another instance). For example, the information volunteered by a subject regarding an event in the school's history was given figure status in analyses designed to uncover situational correlates of learning, but this same information was given ground status in analyses designed to shed light on factors influencing the process by which teachers resolve their job-related learning goals.

IV. WRITING THE REPORT/PRESENTING THE FINDINGS

Erickson (1973) stated that ethnographic research is comprised of two overlapping components--inquiry (or, what is done in the field) and report (or, what gets written). The adaptations and inventions that were needed to resolve illustrative problematic situations in the field were discussed in an earlier section of this chapter. It now remains to specify and describe some of the defining features of ethnographic research and to note the implications these features had for the way that the report was written.

Several writers have characterized ethnographic research as a fluid, somewhat haphazard enterprise. Bussis and others (1976) suggested that this kind of research should be regarded less as a destination to be arrived at and more as a direction to be headed. Spindler (1974) pre-dated this observation in his contention that models used in ethnographic research are more orienting than definitive. Such models help the researcher to get started on the journey of discovery, but leave him very much to his own devices

once the journey has begun.

Schwab (Ford and Pugno, 1964) pointed to another distinguishing characteristic of ethnographic research; it generally embraces to a greater degree than does research based on the natural science paradigm the richness of the subject matter under scrutiny. This richness derives primarily from the fact that ethnographic research places the researcher face-to-face with the complexities of a concrete experience. This vantage point permits the resourceful investigator to gather a storehouse of understandings an individual has about a given phenomenon.

These overriding characteristics of ethnographic inquiry had important implications for the strategies that had to be adopted in writing the report. An important issue that was raised by the somewhat eccentric flow of the inquiry was that of organizing the report in such a way that it would be intelligible to the reader. The natural history approach suggested by Becker (1970) was judged as the most appropriate vehicle to meet this ideal of ethnographic reporting. As described by Becker, the natural history approach consists of presenting evidence that came to the attention of the researcher during the successive stages of his conceptualization of the phenomenon under investigation.

A retrospective examination revealed that the conceptualization of the way teachers resolve their job-related learning needs occurred in several discrete, but overlapping, stages. First, there was an image-ing* of the phenomenon of learning. This image-ing

*This term was coined by Schwab (Ford and Pugano (1964)).

suggested that learning would be a product of a complex interplay between factors deriving from within the individual learner, on the one hand, and those emanating from the environment in which he works, on the other hand. At this stage of the conceptualization, it is recalled, there was a strong hint that adulthood would act as a key variable in job-related learning. Meanwhile, there was at this stage only a dim appreciation of the way the subjective element would impinge on this kind of learning. In any case, the image of learning that was held at the initial stage of the inquiry is implicit in both the conceptual framework depicted in Chapter I and in the literature reviewed in Chapter II.

The analysis of information gathered in the field gave reason for qualifying the heuristic model of learning that was posited at the outset of the study. The shift to the second stage of the conceptualization, whereby the subjective element in educational decisions is more fully acknowledged, is evidenced in the discussion in Chapter IV and indicated more explicitly in Chapter V.

The third stage in the conceptualization of the process by which teachers meet their job-related learning needs occurred, by and large, after the field work proper had been completed. As evidenced in the discussion in Chapter VI, this stage is marked by a rather profound appreciation of the significance of the subjective element in spurring, or deterring, job-related learning.

A further methodological implication for reporting was occasioned by the richness and variety of the data that were collected. Ways had to be found that would preserve the integrity of a given experience, and yet avoid the trap of shabby relativism. A way also

had to be found to respect the integrity of each major kind of data that were collected.

For the most part, the literature afforded practical guidelines for treating the primarily qualitative data generated in the present study. For examples, Erickson (1973), Spindler (1974), and Nisbett (1976) gave justification for the use, in instances where greater explicitness was critical in rendering a given experience intelligible to the reader, such devices of fiction as caricature, vignetting, and metaphor. Selznick (1966) gave the rationale, while Lortie (1975) and Hoen (1975) provided excellent models, of the use of structured chronology and other devices of historiography in getting a firm grip on the evanescent nature of much of the data. Barton and Lazarsfeld (McCall and Simmons, 1969), among others, provided guidelines for treating quasi-statistical material.

In instances where reference to the literature failed to yield suitable suggestions for solving particular report problems, reliance was placed on inventions. These contingent solutions are explained in their appropriate context.

CHAPTER IV

HOW TEACHERS RESOLVE THEIR JOB-RELATED LEARNING NEEDS: MAJOR FACTORS IN THE PROCESS

The resolution of the problem of this study entailed generating and analyzing data related to two basic questions: first, What kinds of variables are involved in the process by which teachers resolve their autonomous job-related learning needs?; and, second, What are the dynamics behind this process? The purpose of this chapter is to discuss findings generated in response to the first-mentioned question. This discussion is organized into three main parts. In the first part a brief historical account of the development of the subject school as a unique institution and a demographic analysis of the 1975-76 staff of this school are given. In the next part, the major imperatives for learning traceable to the subject school's history and culture are described. In the next part, the substantiated imperatives for learning are analyzed in light of the heuristic model and other relevant theory.

I. CORRELATES OF JOB-RELATED LEARNING

The variables identified in Tables I and II (pp. 30-31) were used to guide the search for variables perceived by teachers of Mossdale Junior High School to be related to their job-related learning. This search began with a probe into the history of Mossdale Junior High School and a demographic analysis of the then current (1975-76) staff of this school. The results of the probe are presented by way of a

descriptive chronology, while the attributes of the staff are discussed with the aid of tables.

A Brief History of the Subject School

It is customary to begin a case study with a brief history. This custom has been defended on primarily pragmatic grounds. Malinowski (Smith, 1974) asserted that "the first and basic ideal of ethnographic fieldwork is to give a clear and firm outline of the social constitution and to disentangle the laws and regularities of all cultural phenomena from the irrelevancies." Levi-Strauss (Lortie, 1975:1) offered a complementary argument:

By showing institutions in the process of transforming history . . . makes it possible to abstract the structure which underlies the many manifestations and remains permanent throughout a succession of events.

Selznick (1966) claimed that history provides important clues about the personality of an institution.

A further reason for beginning this study with a brief history is derived from a fundamental aim of this study--to discover not only the interpretations of the staff, but also to understand the unique learning-related constructions of reality of individual teachers. This kind of understanding would be facilitated by a knowledge of the historic events which teachers are likely to have encountered, whether directly or vicariously, and which would thereby have had the potential to shape their learning goals.

Planning the school. The educational specifications for

Mosssdale Junior High School* give important clues about some of its distinctive characteristics. This school was planned with ". . . the intention to provide a team-teaching situation in all subject areas." Due attention was also given to the fact that certain disciplines namely, art, home making, industrial arts, and music would require special facilities and teaching approaches. Another basic feature of Mosssdale Junior High School, as evidenced by the specifications, was the centrality of independent inquiry in the teaching-learning strategies of the school. As reference to the floor plan of the school (Figure 1) indicates, the physical plant reflects the emphasis that was given to these two features.

The plan provided for a large-group instructional area which could be divided, as needs arose, into smaller units capable of accommodating groups of 10, 100, and 150 students. The plan also called for small-group areas, thirty-six in total, each capable of accommodating up to fifteen pupils "and so arranged that each pair of rooms could open to become part of the material resources center." In addition to these "spaces", the plan called for independent inquiry areas which were to be distributed throughout the school, specifically in areas adjacent to the science and home making labs, industrial arts shops, gymnasium, music room, art room, and the material resources center. The material resources center, appropriately located at the hub of the school, was to provide open space for 225 students,

*In the interests of anonymity, specific places and persons referred to in this study have been assigned fictitious names.

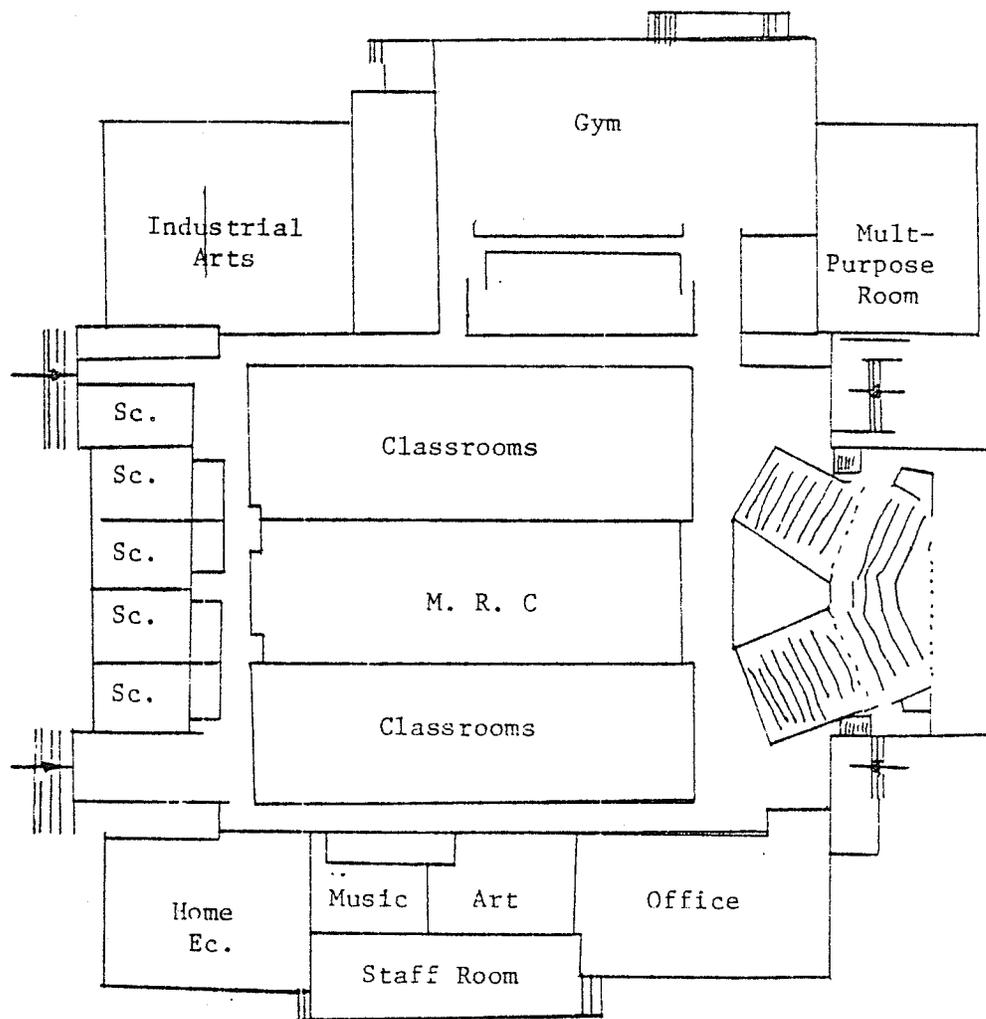


FIGURE 1

Floor Plan of the Study Site

including space in independent study carrels. The material resources center was to be stocked with materials that would facilitate independent inquiry. A few minor modifications were made in the first few years of the school's existence, but none of major substance.

To obtain information on the philosophical underpinnings of Mosssdale Junior High School, a number of interviews were conducted. Recalling the "gossip" that was circulated at the time the school was being planned--to the effect that the superintendent was partial to the team teaching approach and was, therefore, committing the new school to this approach--the decision was made to interview the then- and still incumbent superintendent of Kildonan North School Division. When confronted with this widely held view, Dr. Linder offered this accounting:

It's funny how an afterglow persists long after the flame that had given it life has been extinguished. Not that that's exactly the case here. I am, nevertheless, as convinced today as I was in 1968 that team teaching is a viable approach. Whether or not its full potential is realized, well that depends on many things--besides the physical plant. But we need not go into that.

Nor did I try to disguise my alleged team teaching bias when plans for Mosssdale Junior were being drawn up. As I recall it, however, I took pains to avert charges of undue advocacy. At most, I wanted my idea, as other's ideas, to survive on merit.

Moreover, you know my other bias: I think that the community should have a voice in deciding the kinds of educational opportunities it wants its children to have. That is why I struck on the idea of convening a Joint Planning Committee. (This committee was comprised of citizen members and trustees, as well as educators and an architect.)

Subsequent interviews with various members of the Planning Committee "exonerated" Dr. Linder. Said one citizen member:

Those were the years when innovations were the rage. I remember saying to myself, "This open area stuff doesn't make much sense to me; but who am I to second guess the others in the group

who see it (the open area concept) as an antidote to the restlessness of our youth?"

Another citizen member recalled that he had welcomed the opportunity to have a say in the way that schools were run. "So long," he added, "as the school teaches my child the basics, I don't really care what new, or old, methods teachers use."

A cursory analysis of the community structure lends further credence to Dr. Linder's contention that Mossdale Junior High School was at least as much a creature of the twin architects of history, time and place, as it was of the supposed influence of a single individual. This school was located in an area of Winnipeg which was at that time experiencing an influx of people from a variety of backgrounds, but principally from the "white collar" occupational class. This influx eventuated in a curious admixture of those who were generally receptive to the examination of institutional roles, and those who were, for a variety of reasons, suspicious of change. Indeed, if there was a commonality of belief in this liberal-traditionalist continuum, it was that education is a valuable commodity. To be sure, each of the several identifiable groups in this continuum had its own notions as to the proper role of the school. Thus, to put it into the words of a trustee member of the Joint Planning Committee, Mossdale Junior High School "was obliged, right from its inception, to listen to the beats of "different drummers."

As a ratepayer in the Kildonan North School Division and as the principal of one of the division's large elementary schools, the Principal-Elect, Mr. Schell, was aware of the different, and sometimes

competing, views of his constituents:

Many of them (ratepayers) confided their apprehensiveness about the official announcements that Mossdale would be operated on the principles of openness and flexibility. But they adopted a wait-and-see attitude when they learned that I was to be the new school's first principal. As you know, I had the reputation of being a traditionalist.

Asked why, given his educational philosophy, he entertained such a potentially explosive job opportunity, Mr. Schell explained:

I had been principal of Linden Elementary for fourteen years and, to be frank about it, I was bored with the job. In fact, I was for a few years prior to that time seriously considering getting out of teaching altogether. Let's just say that I was ready for a change. When this opportunity came up, I saw it as the challenge I had been waiting for.

As is now the custom in the Kildonan North School Division, the principal-elect was granted paid leave (in this case, eight months prior to the scheduled opening of the school) to plan the school. This reputation as a traditionalist notwithstanding, Mr. Schell resolved to "give this experiment every chance." Accordingly, in hiring staff, which task he completed by the end of March, 1969, Mr. Schell took care to inform all the applicants for teaching positions in the new school ("and there were many, so we could afford to be choosy") that flexibility, respect for pupils' rights and needs, and team teaching would be the watchwords of Mossdale Junior High School. In keeping with his resolve, Mr. Schell gave his newly hired staff (which was comprised in the main of transfers from within Kildonan North School Division, a few teachers "fresh from Faculty," and a handful with experience in other school divisions), free rein, within the parameters already stated, to decide upon the kind of program the school would offer in the fall of 1969.

Mr. Schell was wary of the possibility that this kind of leeway could lead to attempts by the more assertive members of the staff to exert undue influence on program directions. However, because of other pressing demands ("I had to get the ruddy building completed on time."), not to mention his determination to give staff as much input as he "could reasonably tolerate," Mr. Schell did not supervise the planning of the program as closely as he "assuredly would have in (his) former school." Nevertheless, when Mr. Schell examined the final drafts for the program in each subject, he was satisfied that "really, justice had been done to the philosophy of the new school."

Year I. Mossdale Junior High School opened its doors in September, 1969, "according to schedule," the local newspaper reported. Also, according to schedule, nine hundred adolescents descended upon the yet uncompleted building. It was not until November of that year that the industrial arts wing was ready for occupancy and not until February, 1970 that the gymnasium could be fully used. "To add to our woes, many of the supplies needed for individualization somehow failed to materialize. So, there we were . . .," recalled a charter member.

Another charter member (There are still ten of the original staff on the 1975-76 staff.) observed that "Those weren't exactly halcyon days. Can you imagine the picnic we had with that mess of, of whirligigs--all new to the school?"

"The temperature in my room was a constant 80 degrees the year round. Fortunately, Fahrenheit," reminisced still another of the

originals.

Yes, some teachers were disillusioned by the trials of that first year. Can't say I blame them. No track record to go on. Parent buzzing incessantly wanting to know, "what's going on there?" Some of us faking it. Let's face it, "totems, team teaching, those terms were not in our vocabulary until we had set foot in that place. Would have quit at Christmas, but we had just bought a home and teaching jobs were becoming scarce, and. . . . But I sure flew out of there when June rolled around. I hear things have levelled off there. . . .

A teacher member of the previously mentioned Joint Planning Committee recalled the "first days" of Mossdale Junior High School as follows:

I wouldn't trade that experience for the world. Sure it was pure hell. But what junior high school isn't? Particularly when it's just opened its doors?

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About team teaching, if the theory said it should work, I for one, that is our team, was determined that it would work. And guess what? It did. Not without some trying moments, mind you. . . . But by the end of that first year there was talk of scrapping the idea. And guess who spoke up against it [scrapping team teaching]?

Asked to evaluate Year I in the life of Mossdale Junior High School, Mr. Schell offered this, now reflexive, response:

I expect you want to know why I quit. I've answered this question a thousand times and I still don't know for sure. It was an accumulation of things, I suppose. Reasons I already mentioned. Some of my experiences here hastened what now seems to have been inevitable.

Oh, it's little things. Things like principals giving a teacher they knew to be weak a favourable reference. Just to be rid of him. At someone else's expense, unfortunately!

And supplies not coming in on time. I just couldn't go on giving that "economic crunch" excuse--even if this was getting to be quite a problem. You know where the principal's office is situated? It has a big window facing south. I just couldn't work in this office for the better part of the afternoons; it got so hot. When I requested blinds, central office reminded me that Mossdale Junior was already over budget. So I had to use store

wrapping paper for blinds. Then just before the official opening of the school, I got my blinds. Apparently, the trustees didn't want the image of their "showcase of educational planning in the Kildonan North School Division" tarnished by a piece of brown paper.

Then the salary tussle. Someone in the teachers' union decided that I should get the same salary as a principal in an established school.

It was these kinds of little things that hastened my decision to pack it up.

What hurt most about this decision was that the teachers were, on the whole, such a dedicated lot. They worked their butts off. For an ideal, I must surmise. Perhaps it was the Hawthorne effect that buoyed them up. Interestingly, some of the finest (I remember them referred to as the "conservative fringe" by some of the younger staff members.) have perservered until the present day.

When I finally got up enough nerve to take that step into the business world, few who knew me well were surprised. Meanwhile, those who didn't know my situation put on perma press "I told you so" smirks.

Years II-VI. Years II to V in the history of Mossdale Junior High School were characterized by a series of efforts coping with a variety of problems which, when taken cumulatively, enabled the school to define its identity.

Consistent with its child-centered philosophy, the major goal of Mossdale Junior High School in Year II was "to promote the development of a professional teaching staff that is prepared to accept and work with students in a positive way." A complementary goal was "to promote the development of a total school program that can accommodate all students." As means towards these ends, the school changed from a departmentalized structure to a Band System. The Band System was comprised of six interdisciplinary teams for the core curriculum subjects; namely, language arts, mathematics, science,

and social studies. This change, which occurred half way through the 1970-71 school year, was accompanied by frequent traumatic experiences. "We felt it had to be done, and the sooner the better," explained Mrs. Fergus, the incoming principal. "The alternative would have been to continue to violate the school's underlying philosophy, 'let the needs of the pupils determine our beliefs and practices and not the other way around,' as I understood it."

A teacher who experienced this change agreed, albeit grudgingly at first, with both the diagnosis and prescription suggested by the new principal.

Our team was just ironing out the kinks we had observed in the previous year's operation. Mind you, some of the teams were teams in name only. What sold us on the Band System, as I can recall, was the argument by Gord [Mr. Sigmon, currently the vice-principal at Mossdale Junior High School, is commonly called by his familiar name] that under the Band System we would not need to know as many kids, thereby contributing to a better teacher-student identification . . . especially so far as the grade VII's are concerned. Also in November of that year Mrs. Fergus arranged for the administration, including the team leaders to see first-hand the Band System in Lansing, Michigan. I recall distinctly that all of us who took that tour agreed, I should say, conceded, that the plan seemed to be working very well there.

Another teacher who has since been transferred to another school (at his own request), had this to say about the circumstances of the changeover to the Band System:

Maybe the scheme had merit, but what possible merit could there be in changing plans in mid-stream? In point of fact, the change was made at the end of Semester I in January, 1971. It was like going to bed in one country and waking up in another and strange country.

Why do I think this action was taken when it was? Far be it for me to guess at the whims of a woman. Could be, it just could be that Mrs. Fergus wanted to show us doubting Thomas's that she could be as decisive as any of her male counterparts.

According to several charter members, Years III, IV, and V

were uneventful compared to the cataclysmic Years I and II. Yet there were noteworthy developments in these middle years. For one, the staff at Mosssdale Junior High School busied itself in working out the structural mechanisms of self-government. In this connection, attempts were made to clarify the roles and responsibilities of administrators and team leaders.

Another noteworthy development which occurred in Year III of Mosssdale's existence was a deliberate thrust to individualize learning. The supervision of this thrust was assigned to Mr. Sigmon, the newly appointed Vice-Principal. On the recommendation of Mrs. Fergus, Mr. Sigmon was to spend fifty percent of his time on curriculum development. The variety of ways that teachers interpreted this appointment can be inferred from the following illustrative comments of several members:

With Mr. Sigmon at the throttle things began to perk. For one thing, Gord always had a game plan.

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At first we were surprised when Gord was appointed VP at Mosssdale Junior. We didn't think he could, or rather, would want to handle the discipline part of the VP's job. And, God knows, we had our share of it. But we found that he could when he had to. Only, he preferred other roles. He was . . . well, he was the one who acquainted us with such things as Bloom's taxonomy. At least now I know the difference between cognitive and affective objectives. He's still the one person that I turn to when I have questions about teaching.

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Those of us who have worked with Gord--and in my case, it goes back to the beginning of Mosssdale Junior High, except for the time he was on Educational Leave around 1972 or 1973--respect his learning very much. I'll bet there's no one in this school who reads as widely as Gord does.

Sometimes, however, I think he expects too much from us.

Besides, I have my own priorities. So sometimes I have to behave a bit hypocritically. I (and I know others who do the same thing-- so as not to hurt his feelings) nod approval of his strategies (this is one of his favorite words), then I do my own thing until I'm good and ready to do his thing.

Year IV was remembered best as the "year of the big curriculum drive." Here is one teacher's reaction to this preoccupation:

I'm still at a loss what the point of this mania was. Our fearless leader kept churning out this stuff . . . conceptual frameworks, etc., etc., etc. And we were obliged to spend our inservice days, even many of our staff meetings listening to his treatises. Some of the meetings used to go on and on, sometimes till six o'clock. . . . Then I had to drive across the city. . . .

This view was not, however, shared by the majority of the teachers who made observations on the major developments of Year IV. The following sentiment is typical:

This kind of thing, these discussions and workshops on curriculum, or whatever, they're a mixed blessing. They sap a lot of precious time and energy, but how else could teachers cope in these hectic times of change?

In Year V of its existence, Mossdale Junior High School underwent a series of tests. The comments below both describe the nature of these tests and suggest their cumulative effect on the school's search for "full-fledged member" status.

I call the 1974-75 school year as the year of the Great Investigation. I couldn't believe it. This guy from the school board office came, looked us over, asked a batch of questions, and then went away. A few weeks later he came back and told us that we were "okay". Said his study showed that, compared with other junior high schools in the division, we were as good. Imagine! Us? Bully for him. Some of the older teachers told me that in the school's first years there had been flak from some parts of the community. But that it should come to this!

Most of the teachers who were questioned about the events of the 1974-75 school year were even more chagrined than this incredulous teacher. One teacher charged:

It's fellow teachers who were badmouthing us. (They still are, I'll bet.) . . . probably because they feel uncomfortable with our image. I would be mightily surprised if the superintendents' department didn't deliberately create the image of our being an alternative school [apparently as a means for rebuking "unprogressive" teachers].

The speculation as to the origin of the bad "press" that was given to Mossdale Junior High School is echoed in the following accounts:

I happened to visit this person in this particular school, which must for obvious reasons remain nameless. There, to my horror, I noticed the names of graduates of our school marked with the school initials, MJ, on each class list. But were the names of students of other feeder schools identified in this manner? I guess not!

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Even the principal of one of the schools more or less blamed us publicly for the poor performance of some of our "social passes". Seems to me that Central Office issued a directive against what I would term unethical conduct. That didn't stop them though. A while later, a teacher from this same school told a teachers' meeting at another school in the school division that at least the pupils from School XYZ knew their basics.

There were still other interpretations as to the reasons for "the investigation".

It was a product of outside forces, as well as of goings-on in the school. I trace it to the fact that our custodian's report on breakage was lengthier than reports from other schools. Herman has such a penchant for detail, and . . . at any rate, the inference was made that our school was more slack [than other schools in Kildonan North School Division].

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As you know, other things were happening in the Kildonan North School Division at that time--austerity, the debate on the unitary system, and program budgeting. I would have to say that concern over money things brought it [the investigation] on and that educational questions came into the picture sometime later.

The effects of "the investigation" and other academic events are nicely summed up in the words of David Melville, the school's

resident philosopher:

How did it (the investigation) affect us? Negatively, of course. We felt put upon, treated like errant children and Now that it's over I'm glad. Why? We were vindicated, weren't we? I think we were, don't you?

The Staff: Major Demographic Characteristics

Substantive information on a variety of demographic factors presumed to be correlates of job-related learning were obtained by means of fact sheets. This information is summarized in Table III. The classes used in conjunction with each major variable in this table were chosen for descriptive purposes. (It is, however, acknowledged with Barker, 1968, that demographic variables can under certain circumstances exert a normative influence upon a group.)

Inspection of Table III reveals several prominent characteristics of the Mosssdale Junior High School staff. Reference to segment A of this table shows that the Mosssdale staff was, as is typical of higher grade schools, generally (Lortie, 1975), a predominantly male staff. Male teachers outnumbered female teachers by a ratio of approximately three to one.

So far as age is concerned, the Mosssdale staff was a relatively young one. Nearly half of the teachers were under the age of thirty. The acting principal said that this youthfulness was "a good thing; for people of younger years are still willing to experiment with fresh ideas."

In terms of level of formal academic education, the staff of Mosssdale could be said to be highly qualified. All but four of the forty-four teachers on staff had completed requirements for at least one university degree. Of the twenty-three teachers who already had

TABLE III

Frequency Distribution of Teachers of Mossdale
Junior High School by Selected Life Attributes

Attribute	Frequency
A. Gender	
Male	32
Female	<u>12</u>
Total	44
B. Age (As of January 1, 1976)	
24 or under	2
25-30	21
31-35	8
36-40	9
41-45	2
46 or over	<u>2</u>
Total	
C. Educational Achievement (Years of formal education beyond high school)	
1	--
2	2
3	2
4	23
5	13
6	<u>4</u>
Total	44

TABLE III (continued)

Attribute	Frequency
D. Teaching experience (In years, including the 1975-76 school year)	
1 year	5
2 years	5
3 years	1
4 years	8
5 years	3
6 to 10 years	8
11 or more years	<u>14</u>
Total	44
E. Tenure at Mossdale Junior High (In years, including the 1975-76 school year)	
1 year	11
2 years	6
3 years	1
4 years	7
5 years	5
6 years	4
7 years	<u>10</u>
Total	44

one degree, seven were working towards a second degree. Of the thirteen teachers who had completed two degrees, several were contemplating "going for the masters degree." One teacher, the vice-principal, already had a master's degree, while three more teachers had begun master's programs of study. (It struck the researcher that the quest for higher academic qualifications seemed to be more in evidence at Mossdale than at any of the other junior and senior high schools in the Kildonan North School Division.)

Reference to segment D of Table III reveals a bimodal distribution insofar as the teaching experience of the Mossdale staff was concerned. One-half of the staff had five or fewer years of teaching experience. To quote the observation of one member belonging to this class, they were "still learning the ropes." Of the other half of the staff, eight had between six and ten years of experience, while fourteen of the staff had eleven or more years of teaching experience.

Reference to segment E of Table III reveals another interesting fact about the composition of the Mossdale staff. Approximately one in four teachers were new to the school, while nearly the same proportion had been on staff from the time Mossdale opened its doors seven years ago in 1969.

Direct experience and the literature suggested that each of the attributes listed in Table III would influence in complex ways the learning behaviour of teachers. Subsequent ethnographic inquiry yielded findings which confirmed this common sense generalization. The major portion of these findings is discussed under the heading, "The Learning Needs of Mossdale Junior High School Teachers," (p. 103)

in this chapter. As well, a small portion of these findings is discussed in several contexts in Chapter V.

II. LEARNING IMPERATIVES STEMMING FROM MOSSDALE'S HISTORY AND CULTURE

In the foregoing chronology, critical events leading to the development of Mossdale Junior High School as a distinctive institution were traced. The purpose of this part of Chapter IV is to discuss illustrative learning-related meanings these events, along with events occurring in the then current (1974-76) school year, had for the staff as a whole or for individual teachers. To facilitate reading, the more normative influences for learning stemming from Mossdale's formal structure are outlined by way of a focused narrative: meanwhile, the more idiosyncratic influences for learning stemming from Mossdale's informal culture are presented through the expedient of vignettes.

Learning Imperatives Stemming from the Mossdale's Formal Structure

The goals of an institution may be written or "understood," specific or general. In the case of Mossdale Junior High, the goals were clearly spelled out. In 1973, the Kildonan North School Division produced a goals statement which accepted the general aims of education as enunciated by the Department of Education: "the development of broad literacy, and the promotion of democratic citizenship." More specifically, the Kildonan North School Division committed member schools to a complement of five aims: communication, personal and social development, creativity, systematic thinking, and skill

development. These aims were, in turn, undergirded by a series of illustrative behavioral and expressive objectives. In pursuing these aims and objectives, schools were urged to make provisions for continuous progress, to view subject disciplines more as vehicles for attaining primary educational aims (than as ends in themselves), to measure traditional disciplines in terms of their capacity to contribute to the five developmental areas specifically and to the total curriculum, generally. The Statement of General Aims and Objectives further admonished teachers to refrain from consciously fitting the five developmental areas into existing subjects. Finally, the Statement committed the individual schools to develop a unique program within these parameters.

An analysis of the Goals Statement indicated the presence of many vestiges of the original philosophical base of Mossdale Junior High School. Witness the following examples: "that differences of individuals would be recognized;" "that the school would promote individual progress;" that "basic skills of communication be developed;" that "thinking would be stressed;" and that the teacher would not be a mere "dispenser of knowledge, but rather a guide who would provide appropriate content and direction for students in matters of learning."

"We see very little difference between the Divisional aims and the aims of our Founding Fathers--other than the fact that the Divisional aims are more clearly articulated," commented Mr. Sigmon. "And we try as much as possible to encourage teachers to live up to these aims."

Data generated by the analysis of documents, focused observations, and discussions among staff members revealed that formal organizational encouragement of job-related learning took many forms. The Goals Statement was given a prominent place in the school's handbook. An August, 1975 bulletin to parents and students acknowledged the school's acceptance of the five developmental goals. "Hardly a staff meeting goes by without them [administrators] mentioning our obligations [to implement the goals]," voiced a staff member. Finally, daily bulletins alerted teachers to an assortment of how-to's: how to bring creativity into science classes, how to integrate basic reading skills into subject disciplines, and how to foster personal and social development via field trips, to mention a sampling of such staff circulars.

Not only were teachers bombarded with information on opportunities for job-related learning, they were also encouraged in many ways to take advantage of these opportunities:

This is my first year at this school, although it is not my first year of teaching. I find that both the principal and vice-principal here are ready to literally bend over backwards to make it possible for us to go to conferences or things like that--by taking over our classes, for instance.

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Immediately upon receiving a request for funding, I phone both the superintendent of personnel and the P.D. (Professional Development) chairman from our "local" advising them that they will be contacted shortly by so-and-so about requesting financial support for such-and-such. (As you know, Marvin Husek (the personnel superintendent) has a modest P.D. budget, as does our local teachers association.) Then I write a letter to each, justifying the request. This leaves an onus on the teacher to follow the matter up and . . .

Naturally, I'm prone to do a better job of justifying a request [for funding] if I feel convinced that the intended P.D. activity falls within the general divisional goals.

Yes, I must admit that it was easier for me to spring Klaus Dibbner to attend the York Reading Conference because reading has been for the last couple of years, I understand (Mr. Palardy assumed the position of Acting Principal in the 1975-76 school term, during which time Mrs. Fergus was on educational leave.) a particular sore spot at Mossdale Junior.

Mr. Palardy inherited two other problems (besides the reading problem alluded to in the comment immediately above) which he was anxious to solve. One was "community communication and involvement;" the other was "communication with feeder schools and high schools." It can be seen by reference to the chronology (p. 76) that certain staff members had felt smitten by adverse comments by members of the community and by teachers from sister schools. To resolve the first-mentioned problem, Mossdale Junior High School staged an "Open House" early in the school year (October 10, 1975). Perusal of the announcement which advertised this event reveals some apparent reasons for the administrators' sponsoring it. The displays would provide tangible evidence that Mossdale teachers were doing their job. The invitation to "meet the reading specialist" would allay fears (whether warranted or not) that the school had reneged on its responsibility to teach the 3 R's. There was another reason: "Favourable feedback," Mr. Palardy confessed, "would do wonders to some of the 'aggrieved' on our staff." But even more importantly, "preparation for the open house will compel (or, encourage, if you will) teachers to look more intently at their programs--to see if they were meeting the school's objectives."

The part played by the administrators in promoting P.D. was also evident in other happenings in the school. At the instigation of Mr. Sigmon, several teachers experimented with cooperative teaching.

In one such experiment, the social studies and geography teacher collaborated in teaching a unit on "Peoples of the World."

Mr. Sigmon put the idea into our heads. Donna and I have been cooperating on and off for some time. Nothing formal . . . we're members of the same interdisciplinary team and only a door separates our rooms.

.

I can recall only one occasion [of cross teaming] this year. I was working back and forth with this teacher and the V.P. got involved. During the course of this, Dr. Linder came in with a specialist--for this was cross teaming! We were kind of amused because the only reason we taught this way was because of the equipment. Oh, I suppose the visit could be construed as a pat on the back. We weren't looking for it, however.

In a similar experiment, three teachers were involved, including the two teachers referred to above. "One of the teachers seemed to need help, being new to a junior high setup," observed Mr. Sigmon, "so I thought of teaming him with some of our more experienced teachers. Frankly, I hoped this would set an example for more such cooperative teaching."

Formal inservice days were another vehicle by which administrators tried to advance teachers' competencies in meeting the school's goals. Specific parts of the agenda for the team-building workshop, which was held in March, 1976 substantiate this conclusion:

Mr. Soles will introduce the participants to specific strategies for identifying objectives, group decision-making, communication, and implementing action as a group. These strategies and insights could assist teaching teams to organize and coordinate their curriculum. It could also assist staff members to help students to acquire these strategies.

Meanwhile, another workshop on the agenda

will work through some specific strategies that can help team members to identify each other's strengths and weaknesses in assisting adolescents to develop intellectually, personally and socially . . .

The agenda further testified that support would be given, on request, to teams planning a team teaching unit: "If resource people are required, or visitations are requested, arrangements can be made for an inservice, say in April."

Learning Imperatives Stemming from
Mosssdale's Informal Culture

Analysis of field notes and interview protocols indicated that the influence of the informal group culture upon the job-related learning was both complex and pervasive. The analysis further revealed that much of the observed influence stemmed from a dynamic tension between and among a variety of the more prominent subcultures. The tension that was observed to have the most unremitting influence on the learning behaviour of Mosssdale teachers was that between the small "c" conservatives and the small "l" liberals. As the following characterization by Mr. Sigmon reveals, the differences between these two subgroups were fairly standard ones. The conservatives tended to select those kinds of learning objectives and to form those kinds of associations which they perceived would promote a discipline-centered curriculum (that is, one based on faculty psychology). For their part, the liberals tended to favour learning goals which they perceived to be allied with a process curriculum (that is, one based on a diagnose-prescribe-evaluate cycle. But, as Mr. Sigmon acknowledged, situational considerations could (and, indeed, did) influence teachers to choose learning aims that they may not have been consistent with their professed ideology.

There is your traditionalist wing. As you can appreciate, most of the senior (And I don't necessarily mean older.) members of our

staff belong to this group. They are the people who tend to identify with the back-to-basics movement. I suppose they feel vindicated now--now that the wheel has come full circle. One thing I respect them for is that they--well, most of them--haven't stopped the search for newer and better ways to . . . In fact, several from this group have served on Department of Education committees. For example, Stephanie Dudek recently chaired a committee that revised the mathematics curriculum in the province.

Then you have the small "l" liberal wing. This wing is really a composite of two elements--the diagnostic and the developmental. The diagnostic element refers to the keeners concerned about reading. Even before our reading clinician came upon the scene, which was at the beginning of the 1975-76 school year, most of the people in this wing were already quite thoroughly acquainted with the diagnose-prescribe-evaluate paradigm. George Klein's coming has helped to confer legitimacy of this group. Myself, I have some reservations about the "diagnostic" approach; it presupposes an S-R model and can become quite manipulative. So far as the developmental wing goes, we believe that a teacher's major function is to identify alternative teaching strategies and learning experiences and to expose kids to them. We may never know exactly what the causal relationship is between a particular student and a particular learning experience.

Of course, it's awkward to pin a teacher to one end of a continuum or another. The same teacher can take a certain position to one kid and . . . Really, so much depends on the issue. The same teacher may side with the traditionalists on a law and order issue but with the developmental wing on a strictly pedagogical question. There's always an element of inconsistency (in trying to "pin" people to a given orientation--whether for social reasons, or because of personal experience, or . . .

Further analysis of the field notes brought to the fore a large number of variables which stemmed from the various subcultures of Mossdale Junior High School and which were construed as imperatives for learning by individual teachers, or groups of teachers. Representative kinds of these influences are discussed, with the aid of vignettes, below.

Vignette #1 illustrates an interesting ambivalence displayed by many teachers of Mossdale. Their wish to shed the "trailblazer" image (and, thereby, to be released from the learning obligations

implied by this image) was matched by a slightly stronger desire to remain in the limelight (and, accordingly, to reap the resulting psychic rewards; for example, honours bestowed on their students; and to pay the penalties, in this case having to learn how to teach reading to junior high's).

Vignette #1

We'll never live down our "alternative school" image. Like it or not, the superintendents expect us to be trailblazers. Gord has his "impossible dreams." Since the school first opened, he's been playing variations on the interdisciplinary theme. Now the most persistent tune one hears around here is the DR (Developmental Reading) tune. That's one thing they didn't tell us at Faculty--that we'd be teaching reading to junior high's. One has to wonder what they're doing about reading in the elementary grades these days. Frankly, I sometimes wish we could shed this image of being at the vanguard of every new idea that happens along . . . so we could . . . No, hold the phone. On second thought, I would not really want our image to change--even if, to be honest about it, this is not a totally accurate one. I rather relish telling this parade of visitors, you included, that we're not your ordinary, run-of-the-mill school. Of course, I don't tell them this in so many words. What I do instead is show them the fruits of our labours. You know--projects completed by kids, prizes won by our students. And, by the way, this includes awards in such things as mathematics, and essay writing, and public speaking, and . . . As you well know, we're not even supposed to be a "basics" school!

Vignette #2 reveals a motive for learning that was born of a tension between those who believed they should live up to concensually derived goals (or, the "trust," as several teachers referred to these goals) and those who could not, or would not, meet the challenge implied by the acceptance of this trust.

Vignette #2

There was a palace revolt of sorts here last year. Some of the mavericks up and left when the new Rossmere Junior High School was established. I had mixed feelings about this. Some of those to leave had been Gord's friends in the early days, I am led to understand. If that were the case, then they were betraying a

trust. That's what I think. In some ways I was glad when they left . . . because a few of them, especially the grade nine teachers, acted as a law unto themselves. We'd decide something like . . . and the next thing . . .

Vignette #3 illustrates the negative influence upon innovation, not to neglect the learning innovation implied that resulted when some teachers perceived themselves to be victims of closure tactics being practised by the more senior (in terms of tenure at Mosssdale) members.

Vignette #3

It didn't take me long to find where the power axis of Mosssdale Junior is. In the Pioneer lodge. Perhaps it's pure coincidence, but I don't think so, that members of this "lodge" hold key positions here. Take your team leaders; most of them, I'll wager, were here for the ribbon-cutting ceremony. In point of fact, five of the seven team leaders have been on the staff of Mosssdale Junior High School since the school's beginning in September, 1969. I noticed the same tendency toward rewarding loyal followers with the plums of office in my last school. Perhaps this kind of thing is inevitable, but . . . Whenever one of us newcomers proposes something that doesn't meet with their fancy, they like to hearken to some mythical past when the suggestion that is made was tried and rejected as a failure. Perhaps that, too, is inevitable.

Vignette #4 illustrates how personality factors and idiosyncratic learning needs of a teacher influence the kinds of relationships he establishes with significant others in his perceptual field.

Vignette #4

This year is a little different. I lost two of my former team mates. They were the ones I always went to when I wanted to try on for size some brain wave, or . . . Gord is the only one I go to now when I want to discuss a new idea or plan. I've gone to the principal once or twice, but . . . well, he gave me a sympathetic hearing, I must admit, but somehow . . . Oh yes, I do consult with my present team members. For example, we spent some time not two weeks ago planning our annual field trip. I was one of the prime movers of the field trip idea. And, yes, I enjoy

chatting with some of the others on staff. You've met Francis Enthwhistle and Alberto, what's his name? They're such good listeners and . . . What else I like about them is that they have their heart in the right place--in the kids. Alberto was asked to head up a team, but of course he declined.

Vignette #5 and Vignette #6 illustrate, first, the importance of first-hand experiences as a vehicle by which novice teachers can gain a profound appreciation of complexity of the teaching act and the professional learning goals (beyond Faculty) that the job of teaching demands. These vignette illustrate, second, the importance of administrative arrangements (teams, departments) in helping teachers to cope with emergent job-related learning issues.

Vignette #5

Being new to the profession, I naturally needed (still need) a lot of help. At first I thought that the instructing I had done in Bio Lab in my Honours year at the university would be an asset. It turned out to be more of a liability. I wasn't communicating with the students very well for the first month and it started to get to me. Then I remembered what Mr. Palardy said at the orientation meeting prior to the school's opening: "Your team may well be your best source of help, if you let it." That was some of the best advice I have received in my . . . I was going to say career, but does one year at it entitle me to say "career"? To make a long story short, I mentioned my problem--communicating to students at their level--to my team. To the one, they volunteered practical suggestions. Dwight showed me how to break a lecture into smaller, and more digestible, units. Christine showed me how to re-write my test items by using a graded vocabulary list. Michael Karabelas, a science teacher from Team 72, introduced me to STAM (This stands for Science Teachers Association of Manitoba.) and Henry, another fellow science teacher . . . I feel pretty good about being part of this staff now. Just the same, I'm hankering to teach at the high school level--now that I've had my baptism. Mr. Husek, the superintendent in charge of staff placement and transfers, told me there was a high probability of such an opening at Concordia.

Vignette #6

It boggles your mind how much there is to learn when you're new to the game--how to write behavioural objectives, how to

determine per pupil allotments of consumables, how to tell parents that their "pride and joy" does not have an aptitude for graphic arts, and how to . . . actually many, many how to's. The two other fellows in the shop took me under wing and, like mother hens, they . . . I suppose it would be "clucked" me into shape. Super guys. Always ready to help. Super teachers, too. I learned so much just from casual observations. We're in the same general area, as you can see.

Vignette #7 shows that concrete knowledge gained in leisure-time pursuits (that the life of an artist is not always the proverbial "bed of roses" can have practical classroom application (to serve as a graphic illustration to teach starry-eyed adolescents that appearance and reality are not always the one and same thing).

Vignette #7

Us artsy types (That's what they call the music, art and drama teachers around here.) get together a lot during lunch breaks . . . especially Don and I. Peter joins us when he doesn't have music practice. Other people sometimes join our group. Jan Lyons likes to sit in--literally sit in--on our togethers. I don't remember her saying "boo" more than half a dozen times since . . . Even Mr. Palardy, our principal, has graced our company on occasion. One day we kidded him about his credentials for joining such a celebrated bunch as us. "I listen to Red Alix's Beefs and Bouquets on CJOB and I have season tickets to M.T.C. (Manitoba Theatre Center); these should get me in, don't you think?" he kidded. Most times we talked about anything, but shop. Remember a few weeks ago? Al Purdy was "front and center" for a few days. It all started with Don. He'd been to this party where Purdy happened to be at. (Says his wife, who is an English "major," dragged him there.) The very next day we got the "goods" on the life and times of one of Canada's latter day saints. Purdy's the Writer in Residence at the U. of M., as you probably know. The pittance of a stipend he [Purdy] gets for this honour barely keeps him going. Don says he [Purdy] lives in a furnitureless apartment room. Pretty pathetic figure. The next time one of my students gets the idea that being an artist is the proverbial "bed of roses," I'll sic Don at this student. That's what I'll do.

Vignette #8 shows how developments beyond the immediate control of the individual teacher (declining enrollments) can be an indirect spur to learning goals not previously appreciated by a teacher.

Vignette #8

What do we talk about during the "other business" portion of our meetings? About many things. Like who will represent our school at the AGM (Annual General Meeting of the Manitoba Teachers Society). Like grievances that one of us, or a group of us, might have. A good example of this would be (By the way, you attended this particular meeting.) when administration gave us the word that the superintendents department had ordered staff cuts and that a Home Ec or IA (industrial arts) teacher would be likely to get a pink slip, come June. Actually, it was to be a transfer. We heard via the grapevine that Dennis Stanavage would be the one to go. According to Mark Williams, our Kildonan North Teachers Association Rep, "all things being equal, last person in, first person out." Dennis--and I'm sure you have noticed this--is very popular with students and staff, alike, so . . . But this was not the only reason why we stiffened our collective backs up. I know that the majority of us viewed this as "the thin edge of the wedge"--considering the decline in enrollments and goings-on in other parts of Kildonan North, such as . . . This year we were down approximately 100 pupils--down to a more workable student-teacher ratio, I might add. Best overall ratio in my five years at Mossdale Junior High; which is why many of us veteran campaigners would rate 1975-76 as the banner year--until this fiasco, that is. Now the powers that be are projecting a further drop in our enrollment--owing to the redrawn boundaries in order to accommodate the new Rossmere Junior High. This turn of events is a disquieting one for the teaching profession, don't you think? Last year they let a teacher at Concordia go, tenure or no tenure. The official reason given was that the subject this teacher was teaching (I believe it was industrial maths.) was no longer needed at the school. The real reason, my spies at Concordia tell me, was that administration was not satisfied with the job this teacher was doing in the classroom. Yet, this same administration loaded this poor chap with the responsibility for the school's driver education program (True, there was additional pay for this responsibility, but the point is they couldn't get anyone else to do it.), besides his regular teaching duties. I doubt that this kind of thing would have happened if we didn't have a teacher surplus situation. But now . . . and given the fact that we have a pro tem administrator . . .

Vignette #9 illustrates the potential of even routine tasks (reporting to a parent) to spur job-related learning on the part of teachers. This vignette also illustrates the potential of fellow staff members to act as resources in helping a teacher to resolve a pressing job-related learning problem.

Vignette #9

If you were to monitor our informal talk the year around, you'd find a pattern somewhat as follows: Early fall you'd hear such things as "What kinds of kids did you get this year? I'm sure most of my VII's are social passes, but my . . ." Late fall, you're as likely as not to hear rumblings and grumblings about report cards and parent-teacher interviews and . . . Around Christmas, what else but "What to do when the holidays come" theme? The last little while, as I'm sure you have witnessed, we've been on the ecology theme. This means it must be spring! Yes sir, every year at this time Mark (Mark Williams is our resident outdoor education expert. We seem to have a resident everything at Mossdale Junior. --that's who the kids fondly call "Mother"--is our parliamentarian par excellence. Jean Vincent and Donna Sools are running neck and neck for the honour of "grammar girl." William Halpern is the local Samuel Johnson; if it's in the dictionary, Bill will know about it. Want some advice on a carpentry project? Victor Kroemer's as good as they come.) Getting back to Mark, every year at this time he gives us this 'spiel: "There are sermons in stones," you'll hear him pigeon-hole Shirley Tuska. "The wind's your original Aeolian harp (whatever that is)," he joshes Peter Kolesnick, our music specialist. "If you come on the now annual student and teacher camping trip I'll cook you a pot of delicious rose hip tea (whatever that is)," he teases the Home Ec trio. If you get one of the inseparables, you get them all, so before you know it, he's got the entire school thinking camping.

Finally, Vignette #10 illustrates how a teacher's perceptions about an institution in which he works (that it tends to verbalize to excess) can immobilize him from meeting some of his personality needs (in this case, the need for explicitness, and the need for decisive action).

Vignette #10

They verbalize to the point of excess here. I would be able to buy a selectric typewriter if I could get a dollar for every time I heard the exclamation, "Oh, not another meeting!" It took me a month to separate rhetoric from reality in this place.

III. ANALYTIC COMMENTARY

Up to this point in Chapter IV major correlates of continuing

education of teachers was discerned in the subject population, The next task was to analyze the data thus generated in the light of the heuristic model and other relevant theory.

The Press for Learning at Mosssdale
Junior High School

Press referred to both the forces inhering in the wider society (or, "environment") and to forces deriving directly or indirectly from the circumstances surrounding a teacher's day-to-day work (or, "situation"). Analysis of the findings presented immediately above indicated that each of these kinds of forces impinged on the efforts of Mosssdale Junior High School teachers to cope with recurrent and emergent job-related learning problems.

Environmental Press. The most pervasive environmental press that teachers at Mosssdale Junior High School perceived as impinging on their learning was accountability. In Getzel's role theory (Halpin, 1957) this press for learning was described as an amalgam of the expectations that the school, a microcosm of society, has for its role incumbents. As this was documented in the chronology (pp. 75-82) teachers and administrators perceived expectations on a continuum between a mandate for change to a warrant for stabilization. The mandate for change, which was in the ascendancy in the school's early history, expressed itself in such innovative (for that time and place) ideas and practices as open area, team teaching, interdisciplinary teaching, child-centered curriculum, and shared decision making. The countervailing force of stabilization, which began to gain momentum in the later years of the school's history, expressed itself in the

re-emphasis on subject-centered teaching, financial restraints, and the accompanying cutbacks in support material and services, and the back-to-the basics movement. In their own unique way, each of these environmental forces could be construed as motives for job-related learning.

Teacher surplus and declining enrollments were other examples of environmental press which teachers perceived as cues for learning. As this was depicted in vignette #8, these twin factors obliged teachers to sharpen existent tools or to acquire new ones. At the same time these forces spawned a movement towards power equalization (teacher militancy); this movement, too, was felt as a press for learning new roles by some teachers.

Situational Press. This rubric subsumed major dimensions of the learning environment in which the teacher works. In particular, this kind of press for learning includes factors inhering in the formal and informal "character" of a school. Some of the more prominent manifestations of this type of press are discussed below.

Clearly the most prominent press for learning stemming from the formal side of Mossdale Junior High School was embodied in the person of Gordon Sigmon. Reference to various parts of the ethnography reveals that Mr. Sigmon has played many different roles in promoting the continuing education of individuals and groups in the school. To illustrate, as an early proponent of open education, Mr. Sigmon helped to spearhead the development of the Band System and shared decision making. In his assigned role as curriculum leader, Mr. Sigmon came to be widely acknowledged as the school's primary

knowledge broker. His other position, that of Vice Principal, made him a mediator between the self-actualizing tendencies of the school and the competing expectations of the school's various publics, on the one hand, and between the "progressive", "developmental", and "conservative" factions in the school, on the other hand.

The same section of ethnography makes it clear that the protem principal, Mr. Palardy, had endorsed in both word and deed the historically prescribed--and normative--professional development aspirations of Mossdale Junior High School. "Except that," in the words of one of the charter members, "the new boy is more direct in his approach (toward continuing education) and somewhat more finicky about the way that our P.D. plans are carried out."

Several theories helped to explain the kinds of actions that were taken by the administrators at Mossdale Junior High School. Classic learning theories suggested that goal clarity is a prerequisite, albeit not a sufficient one, for organizing a learning activity (Dewey, 1963). Administrative theory suggested that administrative intervention, for example, thrust, (Halpin, 1958) is an important factor in group productivity. The various dissonance theories suggested that the tension between an ideal (in the present case, this could be the respective divisional and local goals) and the real (the degree to which the goals are being implemented) is a spur to learning.

Another aspect of a school that was found to have implications for the job-related learning of teachers was the informal group culture. Selznick (1948) explained that such cultures represent spontaneous efforts of individuals and subgroups to cope with the

demands of the formal structure and/or to forces tangentially related to the formal structure. Where regularized, these self-defense mechanisms may give rise to a homogeneity of outlook or action orientation, and ultimately, to a structural transformation of an organization. Indeed, as it has been noted earlier in this chapter (p. 77), Mossdale Junior High School may be said to have experienced just such a transformation in Year II of its history. For the most part, however, these kinds of self defense mechanisms have an ad hoc existence and an amorphous character.

Organizational and adult education literature, helped to make sense of illustrative aspects of informal culture press for learning that was exemplified in the vignettes (pp. 92-97). For example, the concept of "group needs disposition" (Getzels in Halpin, 1958) serves to characterize a cultural force that was born of the rather inauspicious beginnings of Mossdale Junior High School; namely, the desire to prove to unbelievers that this school is a "basics" school, just like the other schools in the division. (See the vice principal's characterizations, (pp. 91-92) and Vignette #1.)

The concept of "sunk costs" Abbott (Owens, 1970) gives meaning to the contest (which is illustrated in Vignette #3) between the would-be innovator and those who "like to hearken back to some mythical past. . . ."

Lortie's (1975) notion of "psychic benefits" helps to explain, in part, why the subject in Vignette #4 may have chosen the particular persons as his confidants and work associates--because these teachers get their major satisfactions not from status factors but from factors associated with meeting the needs of students.

Vignettes 5 and 6 substantiate a recurrent theme in the literature of continuing professional education; that professional training institutions, cannot under normal circumstances, equip novice teachers with all the required competencies to cope with emergent problems on the job (Nattress, 1970). Other literature (Fair, 1974) suggested that practice teaching has only limited utility as a "coping stone." The problem implied here is further exacerbated by the fact that teaching is, in the view of Lortie (1975), an "unstaged career." As a consequence of this, a novice may be compelled to perform at a level expected of his more seasoned counterparts. No wonder that the novice teachers depicted in these two vignettes exhibited such a strong need for help from their respective team members.

The concepts of "psyche group" (Rubin, 1971) and "enclave" (McLeish, 1976) helped to explain why the "artsy types" described in Vignette #7 tended to band together informally; such groups offer voluntary participants a non-threatening vehicle for meeting personal, as well as professional, learning needs.

Routine and semi-regular goings-on may, likewise, be occasions for job-related learning: this is particularly likely when a teacher perceives an otherwise taken-for-granted reality as problematic (Psathas, 1975). This proposition is evidenced in Vignette #9. To explain, the passage in the vignette, "I'm sure my seven's are all social passes, but my eight's . . ." may be construed as proof that the teacher in question had perceived that teaching a "social pass" student requires a different set of skills than those required to teach the "eights"--whatever the precise characteristics of this group

may be.

The Learning Needs of Mosssdale Junior
High School Teachers

A need, as it was defined earlier in this study (p. 9), is an organic potentiality or readiness to respond in a certain way (such as deciding to learn) under a certain condition (for example, at the urging of a peer or a spouse). Psychoanalytical research, for example that of Rogers (1959), suggested that needs are functions of antecedent factors in an individual's or group's background. The discussion which follows identifies and describes analytically major antecedents, predispositions, or "needs" factors which were found to inhere in the history, culture, and personnel of Mosssdale Junior High School.

One of the most transparent needs of teachers of Mosssdale Junior High School was the need to justify, or otherwise rationalize, the school's uniqueness. This uniqueness can be traced to several historical factors, namely, the decision by the Joint Planning Committee to build a plant that would permit team teaching and foster open inquiry; the first principal's resolve to give these innovative ideas "every chance;" the successor principal's determination to avoid doing violence to the school's philosophical moorings; and the school's early setbacks in trying to live up to its innovative school image. These historical accidents, coupled with the constant criticism--whether justifiable or not--from teachers in the Kildonan North School Division and other parts of the behavioral system contributed to the need by many of the school's teachers to expand their repertory of professional skills. The joining of Provincial and local curriculum

development committees and, more recently, the decision to institute a Developmental Reading Program are but two examples of efforts to satisfy this kind of normatively prescribed need.

But these same kinds of antecedents also spawned some counter-productive (in terms of job-related learning) behaviour patterns. For example, in-depth interviews unveiled pockets of disenchantment and anxiety. Not surprisingly, this tendency was strongest among novice and untenured teachers. Consistent with Fair's study (1975), one beginning teacher gave loneliness and fear of being judged incompetent as the major reasons for her anxiety. "And it didn't help to be reminded practically everywhere you turned that the school you're at is something special, be it meant in a positive or negative way."

Moreover, the interviews and casual observation revealed instances of resignation and an inclination towards institutional introversion. The attitude of resignation can be inferred from repeated declarations, "We'll never [underlining mine] live down the bad press we received--perhaps deservedly so--the first few years."

The inward-looking tendency could be inferred from observations of several new, but experienced, members of the 1975-76 staff. Observed one teacher, "They like to hearken back to some mythical past . . . (Vignette #3)." Mr. Palardy judged that "the staff, as a whole has a 'ready stance' (so far as the undertaking of novel learning ventures goes)." Later in the same interview, Mr. Palardy qualified his initial response. He confided that "perhaps the pendulum had swung to the stand pat position." Accordingly, he planned to bear this situation in mind when recruiting replacements.

A third observer offered an analysis of the composite stand pat and rest-on-your laurels syndrome: "They have a tendency to substitute rhetoric for reality, meetings for action" (CF. Vignette #10).

Adult learning theory, which is reviewed in Chapter II of this study, suggested that life attributes such as gender, age, educational level, life style (including leisure activities), and orientations to learning predispose individuals to respond in certain ways to stimuli in the environment. But, as Stebbins (1975) has reminded us, learning responses are not entirely predictable from such attributes. Rather, Stebbins argued, learning responses are conditioned by the learner's objective and subjective evaluations of the situation in which he finds himself. Stebbins' argument is graphically borne out in the following finding regarding the distribution of male and female teachers at Mossdale Junior High School (Table III, pp.83-84). From a strictly nomothetic standpoint, the disproportionate ratio of males to females (approximately 3 to 1) may not have any significant implications for continued learning. Yet, as one female staff member saw it, this kind of ratio "which is the exact reverse of the situation in elementary schools (objective evaluation), has the effect of saying that only some women are good enough to teach at the secondary school level (subjective evaluation)." Another woman teacher lamented that "in a male-dominated work world (objective evaluation), only a few of us feeble creatures dare to aspire to the higher offices . . . and we have to make our own breaks, you'd better believe it (subjective evaluation)." Still another female teacher of approximately the same age, experience, and educational qualifications, was "frankly glad that this year we have

a man principal, someone who can bounce a kid off the wall, if the kid gets too lippy . . . She hastened to add, however, "Oh, no, I have never seen Mr. Palardy do that (objective evaluation), but just the threat of it makes the kids mind. This allows me to concentrate on teaching (subjective evaluation)."

The following random list gathered through recollections, casual conversations, and protocols illustrates further the subjective and perhaps concomitantly, highly idiosyncratic, nature of the learning needs of Mossdale Junior High School teachers:

This is my first year of teaching. I'm sure glad I have friends and relatives in the business.

You may not believe it, after all these years (23) and all these kudos I've received in all these arts festivals, and all these theatre experiences I've had, and . . . that I still don't have a formal degree, far from it. I suppose I've been too busy doing the things I like to do.

I half thought of going for my masters degree, but I couldn't bear the thought of all that red tape. Besides, I'm nearly forty.

I returned to teaching after I had raised my family. That was an eye opener.

Serving on the Division P.D. committee gave me a lot of insights about human beings. Now I no longer brag about being human.

I really look forward to my Thursday evening classes at the Faculty this year. The prof, the whole class . . . it's a stimulating break from the hum drum of the classroom. I must admit though that I'm looking forward to the higher pay I'll receive after I get my second degree.

Additional learning-related needs of Mossdale Junior High School teachers may be discerned by examining Table IV. It is noteworthy that all but two of the thirty-five teachers who responded to the questionnaire on attitudes towards selected dimensions of continuing education strongly believed that they had sufficient

TABLE IV

Frequency Distribution of Teachers of Mossdale
Junior High School by Disposition Toward
Selected Statements Pertinent to Job-
Related Learning

Dimension	Disposition		
	(-)	(-/+)	(+)
(a) Do you make a special effort to become informed about new ideas and practices in your field?	3	7	25
(b) Do you display persistence in sticking with a self-planned learning activity even if persons on whose support you have to count are "cool" to your plan?	7	11	17
(c) Do you feel that you have sufficient freedom to initiate innovative programs in your class?	-	2	33
(d) Do you feel that the superintendents department encourages you to try new ideas and programs?	4	9	22
(e) Is your attitude toward continuing education one of open-minded optimism?	1	7	27
(f) Are you willing to extend your present level of professional performance--even if this requires an extra investment of time and effort on your part?	1	4	30
(g) Are you willing to undertake a novel continuing education activity--even if you feel there is a 50-50 chance it may fail? (Your response should not apply to poorly planned programs.)	4	12	19
(h) Does your selection of continuing education activities reflect careful thought about the overall needs and priorities of your situation?	1	4	30
(i) Do your coffee breaks and other informal encounters in the school include conversations about new developments in curriculum and instruction?	5	17	13

TABLE IV (continued)

Dimension	Disposition		
	(-)	(-/+)	(+)
(j) Do you consult non-teaching, non-professional sources to assist you in carrying out classroom tasks?	<u>12</u>	<u>19</u>	<u>4</u>
TOTALS	8	92	220
(N=35)			

Legend:

(-) refers to unfavourable disposition;

(-/+) refers to an ambivalent disposition; and

+ refers to a favourable disposition towards a given statement pertinent to job-related learning.

autonomy to initiate innovative programs in class. This finding squares with the findings from studies reviewed by Sergiovanni and Carver (1973). This review singled out autonomy and recognition as important needs of teachers, in particular, tenured teachers.

Two other findings in Table IV (See #'s "f" and "h".) would appear to corroborate classic participation studies reviewed by Tough (1967). These studies suggest that professionals are willing to invest heavily in such commodities as time, effort, and money if they perceive that such investment will lead to increased professional competence, more specifically, to practical solutions for pressing everyday problems.

CHAPTER V

HOW TEACHERS RESOLVE THEIR JOB-RELATED LEARNING NEEDS: AN ANALYSIS OF ILLUSTRATIVE LEARNING EXPERIENCES

In Chapter IV the major kinds of factors that impinged on the job-related learning of teachers of Mossdale Junior High School were identified and analytically described. Subsequently, reflections on encounters with interviewees suggested that two additional kinds of forces--random experiential, school, and participant training, on the one hand; and leisure-time activities, on the other hand--would bear on the process by which teachers resolve their autonomous job-related learning projects. Accordingly, the purpose of the first part of this chapter is to examine the validity of these serendipitous observations. The purpose of the second part of this chapter is to investigate the relationship between the various kinds of environmental/situational and personal/background factors and the process by which teachers resolve their job-related learning needs.

I. RELATED LEARNING EXPERIENCES: THEIR INFLUENCE UPON AUTONOMOUS LEARNING PROJECTS

The various kinds of learning experiences that were exemplified in this study are summarized in Figure 2. Inspection of this figure shows that two major criteria were used to classify these activities--degree of apparent conscious planning--(whether by the learner himself or by others) on the one hand, and degree of direct learner input into the conscious planning of learning, on the other hand. The

discussion which follows immediately below defines these learning experiences more explicitly and shows how they impinged on the type of learning that was the focal point of this study--autonomous learning.

Continuum of learner input into the design of the learning activity

High (unconscious)	High (conscious, rational)	Low
-----------------------	-------------------------------	-----

I. Random experiential

II. Systematically Planned

A. Autonomous

B. Participant Training

C. School

FIGURE 2

Taxonomy* of Learning

*This taxonomy was derived from the work of Bergevin (1967), Tough (1971), and Dave (1975).

Random Experiential Learning

This kind of learning may be identified by one or more of the following features: absence of apparent planning or purpose-setting, absence of a professional educator (whether self or other) to guide the learning activity, and most particularly, the lack of awareness on the part of the learner that learning is actually taking place (Bergevin, 1967). Applied to teachers, it is the kind of learning

that occurs while they are coping with daily problems, for example; devising an assignment to meet a unique need, controlling the noise level in a classroom, voicing a controversial opinion at a staff meeting, and responding to constructive criticism by a peer.

Indirect evidence suggested that instances of random experiential learning had significant linkages with the different phases of more deliberately planned learning projects. In-depth interviews revealed that in some cases, this kind of learning served a sensitizing function, pointing teachers to a need to resolve recurring concerns or problems, (for example, how to handle class discussions involving controversial issues). There was also evidence to suggest that reflections on instances of opportunistic learning in teachers' backgrounds influenced the design of their subsequent learning projects. For example, in developing a unit on map reading for his social studies class, one teacher appropriated the techniques that he found especially helpful (simulation) in enabling him to "master the mysteries of aerial perspective" in a pilot training course he had taken.

Systematically Planned Learning

A second broad type of learning that was exemplified in this study was systematically planned learning. As the name suggests, this form of learning is more purposive than is random experiential learning.

Systematically planned learning may take several forms. One form, school learning, is characterized by a leader-follower relationship. Applied to teachers, this form of learning

characteristically occurs at a university or community college and is normally taken for credit towards a degree or diploma.

Another form of systematically planned learning is participant training. A vital element in this form of learning is that every individual in the program is obliged to participate actively in a given learning experience and, in so doing, to assume some responsibility for its success.

To unveil possible links between school and participant training learning and another form of systematically planned learning was the focus of this study, that is, autonomous learning, a number of post hoc evaluations were conducted. The cue for taking this measure came from an analysis of responses to a request which was made to interviewees to specify their "most gratifying" and their "most trying" learning experience, respectively, during the 1975-76 school year. Findings relative to this analysis are summarized in Table V.

Interestingly, it was found that fourteen of the nineteen teachers who were interviewed intensively reported autonomous learning as the type of systematically planned learning that was most gratifying to them; meanwhile, an approximately equal number of teachers in this group, fifteen, reported participant training type of systematically planned learning that was the most trying to them. These findings begged the question, what reasons or factors help to account for the nature of the satisfactions afforded by the various kinds of systematically planned learning? Analysis of available evidence yielded some plausible explanations.

TABLE V

Frequency Distribution of Subjects' Satisfaction
Towards Different Forms of Systematically Planned
Learning

Nature of Satisfaction Afforded	Systematically Planned Learning				Total
	School Type	Participant Training	Autonomous	Other	
"Most Gratifying Experience"	1	4	14	0	19
"Most Trying Experience"	0	15	0	4	19

The reasons why interviewees named their autonomous learning experience as most gratifying experience are explored later in this chapter. For present purposes, and at the risk of stating a tautology, suffice it to note that underlying each instance of autonomous learning was the goal to solve a self-selected, job-related learning problem.

Self-directed goals were also the bases for gratification in one instance of school learning and three instances of participant training learning experiences. The teacher who had enrolled in the school-type course (Education 43.522--Special Learning Disabilities) explained her motivation to do so in the following verbatim account:

When I face a class, I see three kinds of groups (in terms of ability and achievement orientation)--fast, average, and slow. The first two I've been able to handle without too much trouble. But as far as the lower group goes, I have to rely on someone else's services. So I studied the calendar and came up with this course. . . . It [the course] gave me, shall we say a clothesline on which to hang my ideas. The professor did such a good job,

that everything fell into place. She has an elementary teaching background. So she went into the process of learning and. . . . This kind of information enabled me to tailor my instruction in line with their [slow learners'] needs.

The reason(s) why several of the interviewees named a participant training experience, specifically the workshop on First Aid, as their most gratifying experience were, likewise, traced to unresolved individual problems. In the words of one of the sponsors of the First Aid Workshop, "It was one of the most useful things our Professional Development Committee has planned in my three years at Mossdale." Further probing revealed three kinds of pressures that spurred the motive to learn the rudiments of first aid: at the system level, a memorandum from the Kildonan North School Division that outdoor education programs would not be approved unless sponsors could demonstrate competence in First Aid; at the school level, the desire for protection in the event of mishaps during annual field trips; and, most immediately, a case where "this student almost died in a freak classroom accident because the teacher involved did not know simple A.R. [Artificial Respiration] procedures."

As already noted, fifteen of the interviewees named a participant training type of learning as their most trying learning experience in the 1975-76 school year. Both logic and related research (Douglass, 1970; McLoughlin, 1971) pointed to the lack of learner identification with a given problem as a probable reason for the observed disaffection. Indeed, there was evidence to support the lack of goal identification hypothesis insofar as learning goals connected to team building were concerned. Witness, as proof, this sample of unsolicited comments overheard immediately before or during

the March, 1976, team building session: "It was their priority, not ours."; "Not another touchy, feely session."; and "If you think this is a grassroots happening you are witnessing here, then you obviously don't know our administration."

On the other hand, there was evidence which suggested that where teachers quarreled with participant training learning experiences connected with the Development Reading Program, they did so in the main for reasons other than disagreement with general Program goals. A reconstruction of the origin of the Reading thrust revealed that a variety of environmental and situational presses (these were detailed in Chapter IV) predisposed teachers to acknowledge at least tactily that the Program was a good thing for teachers as well as for students.

The reconstruction further revealed that "good thing" had different meanings for individuals or groups on the staff. In the eyes of one teacher, "good" meant obtaining needed services without financial or psychic cost to the beneficiary:

Several of us (naively, it now appears) saw it as a gift. We were to get another body, with the school division picking up the tab. Gord had done it again, we thought . . . so we didn't consider the implications any too closely. What's this saying about never looking a gift horse in the mouth?

The "gift" in this instance was a reading consultant. According to the proposal for funding that was submitted to the superintendent of the Kildonan North School Division in April, 1975, the primary function of the consultant was "to work with content area staff members to assist them in organizing and developing developmental reading strategies within subject areas." A secondary function of the consultant was also specified: "diagnosing students, working with complex readers in a tutorial program and providing

liason with feeder schools."

Previous experience by the researcher in pilot testing a similar reading program at a high school in the same school division pointed to the likelihood that teachers would be more receptive of the consultant if he were to perform the secondary rather than the primary function. The evidence supported the predicted behaviour. To be sure, constraints of time, not to neglect the consultant's bias* have contributed to some degree to the observed deflection from the primary goal of the Development Reading Program, as this goal was espoused in the proposal for funding mentioned earlier. Whatever the reasons for this, the finding in this study is consistent with Lortie's study (1975). He found that where teachers are compelled to choose between supposed long-run gains (in this case, self-sufficiency in handling all but the most severe reading problems) and immediate gratification (in this case, being relieved from performing unaccustomed roles), teachers would invariably opt for payoffs they perceived as imminent.

The following retrospective comment demonstrates even more graphically than did the first two illustrations that the Developmental Reading Program had individual and covert, in addition to concensual and overt, meaning for some teachers:

*By his own admission, the consultant was placed in Mossdale Junior High School under "false pretenses":

I came here [from New Brunswick] expecting the Child Guidance Clinic to put me in an elementary school; my graduate work having been done in this level. Can you imagine the shock I received on arriving here a short bit before school opening and being advised (a) that I was being placed in a junior high school and (b) that I would be expected to do staff development work?

When we negotiated our role (I don't like group guidance; it's obsolete) I felt we [the two guidance teachers] could each become somewhat of a resource teacher answering the personal and social development needs of children. In other words, it was a trade-off [taking on an expanded role, thereby justifying the retention of a second counsellor].

As may be inferred from the comment below, the hoped-for benefits failed to materialize. To their chagrin, the more avidly the counsellors pursued their private aims, the more they allowed teachers to temporize on or displace--perhaps unwittingly--the formally specified goals of the school.

We made wrong assumptions about the staff's commitment to the program. Gradually we began to realize that we were doing other than supervisory work. The staff, by and large, let us do the lion's share of the tutorial work. Under these circumstances, the tutorial began to lose credibility. We realized that we were being used a lot. But I'm not bitter because I made the decision to get fully involved.

There are two questions here which cannot be answered from available evidence: first, to what extent could the observed negative attitude towards the Developmental Reading Program be attributed to the implementation process; and, second, to what extent could this attitude be traced to goal fragmentation. The literature suggested that dissatisfaction with a learning experience can be explained by either or both of these factors. Wacaster (Charters and others, 1973) identified several typical, albeit often unanticipated, consequences of the failure to reconcile competing goals--disenchantment, assimilation to the familiar, and even outright disengagement. Kritek (1976) traced similar kinds of negative concomitants to implementation style.

The remaining four respondents (see Table V) named committee and staff meetings as their most trying learning experiences. A

newcomer to the school gave lack of commitment as a partial reason why she dreaded committee meetings:

You must have noted the lack of involvement. . . . Not like last year. We'd have to order supper. But here everyone is afraid to hurt anybody else. I dreaded those meetings. I used to get headaches. I'd get so relieved when I came home to my apartment. At least, I'd hear noise there.

Typical reasons that were given for regarding staff meetings as unproductive affairs, insofar as continuing education purposes are concerned, include late publication of agenda, "hidden agendas," insufficient time for debating issues, and "stacked cards." Constant comparative analyses, however, belied some of these reasons as no more than symptomatic of other priorities, as the blunt response given by one respondent indicates: "You've got to be joking. For me a staff meeting is not a place for p.d., but time to mark papers."

Leisure-time Activities

Indirect evidence from research (Denton, 1974 and Bevis, 1975 and Bergstern, 1977) suggested that there is an organic bond between job-related learning and leisure-time activities. To substantiate or otherwise qualify the nature of the hypothesized bond, insofar as the subjects of this study were concerned, several kinds of data were collected and analyzed.

Using the Leisure Activity Index (Appendix C, p. 201), teachers' leisure-time activities were ascertained. These activities were then grouped into four categories, namely; entertainment, hobby, play, and fulfillment. Entertainment embraces leisure-time activities in which the role of the participant is essentially passive. Leisure activities belonging to this category that were exemplified in the present study

included dining out, attending movies, and attending spectator sports.

Hobby activities are those which a person undertakes not only because he enjoys the activity but also because this activity usually results in a tangible product. The teachers of Mossdale Junior High School used their leisure time for a variety of hobbies, for example; photography, sewing, crafts, raising animals, and restoring antique cars.

Play activities involve action against forces, whether these be forces of nature or the moves of an opponent. Play activity, unlike hobby activity, yields no material results; its chief satisfaction derives from the challenge it provides and for the sense of accomplishment it may bring. Teachers of Mossdale Junior High participated in a number of popular play activities. Bowling, bridge, and curling were examples of indoor play activities; meanwhile, canoeing, hiking, and hunting were examples of outdoors type play activities. Flying was one of the more exotic play activities noted.

Fulfillment activities are distinguishable from other leisure-time activities in one major respect; they normally require the individual to give more of him/herself (whether in creative input, or degree of dedication) than would be the case for entertainment, hobby, and play activities. Moreover, whether they are pursued for selfish or altruistic reasons, fulfillment activities normally engender some form of growth; for example, in the depth of understanding of human nature, in improved ability to appreciate a difficult piece of music, or in a greater facility in written discourse. Some of the fulfillment activities carried on by teachers of Mossdale Junior High School during the 1975-76 school year were acting, organizing a social

action group, and reading science fiction literature.

Further analysis revealed that Mossdale Junior High School teachers who completed the Leisure Activity Index tended to shun leisure-time activities of the spectator, or low personal input, variety in favor of leisure-time activities requiring high physical and/or mental input. As shown in Table VI, only approximately one out of five teachers preferred the more passive kind of leisure-time activities. Conversely, approximately four out of five teachers preferred leisure-time activities which permitted varying degrees of active participation. The kind of leisure-time activity that afforded satisfaction to the largest proportion of teachers was fulfillment.

TABLE VI

Relationship Between Teaching Experience and Kinds
of Leisure Time Activities Preferred by Mossdale
Junior High School Teachers

Type of leisure-time activity	Frequency of teachers preferring each type N = 33	Mean years of teaching experience (rounded off to the nearest whole number)
Entertainment	6	3
Hobby	8	7
Play	7	10
Fulfillment	12	10

The serendipitous finding that the majority of teachers who named fulfillment activities as their most satisfying type of leisure-time activity happened to be "seniors" either in age or status

(whether assigned or earned) led to the speculation that, among other demographic variables, age would explain the distribution given in Table VI. On the other hand, enrollment data from a continuing education program seemed, on first glance, to invalidate this hypothesis.* However, insights from the literature suggested a way to reconcile the apparently contradictory data. Interpersonal theory (Sullivan, 1953; Lippert and Fox, 1971) suggested that learning may be viewed as the search for relief from tensions brought on by the expectations of society. From this theory, it could be deduced that novice teachers would be more susceptible to frustrations resulting from inability to cope adequately with the expectations of society than would their more seasoned counterparts. Personality theory was, likewise helpful in making sense of the observed differential preferences for major kinds of participation in leisure-time activities. According to this school of thought, human beings develop from a state of passivity in early age to an increasing state of activity with advancing experience [emphasis mine]. This is what Erikson (1950) referred to as self-initiative and Brofenbrenner (1976) and (Dave, 1975) as self-determination.

The competence motive theory pointed to yet another variable that may explain differential preferences by teachers in the use of

*In direct contrast to the findings of this study, entertainment brand courses, for example, travelogue and illustrated lectures, tended to appeal most to senior citizens. Hobby activities had a more notable sex than age bias, insofar as enrollments were concerned. Play activities tended to be the preserve of persons between twenty-five and thirty-five years of age. Enrollment in fulfillment types of courses was too negligible to permit the discerning of age biases.

their leisure time. White's research (Sergiovanni and Carver, 1974) led him to conclude that the desire for mastery over widening job demands (White rightly observed that the appreciation of such demands is influenced to some extent by years of experience.) motivated professionals to seek out opportunities for continuing education.

A synthesis of insights from these theories, together with recent research by Boshier (1974), to the effect that age may be viewed as an intervening (or conditioning), rather than an explanatory (or, independent) variable, suggested a relationship between years of experience in teaching and leisure-time preferences. Reference to Table VI (right hand column) shows that the expected linear relationship (from outer-directedness to inner directedness) was generally substantiated.

The findings that teachers who ranged widely in years of experience named each of the main types of leisure-time activities as their "favorite" suggested that they perceived these activities to have attributes that could satisfy personal and/or vocational needs. To test this hypothesis of inherent qualities, two kinds of analyses were performed. First, dimensions of satisfaction (see Leisure Satisfaction Check List in Appendix C) were related to each of the different types of leisure-time activities described earlier in this section. For the purposes of this analysis, the dimensions of each of the eight major attributes were dichotomized. The results of this crosstabulation are summarized in Table VII. Inspection indicates general support for the common sense hypothesis that teachers will choose leisure-time activities that they perceive to have inherent in them the potential to resolve their job-related problems. Closer

TABLE VII

Relationship Between Selected Dimensions of Satisfaction and Four Major Types of Leisure Activities

Major types of leisure-time activities	Dimensions of Satisfaction												Total				
	I Mental relaxation		II Absence of relaxation		III Mental involvement		IV Affiliation		V Group		VI Alone			VII Mental involvement		VIII Absence of relaxation	
Entertainment (N=6)	1	1	1	2	0	3	0	1	1	2	0	1	2	4	3	2	24
Hobby (N=8)	3	1	1	0	2	3	0	2	1	0	2	6	6	4	7	0	34
Play (N=7)	5	0	1	2	0	7	1	3	0	7	1	3	6	6	5	0	40
Fulfillment (N=11)	5	4	5	1	6	4	2	5	3	6	0	1	6	11	10	0	63
	14	6	8	5	8	17	3	11	5	20	1	7	4	25	2	161	
Total	20		13		25		14		25		8		29		27		100
% of Total	12.4		8		15.5		8.6		15.5		4.9		18		16.7		

inspection helped to specify the nature of the observed relationship. Comparison within attributes warranted the following omnibus, and tentative, conclusion: teachers of Mossdale Junior High School chose leisure-time activities which individually or severally afforded them mental relaxation, solace (or privacy), release from job concerns, a stimulating challenge, a vehicle for self-expression, scope for active participation, a source for satisfying hedonistic appetites, and an outlet for personal needs.

Observational evidence corroborated or further specified some of the more interesting inferences about teachers' reasons for electing certain leisure-time activities in preference to others. It was observed that three of the six teachers who listed an entertainment type of activity as their favorite leisure-time activity in the 1975-76 school year also happened to be members of the same interdisciplinary team. Earlier, in the non-participant stage of the study, one member of this team offered this pertinent information:

We meet socially quite often at one of our homes. We like each other's company . . . and this helps to smooth out rough spots in school . . . We try not to talk "shop" at these gatherings, but one way or another we always manage to get into it [talking "shop"].

Even a cursory analysis of the quoted response indicates that at least two motives influenced teachers' election of entertainment type leisure activities; namely, to escape from pressures of work, and to solve problems arising at work.

It was further observed that five of the eight teachers who listed a hobby as their favorite leisure-time activity taught either home economics or industrial arts. Although no direct evidence was found to this effect, it seems reasonable to assume that "shops"

teachers would be virtue of their vocational orientation be partial to leisure-time activities which result in a tangible product. Whether or not these teachers also appreciated hobby activities for job-related reasons could not be ascertained from available evidence. Interestingly, however, two of the "non-shops" teachers who favored hobby over other types of leisure activities did so for job-related reasons. A music teacher decided to learn how to repair instruments because he "frankly got tired of postponing important lessons because of downed instruments. . . ." Meanwhile, another teacher decided to take a serious interest in making plant hangers when she found this hobby to be instrumental in building a trusting relationship with her class.

Judging from inferential evidence (see Table VII), it would appear that play activities would not have implications for on-the-job problems insofar as teachers of Mossdale Junior High School were concerned. There was, however, direct evidence that belies this conclusion. The teacher who participated in flying initially took this activity up for intrinsic reasons. Somewhat later, he found that flying provided him with insight (in this case aerial perspective) relative to his job as a geography teacher.

It is perhaps significant that nine of the twelve teachers who preferred fulfillment over other forms of leisure activities had also recently taken on new professional roles; for example, principalship of a junior high school, tutorial program coordinator, and team leader. Noteworthy, too, in this connection was evidence gathered for other purposes in this study; specifically, four of the twelve teachers who showed their strongest preference for fulfillment forms

of leisure volunteered verbalizations that can be summarized in the slogan, "New customs breed new demands."

II. AUTONOMOUS LEARNING PROJECTS

The crucial feature which distinguishes autonomous, or independent, study type of learning from other forms of systematically planned learning is the degree of learner input involved. In this form of learning, the learner assumes the major responsibility for planning and implementing a series of activities that are designed to meet self-perceived needs.

Related literature (Johnstone and Rivera, 1966; Tough, 1971; and Dickinson, 1975) indicates that autonomous learning is a phenomenon of growing interest among the various professions. While no attempt was made to gauge precisely its occurrence vis-a-vis random experiential, leisure-time, and other forms of systematically planned learning, autonomous learning was found to be the most popular form of learning insofar as this study was concerned. Each of the nineteen interviewees recalled having participated in at least four (and an average of five) learning projects that occupied a minimum time of seven hours and that were intended to meet a clearly identified job-related learning goal. There were indications, moreover, that the number of autonomous learning projects itemized might have been greater had it been practical to give interviewees more time and prompting to recall such activities. Indeed, the majority of the interviewees were surprised at the extent of their autonomous learning activities during the 1975-76 school year. Several of the teachers indicated by their initial reaction that only those learning activities that bore credit

qualified as instances of continuing education. One teacher remarked, "I finished my B.Ed. a few years ago, so I don't know if I'm the right person for your study." Another asked whether or not reading professional literature would be considered a bona fide form of continuing education. Still another teacher was worried that he could not contribute to this study "in view of the fact that we [i.e., the school] had only two p.d. [professional development] days. . . ." Further, this same teacher "happened to be sick during the S.A.G. [Special Area Group] conference." The kinds of limited conceptions of continuing education found in this study were congruent with research by others who recently studied the participation phenomenon in professional continuing education (Tough, 1971; Fair, 1973; McCatty, 1974; and Kowalchuk, 1974).

Autonomous learning projects undertaken by teachers of Mossdale Junior High School in the 1975-76 school year varied extensively in such dimensions as goals (or intended outcomes), and modes of resolving job-related learning needs. These dimensions are illustrated and discussed below.

Goals (Intended Outcomes)

Information about job-related learning goals of teachers was secured, in the main, through indepth interviews. Specifically, teachers were asked to recall autonomous, job-related learning projects they had undertaken during the 1975-76 school year. Where necessary, probing questions were used to ascertain as precisely as possible the intended behavioural outcomes of each learning project named. Analysis of the data revealed that the learning projects of teachers

could be placed on a continuum from those intended to have immediate classroom application to those intended to gratify perceived future needs. Illustrative examples of these projects, classified according to intended outcome, are given in Figure 4.

A cursory comparison of the approximately eighty self-initiated learning projects reported (including the nineteen representative types of projects detailed in Table VIII) indicated that the proportion of projects having immediate implications for good role performance was significantly higher than that for the other two classes of projects combined. An estimated four out of five projects recalled by the interviewees could be classed as "having immediate application to the job." Not surprisingly, the direction, if not the magnitude, of the observed relationship was consistent with recent empirical research. Tough (1971) and McCatty (1975) found that approximately two out of three subjects in their study undertook autonomous learning projects that were occupationally oriented. Several researchers (Brim and Tollet, 1964; Adams, 1971; Devore, 1971; Kozol, 1972; Fair, 1973, Kowalchuk, 1975) provided corroborative evidence in support of the conclusion that teachers tended to prefer in-service learning opportunities that were work oriented.

A further comparison revealed that projects having applicability to the job at hand were distributed more or less proportionately among interviewees varying in years of experience. In the light of direct experience and related literature, this finding was not surprising. It could be expected, as Fair's research (1973) revealed, that neophyte teachers would spend much of their time, perhaps the major portion of it, in learning content they had to teach

to their class; for example, a unit on Canadian American relations for a social studies class. Moreover, as Rubin (1971) has reminded us, pre-service training cannot equip neophyte teachers to cope with the myriads of methodological problems that confront them when they first step into the classroom. In fact, Rubin was adamant that teachers cannot learn how to teach until they begin to work with children who are learning: ". . . it is in these first interactions that a fundamental sense of purpose and method is born." It was just such an "interaction" that prompted one of the neophytes interviewed in this study to undertake the project on handling chronic absenteeism.

Several theories helped to explain why the more experienced teachers undertook projects which they perceived to have important but not pressing implications for classroom practice. Wallen (Devore, 1971) and Finch (1969) hypothesized that the need for continuing professional education would be heightened in instances where changes introduced into curriculum, organizational structure, and instructional methods are so far-reaching or novel that teachers cannot cope with them by using existing competencies. Lowenthal and others (1975) chose to study adults who were in the process of changing their careers. They based this decision on the premise that anticipation of an impending transition often serves as a stimulus to examine and possibly to re-orient goals and aspirations, and to reassess personal resources and impediments in light of the probability of their attainment.

Through probing questions, it was discovered that the first-mentioned example of a learning project, adding an affective dimension

to science teaching, was a response to the Kildonan North School Division Goals Statement. As pointed out earlier in this study (See p. 87), the Goals Statement mandated a complement of five broad goals, including the goal of personal and social development. Meanwhile, the decision to learn how to deal with noncompliance was traced to the team leader's frustrations in meeting frank, if unwarranted, criticisms of previously established Team policy by an experienced teacher new to Mossdale Junior High School. Similarly, the numerous projects designed to learn how to teach vocabulary associated with each major discipline were found to be responses to the school's thrust to improve pupils' overall reading competencies.

Further analysis of the learning projects numbered 3 to 7 (See Table VIII) revealed that they were reactions--some perhaps reflexive--to forces external to the learner.

A similar analysis of, projects numbered 8 to 11, which teachers perceived as important, but not of pressing significance, revealed that they were motivated approximately equally by personal needs and forces deriving from the environment/situation. Teachers who undertook "important, but not pressing" types of projects did so to solve idiosyncratic personal needs as much as they did to solve emergent job-related problems. For example, the teacher who undertook to learn how to evaluate library services rationalized his decision in these terms:

I knew I was in it tough; for I had heard mutterings. . . . This was my first go at running a library and I didn't want the same kinds of stories circulated about me when I leave. If I go down, it won't be for lack of knowing what a good library should do for a school.

The teacher who volunteered to re-design the industrial arts facility

did so both as a test of his ingenuity and as a way to remedy what he believed was an intolerable teaching situation.

I thought we should be able to build a room within a room, a place to corral students . . . so that we can chit chat and hear each other, which is not now possible because of increased enrollment.

The teacher who undertook to learn how to teach voyageur songs was responding not only to the call of professional duty but also to a quickened sense of nostalgia:

How I remember the good times we had when I was their [the students'] age. We'd sing practically all the time. . . . We'd sing as we paddled down the Roseau River. There have been hints like "maybe the French teacher could teach them voyageur songs for the canoe trip." And even though I haven't been asked directly yet, I decided to get ready, just in case.

Teachers of Mossdale Junior High School also pursued learning goals that were only tangentially related to their day-to-day classroom performance. As reference to Table VIII reveals (p. 134) included in this broad type of goals were several sub-types; those having long-run methodological or curriculum implications (projects numbered 12, 13, and 14), those related to teacher welfare (project number 15), and those that could be construed as meeting highly individualized self-actualization needs (projects 16, 17, 18 and 19). Presthus (1962) might have referred to these goals as latent goals. As distinct from manifest goals, which are directly related to the productivity of an organization, latent goals are directly related to the needs dispositions of individual members and only incidentally to the aims of an organization.

Comparing the relative distribution of teachers according to their major learning goals, it was found that "important but not pressing" goals, and even more so goals "of eventual significance"

tended to be the prerogative of the more experienced teachers. In one notable exception of this tendency (See project 18), a neophyte teacher admitted to pursuing an interest stemming from her experience in student government at both high school and university: I have always been of the opinion that people spend too much time getting down to "brass tacks."

The observed tendencies are consistent with the literature. Gould (1975) showed that some adults feel psychologically different about themselves at various stages of their life. Boshier (1977), hypothesized that adults have two major kinds of needs--deficiency needs and growth needs. It was, therefore only logical to expect that teachers would seek to resolve growth-related problems only after they had met deficiency, or coping-related problems. Similar reasoning explains why the resolution of growth needs was in almost every instance related to extensive experience. Liveright (1968) stated that inherent in adult education are several classes of goals, including the goals of professional competence and self-fulfillment. He further specified an over-riding goal of adult learning--the mature personality. By this Liveright meant a person who is able to live creatively with

. . . persistent paradoxes of human existence: stability and flexibility; balance and activity; conviction and uncertainty; steadfastness and tolerance (p. 65).

Investigators of teacher continuing learning behaviour offered parallel explanations. Stillwell (Devore, 1971) asserted that there are many levels of professionals, with each level implying fairly specific learning needs. Sergiovanni and Carver (1975) cited empirical evidence that corroborates Stillwell's contention. They

TABLE VIII

Illustrative Autonomous Learning Projects on
Teachers by Intended Outcomes*

-
- A. Goals perceived to have immediate applications:
1. To develop a unit on Canadian-American relations.
 2. To handle a case of chronic absenteeism.
 3. To update knowledge on textiles.
 4. To manage a case of non-compliance with a Team policy.
 5. To graft a theatre orientation onto a creative drama course.
 6. To teach content-based vocabulary.
 7. To incorporate affective goals into science teaching.
- B. Goals perceived as important, but not of pressing significance:
8. To derive criteria for evaluating library services.
 9. To re-design an industrial arts facility.
 10. To construct an annotated bibliography.
 11. To teach voyageur songs suited for a planned canoeing field trip.
- C. Goals perceived to have eventual significance:
12. To determine kinds of teacher behaviors which induce "smart alec" responses to students.
 13. To design a Junior High School mathematics course for the Department of Education.
 14. To devise strategies for implementing broad curriculum goals.
 15. To produce a working paper on teacher transfer.
 16. To prepare an oral presentation for a seminar in reality therapy.
 17. To collect a list of fantastic words.
 18. To develop mechanisms for expediting business at staff meetings.
 19. To establish a set of criteria for judging entries in a science fair.
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*For stylistic and ethical reasons, many of the original statements regarding intended outcomes were edited.

found that the need for recognition was significantly stronger among the more experienced than among novice teachers.

Learning Modes

Mode may be defined in a number of analogous terms. In its dictionary sense, it refers to a manner or way or method in which a thing is done. In its statistical sense mode refers to the most frequent set of measurements. For the purposes of this discussion, mode combines elements of each of these meanings; it signifies an inclination on the part of a teacher to utilize different human and/or non-human resources to acquire job-related skills, knowledge, or attitudes.

Analysis of interview data indicated that teachers of Mossdale Junior High School who planned their own learning projects in the 1975-76 school year used three main modes of learning--human, non-human, and mixed. A teacher was deemed to be inclined towards a human mode of learning if he relied to an arbitrarily set minimum of 66% on one or another kind of human resource to meet his perceived professional needs. Meanwhile, a teacher was deemed to be inclined towards a non-human mode of learning if he relied to an arbitrarily set minimum of 66% on non-human resources to meet his/her professional needs. Finally, a teacher was deemed to be inclined towards a mixed mode of meeting his/her professional needs if he made approximately equal use of human and non-human resources. Representative examples of each of these modes of learning are discussed below.

The teacher who undertook to learn how to evaluate library services (see learning project 8, (Table VIII) exemplified the "human"

mode of learning. Following consultations with his principal and division library supervisor, this teacher arranged a series of meetings that took place on a rotation basis at the schools of fellow librarians. By mutual agreement, the host librarian was obliged to coordinate the group's learning activities; for example, to set the agenda, direct the kinds of preparatory reading each participant was required to do, arrange for appropriate resource personnel, and conduct an informal evaluation. "The thinking behind this scheme was bafflingly simple" explained the librarian.

We knew each of us had not only insights but important contacts that could contribute to solving our mutual problem [deriving relevant yardsticks for evaluating local school library services], so we decided to pick each other's brains.

A clearcut example of a learning project in which a teacher made extensive use of non-human resources was learning project 16 (Table VIII, p. 134) to prepare an oral presentation for a seminar in reality therapy. The following excerpt from an interview with the teacher who undertook this learning project both demonstrates and justifies her reliance on the non-human mode of learning:

I had read around this subject [reality therapy] in some of my university courses. After I had completed my B.Ed. I tried to keep au current by systematically reading Psychological Review, Educational and Psychological Measurement, Journal of Behavioral Education and . . . But still I wasn't convinced that I could do justice to this request [to conduct a seminar at a Special Area Group Conference]. . . . I'm the kind of person who believes in doing a task well or not at all. I started asking around for other sources of information. Then, quite by accident at our SCAM [School Counsellors Association of Manitoba] meeting, someone mentioned the Glassier Tapes on Reality Therapy. Needless to say, I laid my hands on these tapes. I devoted four beautiful evenings listening to them. They were just what I needed.

In contrast, the teacher who sought to incorporate affective goals into his teaching of science (illustrative project number 7),

exemplified the "mixed" mode of learning. That is, he relied approximately equally on such human resources as fellow participants in the Creativity Workshop and such non-human resources as the reading material he was required to digest in preparation for and as follow-up to the Workshop.

At various stages of this study it was observed that some teachers seemed to rely to a greater degree on one mode of learning than on another. To hazard an estimate, nearly two of three teachers preferred the human, approximately one in five preferred the mixed, and the remaining proportion preferred the non-human mode of learning. If this estimate is reasonably accurate, two related questions may be raised: Why, on the one hand, did such a clear majority of teachers favor the human mode of learning? Why, on the other hand, did such a comparatively small proportion opt for non-human resources to meet their job-related learning needs? Analysis of available evidence yielded several plausible answers to these questions; logic and deductions from relevant theory provided further explanations.

The propensity of Mossdale teachers for the human mode of learning can be attributed, in large measure, to institutionalized cultural factors. As the history presented in Chapter IV of this study showed, right from the outset Mossdale Junior High School embraced the child-centered philosophy. The Band System, comprised of two interdisciplinary teams for each of grades seven, eight, and nine was introduced on the belief that it would be a better vehicle than would the more traditional departmentalized approach in enabling the school to implement this philosophy. Whether or not this belief has been

justified, must remain a moot point here. What is not debatable, however, is the conclusion that the Band System accounts for perhaps the largest portion of professional learning-related interactions between team members. This segment from an interviewee in his second year at Mossdale specified the influence that collective responsibility for a group of pupils (that is implied in the Band System) has on teachers' learning behavior:

Prior to coming to Mossdale, I worked in isolation. Contacts with colleagues were restricted to the occasional department meeting. Now and then we'd exchange pleasantries . . . you know, during coffee breaks, hall duty, and. . . . But seldom did we share insights about kids. Not like here. It's easy to see why this is so--team approach. Each kid is not so much my kid as our kid.

Observational evidence generally corroborated the noted bond between the Band System and reliance of Mossdale teachers on the human mode of learning. However, analysis of the rather frequent in-class interactions and regular noon hour meetings between team members revealed that this relationship held only insofar as questions of discipline, pupil welfare, and extracurricular activities were concerned. Only on rare occasions were team members found to discuss matters other than "housekeeping" concerns. The following evaluations by the Acting Principal serves both to confirm the limited problem-solving scope of the team structure, and to point out some unintended consequences that were traced to teaming.

I've noted only a few sporadic efforts [of learning related interactions about other than housekeeping duties among members of a particular team]. . . . Gord [the vice-principal] had a hand in a fairly successful cross-teaming effort. . . . Donna's Band used a team approach in learning how to teach library research skills. I noticed it not in standard cases but in special areas of the curriculum; for example, extended field studies. But usual day-to-day contacts were intended to keep a handle on students. There was a very definite benefit because teachers heard

what kinds of problems other team members were having and how they were handling them.

.

The base is there for more interdisciplinary work, more cooperative planning, more spilling over to other problem areas; so far this potential has not been reached. What we have in many cases is a tightly knit ball that's hard to work with in terms of professional development. The loyalty and protectiveness that teams develop could have, have had [sic], a detrimental effect upon efforts to get teams to interface* with other parts of the school. East Lansing handled this problem [of insularity] through a deliberate policy of switching members from time to time--which also raises a few problems.

Other, less obvious, though no less pervasive, factors deriving from the school's culture further helped to account for the inclination of Mossdale teachers towards the human mode of learning. As noted earlier in this study (pp. 78-79), accompanying the structural change from a departmental to a Band system, were two functional changes that were conducive to peer learning. The influence of one of these adaptations, the creation of a curriculum consultant role for the vice principal has already in part been documented: some perceived him as an initiator ("Mr. Sigmon put the idea into our head"); others appreciated his acumen for group dynamics ("With Mr. Sigmon at the throttle, things began to perk . . . he always has a game plan."); still other teachers generally valued his breadth of learning ("I'll bet there's no one in this school who reads as widely as Gord does") and counted on his technical expertise ("He's still the one person I

*Where the Acting Principal seemed to point the finger at team structure for the lack of interface with other parts of the school, Schein (1972; 39) attributed this to flights into narrower specialization: ". . . greater differentiation leads to sets of attitudes, concepts . . . that are not easy to share."

turn to when I have questions about teaching.") Observational data confirmed Mr. Sigmon's manifold influence upon the continuing learning behaviour of teachers. While at times they begrudged the amount of energy and time that they felt obliged to expend on "their goals" (meaning administrator's, most particularly, Mr. Sigmon's goals), "not ours," teachers acknowledged Mr. Sigmon to be the major stimulus to their professional and personal growth. During the observation period, he was invariably one of the first persons to be consulted on a variety of learning problems; for example, team functioning, teacher-parent interactions, evaluation procedures, and curriculum design.

The following self-analysis by Mr. Sigmon reveals additional reasons (besides his possessing hierarchical and sapiential authority) why his counsel was so frequently sought:

I try to give them honest criticism, constructive feedback. But, I'm careful not to be too harsh. If they feel badly about say, not being able to make as rapid progress as they (or we) expected, I tell them "Hey, man, Rome wasn't built in a day, was it?" They know (at least the older staff do) that I usually don't stop with a "hand on the shoulder"; I try to provide suggestions, and concrete help.

The search for support (which is implied in Mr. Sigmon's self analysis) and the related need for affiliation were found to be further reasons underlying teachers' apparent preference for the human mode of learning. This need for affect insofar as team functioning is concerned was illustrated in Vignette #5 and in other parts of the ethnography. However, consistent with previous research, there was evidence which showed that this kind of need also manifested itself in interactions other than those between team members. The psyche group phenomenon described earlier in this study (p. 95) is

one case in point; the informal confrontation that prevailed between teachers and other persons both within and outside the behavioural system is another.

According to Symonds (1961) ". . . the motives for most human learning reside in the interpersonal relationship; for it is acceptance and approval that human beings most crave." Schwartz and others (1969) cited empirical studies which demonstrate the universality of the human need for affiliation.

Filip (1969) suggested that confrontation is linked to learning in that confrontation with others helps teachers to become aware of the discrepancy between what they want to do and what they actually do. Stated in Festinger's terminology (1957), confrontation creates cognitive dissonance, which may, in turn, spur learning. In the view of Zalesnik and Moment (1964), interpersonal relationships serve as foci for reality testing.

Dave (1975) developed a related concept (inter-learning) that helped to explain the observed popularity of the human over other modes of learning. He defined inter-learning* as

a process of group learning whereby two or more persons learn from one another through exchanging frequently their roles as teachers and learners without feeling the heavy weight of the teacher-learner hierarchy (p. 19).

Dave explained that in this process, every individual is both a teacher and a learner. The individual can be an initiator, moderator,

*Flechsigg (Dave, 1975) proposed an analogous term, "instructional socialization." By this he meant "those learning processes which are mediated through the imitation of examples and the experience of model behaviour rather than through formal teaching (p. 19)."

contributor, and receiver of educative experiences. Such a unique position of the learner in the setting of this learning style results in eliciting relatively higher motivation for learning. Another attraction of this kind of learning is that it is often effortless and spontaneous. Indeed, in certain situations the processes of inter-learning and living are totally integrated; that is, learning accrues as a by-product of a particular life activity.

Efforts to answer the question why non-human modes of learning were not exploited to the same extent as were human modes for meeting professional learning needs yielded interesting, apparently contradictory, findings. Logic and previous experience suggested that situational factors such as accessibility and relevance to job-related learning goals, to name the most obvious factors, would explain teachers' using non-human modes to meet some of their professional learning needs. To a limited degree, observational evidence supported this common sense thesis. It was found that teachers had access to a wide assortment of "hard" and "soft" ware materials. These materials were available in the school's material resources center or in the staff lounge. Other materials could be readily obtained through inter-library loans or similar expedients. Nevertheless, in spite of the obvious effort by administration (via the librarian) to make materials readily available to teachers for their supposed professional learning needs, the majority of the teachers neglected to take advantage of these opportunities. A random check of the Material Resources Center circulation cards for the 1975-76 school year revealed that only a small proportion of teachers had regularly

borrowed items which had been prejudged to have relevance to job learning in this time span. This finding was confirmed, with interesting elaboration, in an interview with the librarian:

Mr. Glass is always on hand when The Arithmetic Teacher arrives. He likes it because it has exercises for students. The guidance folk sign out Psychology Today quite faithfully. There are no other regular borrowers as far as I . . . except maybe Donna Solls. She's been picking up Reading Journal and other such stuff lately, but. . . . We have maybe two or three steady borrowers. It's interesting because they're the younger and specialist (like music and art) types. You might put Ray and Peter into this category, I suppose. Maybe not, because they have no specific item in mind when they come here. They seem to be interested in a mess of things related to their disciplines--art and music, respectively. It may be a coincidence, but most of my regulars are younger, and specialist, types.

Probing revealed that the "regulars" did, in fact, share a common perspective; they viewed the library, in general, and trade journals, in particular, as one of the most effective resources for coping purposes available to them. More specifically, the teachers of specialist subjects confessed a dependence on non-human resources. They attributed this dependence either to the esoteric nature of their discipline or to their neophyte status. The other "regulars" were tenured core subject teachers; however, they had taken on or had had foisted upon them unfamiliar (or esoteric) roles. For example, the mathematics teacher referred to above felt he needed additional resources to enable him to cope with "today's students, who are so ill-prepared in the 3 R's." By the same token, the other tenured teacher (Donna) gave this plausible reason for her regular trips to the library: "Even though I'm an English teacher, there is nothing in my background that prepared me for this new challenge [that is, as the tacitly acknowledged resident authority on Developmental Reading]."

Besides the regulars, there was another identifiable group of

teachers who exploited non-human resources for professional learning: the browsers. Some of the more salient characteristics of this group may be inferred from the following depiction that was construed from informal conversations with Mr. Bzovy, the librarian:

They come here from time to time and while away perhaps a half hour. Seldom do they actually sign out a book. When I offer to help them to locate an item that they may be interested in, they usually spurn this help with a curt, "Just browsing." I did notice, however, that each tends to browse in a different area of the library. Les, when he comes here, generally heads for the botany section. He claims that he is responsible for suggesting most of the titles in this and in the astronomy collection in our library. Which is kind of interesting, since he's a math teacher. Christine's thick into existentialist lit. I know she's read in other areas, too. Kevin seems to have dropped out of the habit [of browsing]. I understand he's involved in some heavy acting in an ethnic theatre group.

The browsers' reading activities were not, however, confined to an occasional visit to the school library. Observational evidence revealed that they made relatively more frequent visits to the lounge book stand than did other members of the staff. Furthermore, analysis of their responses on the Leisure Activity Index confirmed the hypothesis that browsers would be resourceful, even ingenious, in securing desired reading materials. Some habitually patronized book stores and newstands. Many had during the 1975-76 school year made use of several libraries; namely, Henderson Regional, Department of Education, and University of Manitoba.

It will be recalled that the so-named regulars attributed their reliance on non-human resources in meeting job-related learning needs to situational factors. The browsers, while acknowledging the influence of similar situational factors, tended to give more weight to dispositional factors as reasons for their reliance on non-human modes of continuing education. One interviewee, Christine, rationalized

this kind of reliance as follows:

It's in my blood. I can still hear Mr. Lowden (He was my grade school teacher. Gosh, that's a while back!) reciting, "There's no frigate like a book to carry you leagues away nor any courser like a page . . ." Then in high school, I was shy. (Now I'm reserved.) To get to the point, we had so many marks for class discussion. I just loathed those occasions. (You know something? I still don't relish them, except on a one-to-one basis.) To compensate (I believe I'm using the right jargon from psychology) I tried to excel in my written work. To do that, I had to read a lot more, so. . . .

Other browsers cited analagous background factors in explaining their tendency, when given a choice, to opt for non-human modes of learning.

In the search for reasons about teachers' preferences for the different modes of learning, it was discovered that many of them felt deficient in general reading and library reference skills. Several of these teachers admitted with some embarrassment that they "hadn't cracked a book" for professional purposes (other than classroom texts) since they had graduated. True, the belief, quite prevalent in orthodox educational thinking, that education is preparation for work, may have accounted for some of this apparent foreclosure on the use of non-human resources for professional education. But, as further probing revealed, this foreclosure may also be attributed to a cluster of related factors. The following indicate some of the more common and representative reasons why teachers preferred human over non-human modes for resolving their job-related learning needs.

Until the reading fellow came along and pointed out that you should gauge your reading rate according to the purpose for which you are reading. I read everything at a uniform rate--slow.

.

I'd sit there and practically re-copy the whole reference book. That's why I'm so grateful to Xerox.

.....

The library was always an intimidating place for me. Still is, I don't quite know my way around and I feel like a fool when I have to ask for help.

CHAPTER VI

THE PROCESS BY WHICH TEACHERS RESOLVE THEIR JOB-RELATED LEARNING NEEDS: TOWARDS A PHENOMENOLOGICAL MODEL

Related literature and reflections on direct experience guided a three-stage inquiry into the process by which teachers resolve their job-related learning needs. Specific insights generated by the first two stages of the inquiry have already been discussed contextually in Chapters IV and V. The purposes of this chapter are to synthesize the more critical propositions substantiated in this study, to examine these propositions in the light of theoretical evidence from cognate disciplines, and then to use the resulting insights to advance a phenomenological model of the process by which teachers resolve their job-related learning needs.

I. SYNTHESIS OF MAJOR FINDINGS

Job-related Learning: Major Factors in the Process

The perceptions of teachers regarding the kinds of variables involved in the process by which they resolved their learning needs generally paralleled variables suggested in the initial conceptualization. As graphically presented in Figure 3, teachers perceived learning to be an end product of an interplay among three broad categories of variables. Component A in Figure 3 represents variables deriving from the environment/situation in which the

teacher lives, works and plays. The majority of the variables belonging to this category were substantiated in the non-participant observation stage of the present study. Importantly, however, ethnographic methods helped to unveil additional variations of this category of variables which teachers perceived as influences in the way they identified or resolved their professional learning needs. Teachers perceived leisure-time activities and instances of randomly experienced learning as influences in the design of many of their subsequent autonomous learning projects.

Component B in Figure 3 represents a second broad category of variables which teachers perceived as correlates of their autonomous job-related learning. Here, again, many variations of this category of variables have been noted in the initial conceptualization. But the inquiry brought to light additional manifestations of the influence of personal, background factors on job-related learning. It was observed that some teachers perceived deficiency needs (for example, job security), while other teachers perceived growth needs (for example, subject matter mastery) as more compelling motives for initiating a learning activity. Similarly, teachers differed in their perceptions regarding which previous learning experiences in their background would be the most appropriate means to resolve an emergent learning issue. In this connection, some teachers tended to see traditional modes of learning (for example, enrolling in an evening class at the university) as the only way to accomplish their professional learning goals. Meanwhile, other teachers saw fit to exploit a variety of peripherally related experiences in their background as determinants of their preferred mode of learning.

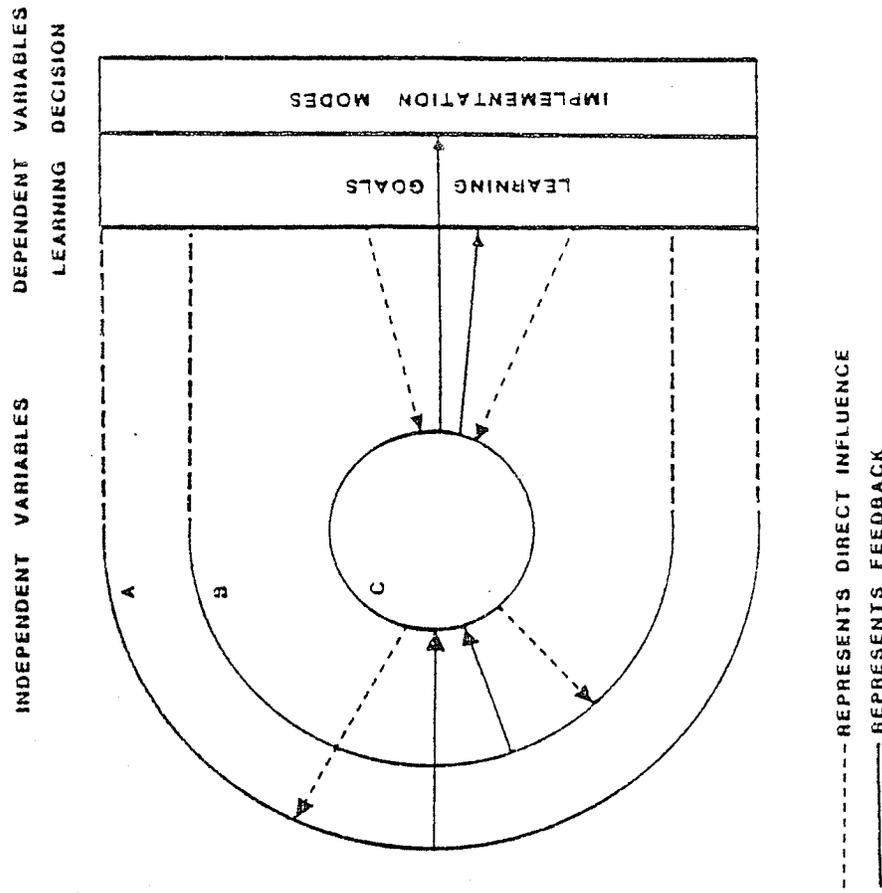


FIGURE 3

Model Illustrating Major Variables Involved in Job-related Learning

Component C in Figure 3 represents a variable whose function it is to interpret (or, evaluate) the meaning which a particular force or constellation of forces has for a learner. For want of a more exact designation, this variable may be referred to as "Interpretive Intervening Variable." The justification for using the term "interpretive" in referring to this component (Component C) is implicit in its function. The justification for using the adjective "intervening" in describing this third major variable, which teachers perceived as having a crucial bearing on their job-related learning decisions, is that this variable intervenes, as it were, between the independent variables (that is, variables deriving from the learner's environment and/or background) and the dependent variable (that is, learning). The designation of "variable" is appropriate inasmuch as this component is, unlike a catalyst in a chemical reaction, itself capable of undergoing a change in its character. As this is illustrated in Figure 3, teachers gave central importance to the "Interpretive Intervening Variable." In so doing, teachers affirmed a generalization that is only implicit in much of the literature on professional continuing education: that job-related learning is invariably an expression of the particular meaning the individual learner ascribes to the sum total of forces which impinge upon him in a given time frame.

Job-related Learning: Dynamics
in the Process

The analysis of teachers' perceptions about the way they resolved their autonomous job-related learning needs also helped to

substantiate and build upon initial conceptualizations about the dynamics involved in the learning process. The more critical generalizations regarding these dynamics may be inferred from a close inspection of Table IX, which is a mercator-like projection of Figure 3. In inspecting Table IX, it should be appreciated that while the entries occupy specific cells in the matrix, this should not be taken to imply a necessary linearity of relationships. It should also be appreciated that the events themselves and the responses to these events are presented in an arbitrarily decided order. This order is intended only to approximate how one particular individual construed selected forces impinging upon him as a need to undertake a specific job-related learning project. In actuality, the dynamics represented in Table IX were not nearly so logical as a cursory perusal would suggest. Evidence from indepth interviews indicated that the process was a complex and idiosyncratic one, involving false starts, unanticipated delays, quantum leaps and other tangential behaviours on the part of the learner in question.

Perhaps the most prominent generalization regarding the dynamics of job-related learning is that it involves a series of phases. Reference to Table IX shows that at least three major phases were evidenced in this study: at the arousal phase a decision to get involved in some learning endeavour (e); at the goal-setting phase, a decision to meet a personal need for growth and recognition by way of producing a bibliography on content area reading strategies (1); and, at the resolution stage, a decision to exploit resources (s) for meeting this particular need.

TABLE IX
Dynamics Involved in Job-related Learning: Concrete Examples

Independent Variables	PHASES		
	Need Arousal	Goal Setting	Implementations
A. Environmental/Situational	<p>a. Department of Education announces grant for innovative curricula.</p> <p>b. Manitoba Teachers' Society proposes 5 week summer tour of Scandinavia.</p>	<p>f. Local newspaper fails return to R's.</p> <p>g. School Division announces winners of Hilroy Bursary for innovative classroom practices.</p> <p>h. Principal wonders out loud that "It might be nice for our school to win such an award."</p>	<p>m. University calendar arrives</p> <p>n. Cost of Living Index shows unprecedented rise.</p> <p>o. N.A.S.T. warns of more teacher cutbacks.</p>
B. Idiographic	<p>c. Cooling season having ended, teacher has time on hands. Yearning for further challenges, further recognition.</p>	<p>i. Teacher's family impatient about his failure to complete the long-overdue project of constructing bookshelves for Jimmy's room.</p>	<p>p. NHL playoffs and the Leafs are really in it this year.</p>
C. Phenomenological	<p>d. Teacher notes grant announcement. Sees it as possible opportunity to satisfy need for action. Maybe an opportunity to improve already positive self-image as "super" teacher.</p>	<p>j. Teacher perceives newspaper report as "provocative, to say the least."</p> <p>k. Teacher sees opportunity to use Department of Education grant to "kill two birds with one stone"; satisfy a personal need (not that the school wouldn't benefit also) and to use award money to hire a carpenter for those shelves.</p>	<p>q. Peers ridicule teacher for attempting to "once again rock the boat."</p> <p>r. Teacher evaluates peer ridicule as so much "sour grapes." Also as support for intention to go it alone on this project.</p>
D. Dependent Variable: Learning Decision	<p>e. Teacher feels impelled to pursue this matter further. "Time permitting of course."</p>	<p>l. Teacher decides to produce a content area reading bibliography, "having served on numerous reading committees and gotten fair appreciation of the problem."</p>	<p>s. Teacher decides to spend the summer in the air-conditioned Elizabeth Dafoe Library, "for that's where the good books are."</p>

Content analysis of the decisions recorded in Table IX revealed another generalization regarding the dynamics behind the process of job-related learning--that learning decisions invariably involve choices between alternatives. For example, at the arousal phase a clearcut alternative might have been the decision not to get involved in learning at all, or to postpone learning, pending more favourable circumstances. However, as this may be inferred from a close analysis of the array of forces which impinged on the learner (more particularly, those forces which the learner construed as meaningful), the learner had no other alternative but to get involved. For, clearly, this particular learner was predisposed to (or, had a need--whether innate or socialized) for, say, self-actualization. The critical questions in this learner's decision-making calculus were not "whether to participate" but "when," "in what," and "how."

The representative answers to these questions serve to bring to the fore another important generalization about the dynamics involved in job-related learning. For example, the qualifier, "time permitting," may at first glance appear to be a gratuitous remark. But, as an analysis of the array of forces which impinged on the teacher represented in Table IX reveals, time was literally of the essence for him. This teacher's interest in sports and his obligations to his family could sap precious time that would be required if he were to meet his self-perceived learning goal. It was only after the teacher had reconciled the impelling forces (in this case, not only the self-actualizing tendency, but also the prompting effects of an assortment of impingements (in this case,

the announcement about the grant for innovative projects), and the restraining or countervailing forces (in this case, to pursue leisure interests and to meet family responsibilities) that the learner could make a concrete decision. Judging by the final resolution,* to spend the summer constructing a bibliography, rather than bookshelves, the sum total of the impelling forces was in the estimation of this particular learner greater than the sum total of the restraining forces. Thus, selected portions of Table IX illustrate the generalization that forces bearing on learning decision have both direction and magnitude. More critically, the analysis of these portions substantiated the phenomenological assumption which underlies this study. This analysis illustrated that the valences of the forces impinging upon a learner are determined, in part, by what the beholder construes them to be.

Further analysis of the learning project represented in Table IX brought to light another insight about the dynamics involved in job-related learning. This analysis yielded evidence which supports the thesis of selection perception. This conclusion can be inferred from the fact that, while an assortment of forces bombarded the learner (for example, a, b, c, g, h, m, n, o, and p), he responded only to those bombardments which had particular saliency for him. Given his apparent needs disposition (self-actualization), the learner tuned in only to those bombardments (a, g, and m) which

*The balance in favour of this resolution seems to have been achieved by some rationalizing: ("use the award money to hire a carpenter for those shelves"). The award money was not an assured prospect, and there was evidence from an interview that the teacher in question appreciated this.

he evaluated as potential instruments for meeting this need.

Finally, the analysis of empirical evidence brought to light the existence of three classes of motivation--basic, need, and dynamic (these designations have been borrowed from Berry, 1971). Basic motivation refers to the basic drives of an individual. The literature, in particular, the work of Maslow, (1968) informed us that these can be traced to instinct, imprinting, and a multitude of environmental forces that converge on the individual. This class of motivation is exemplified in Table IX by the learner's self-actualizing tendency (c).

Need motivation emerges from job-related activities. Cognitive field theory, as this has been interpreted by Bigge (1964), suggested that a person's needs cause a psychological tension which leads to a psychological movement of a person in the direction of the force or to change his cognitive structure if he is not able to move in the predisposed direction. This class of motivation was exemplified in Table IX by the teacher's apparent recognition of a gap between what he knew about the reading needs of students and what he believed to be a necessary kind of action to meet these needs (j).

The third class of motivation, dynamic motivation, is so named because it changes according to the way the teacher perceives the various forces which impinge upon him. Reference to Table IX reveals representative examples of this class of motivation. The family's prodding of the teacher to complete the shelf building project (i) may be considered an example of a negative dynamic motivation. The arrival of the university calendar (m) and the

presence of air conditioning in the Elizabeth Dafoe library (s) may be seen as an example of positive dynamic motivation.

Summary and Conclusions

In the foregoing section critical empirical findings relating to the process by which teachers resolve their professional learning needs were synthesized. These findings warranted the conclusion that job-related learning involves three categories of variables-- environmental/situational; personality/background; and, most critically, an interpretive intervening variable.

In addition, these findings warranted several fresh generalizations regarding the dynamics of job-related learning: that this process involves a series of decisions about alternatives; that learners perceive alternatives in terms of direction and magnitude: that learners are motivated not only by basic drives, but also by existential factors such as life work, and dynamic factors such as the prompting of a spouse or negative feedback by a peer.

Most crucially, the findings gave strong support for the conclusion that job-related learning is an idiosyncratic, phenomenological enterprise. Efforts to understand the learning behaviour of an individual learner must, therefore, be based on a comprehensive knowledge of the meaning that the individual attaches to basic human drives, emergent job needs, and adventitious events.

II. PERSPECTIVES FROM COGNATE DISCIPLINES

Proponents of grounded theory research methods (Bruyn, 1966;

Glaser and Strauss, 1967; and Pelto, 1970) have stressed the importance of maintaining a dialectical tension between generalizations obtained from analysis of observations from the field and relevant theoretical insights that could be inferred from cognate disciplines. These proponents claim that insights gained from germane literature can serve two related objectives of scientific inquiry: to test the construct validity of an aspect of the phenomenon being investigated, and (inasmuch as these insights are congruent with those obtained in the field) to increase the degree of generalizability of conclusions reached in a study.

The review which follows is organized into two sections. The purpose of the first section is to test the tenability of the proposition that learning is, in essence, a process of constructing personal meaning. The purpose of the second section is to explain (that is, provide a theoretical basis for) empirical findings regarding the dynamics behind the process of job-related learning.

Learning as Construction of Personal Meaning

This study brought to light convincing empirical evidence which suggests that job-related learning is essentially a process of constructing personal meaning. A review of representative cognate disciplines provided theoretical support for this thesis.

From the perspective of adult education, Knox and Videbeck (1963), investigated the relationship between life cycle and learning. Their data suggested that the adult's psychological orientations determine the degree to which they will participate in learning. Boshier (1977:112) studied the relationship between adult

participation in learning and two genres of motivation, which he labelled as deficiency motivation and growth motivation. His evidence warranted the conclusion that orientations are "more than just superficial clusters of reasons for enrollment. They seem to be manifestations of a psychological state. . . ."

The literature from perceptual psychology likewise argues the case for viewing adult learning as a process of constructing personal meaning. Combs (1965:27) viewed learning as "a highly personal matter involving the way a teacher sees himself and his experience." Reviewing the writings of major proponents of perceptual psychology, Thornton (1973:171) elaborated on the critical connection between meaning and learning:

Until the ideas that are floating around mean something to a person, they do not affect him. This way of looking at learning is especially applicable to the adult. His experience makes him ready to discover his own personal meaning in many subjects if they are approached in a fashion that makes this possible. His own philosophy, no matter how little he may have formulated it in his own mind, gives him a framework into which the pieces of the puzzle can be tied.

Barker (1965) a prominent interpreter of ecological psychology stressed the power of a learner's sociocultural milieu in governing his learning behaviour. Nevertheless, he acknowledged the potential of the personal dimension to explain non-normative learning behaviour:

The individual persons within a bounded unit of the ecological environment differ in psychological attributes; their behaviour in the same environment will, therefore, differ (p. 10).

The phenomenological literature also offered support to the thesis that learning is a reflection of the meaning a learner attaches to his range of experiences. Chamberlain (Denton, 1974)

asserted that this range includes a teacher's interpretation of each aspect of his direct participation in educational activities, both formal and informal, what he has read about, ideas and attitudes he has heard expressed by others and the problems educators face.

This brief review of the literature provided theoretical support for the ad hoc explanation that was given for the observed idiosyncracies in the process by which teachers resolved their job-related learning needs--that such idiosyncracies are expressions of the meaning teachers gave to the arrays of internal and external factors which impinged upon them.

Construction of Personal Meaning:
Dynamics Behind the Process

This study brought to light evidence which contradicted the notion that learning is simply "caused" by pervasive social, psychological, and like forces. Rather, the evidence, which is synthesized in the first section of this chapter, suggested that learning is a complex process, involving phases, choices between perceived directions and magnitudes of a wide array of forces, and different classes of motivation. The literature which is reviewed below provided theoretical evidence which was, by and large congruent with the evidence generated in this study. To facilitate reading, these "findings" from the literature are synthesized into three broad categories: dual factor theories, definition of situation theories, and force field theories.

Proponents of the dual factor theory have suggested that the process of specifying and meeting a need is a complex one involving at least two kinds of evaluations--evaluations about ends, and

evaluations about means. Vroom (1974) argued that performance is a result of perceptions about motivation and ability. House (Kelly, 1974) expanded on Vroom's path-goal hypothesis. He suggested that productivity is related to one's motivation to perform at a given level. In turn, the level of motivation depends upon the particular needs of the participant, as these are reflected in the goals towards which he is moving, on the one hand, and on his perceptions regarding the relative usefulness of the productivity behaviour as an instrument or path to the attainment of his goals, on the other hand.

Ingram and West (1971), proposed a model which also suggested that two sets of evaluations are involved in specifying and resolving learning problems. One set of evaluations takes into account life chances or opportunities that come into the learner's purview. Another set of evaluations entails the learner's assessment of the accessibility of the means (including his own ability to overcome barriers and constraints thwarting their attainment) required to achieve desired ends.

The dual factor theories served to pinpoint the major kinds of evaluations that are involved in specifying and resolving learning needs. The definition of situation theories, meanwhile, served to shed light on the process by which learners construe/define and order percepts into learning behaviour.

Kelly (Bannister and Fransella, 1971) developed an elaborate theory which describes the processes by which persons construct their reality. Particularly germane to the present discussion is Kelly's notion about the way that construct systems move and flow. As interpreted by Bannister and Fransella (p. 39), the process

follows a cycle. In the first phase of the cycle we circumspect the field, that is, we dream, imagine, speculate. In the next phase, the pre-emption phase, we begin to select out certain issues as crucial and decide the kind of situation we are in. In the final phase, we move to control: at this point we make active choices, deciding not only what construct will cover the situation but also which pole of the construct will provide a suitable anticipatory base of action (or goal).

Based in part on previous research and in part on his ethnographic study of the way teachers construe common sense situations in schools, Stebbins (1975) advanced a theory that is rich in possibilities for explaining idiosyncratic learning. The operative word in his definition of situation theory is the word, incident. According to Stebbins, an incident is a dynamic concept comprised of three essential phases--perception, definition of situation, and action (or inaction, as the case may be).

Each phase, it can be inferred from a synthesis of Stebbins' writing, affords the actor an opportunity for an idiosyncratic response. The response may vary with the perceptions to which the action has been sensitized by virtue of the meaning a given set of perceptions had for him previously. Nor, Stebbins pointed out, is an actor limited to the perception of those elements of the environment that are of immediate interest to him, or that he habitually recognizes (predisposition): The actor may also select other elements in his environment, for example, those which strike him as exaggerated, or those infused with values that seem important to him.

The response to autonomous learning may also vary with the way the actor construes the activated predispositions and elements which have the potential for associated meaning. Such constructions or definitions of perceptions may be classified into one of three typical classes. When an actor defines an event in such a way that it can be concensually shared with a given culture or sub-part of it, he is said to have arrived at a cultural definition. When an actor defines a situation in roughly the same way as did other members of a behavioural system, but neither he nor any of the other members of the system was aware of the similarity of definition, he is said to have arrived at an habitual definition. Finally, when an actor interprets events that he rarely or never encounters in either the larger community or in a sub-culture, he is said to have arrived at a unique definition.

But regardless of the degree to which a definition of situation can be shared, this definition guides subsequent goal-directed action in that situation until such time that new evidence warrants a reinterpretation.

Thus, as Stebbins has argued, idiosyncratic goal-setting behaviour can be understood in terms of two integrally related processes: selective perception, and selective construction of events. But cannot the same "logic" be used to explain variations in the means actors choose to resolve self-selected goals? Reflections on the findings of this study suggested that learning modes could, more often than not, indeed, be viewed as concrete expressions of the meaning (i.e., evaluation as to their potential in meeting desired ends) actors have given to alternative ways of responding to needs.

In his force field theory, Lewin (1951) suggested that human action, for example, intention to learn is a product of two broad classes of forces--inhibiting forces and facilitating forces impinging on an actor's field. Both direct and vicarious experience, however, suggested that the mathematical equation implied in this common sense generalization is perhaps too nice. For, consistent with phenomenological theory, so much depends on the meaning a would-be actor places on each force that impinges on him within a certain time framework. At the broadest level, an actor may construe a force as favourable or unfavourable with respect to his intentions. At a more specific level, an actor may evaluate some forces (whether positive or negative) as having greater meaning, that is, saliency or value for him than other forces.

There are, in the literature, formulations which explain behaviour in terms of valences of forces impinging on an actor. Echoing the thinking of Lewin (1951), Miller (1967) proposed an analytical tool with which to measure the likelihood of participation in continuing education. Miller argued that the fact that participation in adult education activities represents a person's commitment of time and energy, automatically puts the person in competition with his desire to participate in a number of other activities. The question of which activities the actor will choose to participate in cannot be determined unless we know, first, the direction and the magnitude of the forces which impinge on the actor, and, second, the forces which the actor evaluates as salient.

The seminal work of Fishbein (Groteleuschen and Caulley, 1977) resulted in a theoretical model, the expectancy value model,

which, likewise, explains learning choices in terms of valences, in this case, favourableness or unfavourableness towards some stimulus object. The adapted framework consists of three components. One component is the professional's attitude towards participating in continuing education. This attitude is dependent upon two factors: what the professional believes will be the consequences of participating, and what value the professional places on these consequences. Another component is the subjective social norm, that is, the professional's perception of the kind of significance others attribute to his participation. As well, this component includes the importance the professional himself places on these perceived expectations. Still another component is the subjective personal norm. This norm comprises of the professional's personal belief regarding participation, along with the strength of his motivation to comply with these personal beliefs.

Implicit in the force field theories is the assumption that actors are able to view learning, a qualitative entity, in quantitative terms. Blunt (1977) acknowledged the difficulty of quantifying learning, even when the outcomes of learning are specified in behavioural terms. Nevertheless, he believed there is a way around this problem. He argued that, while it may not be possible to quantify learning directly at this time, it is possibly by using existing procedures, for example, psychometric methods, to study subjective estimates of learning. Indeed, Blunt demonstrated

empirically that the psycho-physical technique* of magnitude estimation is capable of producing ratio scales of respondents' subjective estimate of various adult learning activities.

III. HOW TEACHERS RESOLVE THEIR JOB-RELATED LEARNING NEEDS: A PHENOMENOLOGICAL MODEL OF THE PROCESS

This study generated empirical evidence bearing on the phenomenon by which teachers resolve their job-related learning needs. The more critical of these findings were examined through the "eyes" of researchers in cognate disciplines. The insights derived from these two complementary sets of analyses were used as building blocks for constructing a phenomenological model of the process by which teachers identify and resolve their job-related learning needs. This model is presented in Figure 4** and discussed in the ensuing part of this chapter.

One important generalization exemplified in the phenomenological model is that job-related learning is the end product of the interpretations a learner places on various direct and indirect influences impinging upon him in a given time frame. Reference to Figure 4 indicates that the factors deriving from a learner's biological makeup and background experience (box A) as well as the

*According to Blunt (p. 39), this technique is predicated on the assumption that humans are capable of matching numbers to stimuli and stimuli to numbers in such a way as to estimate accurately the ratios between stimuli and also to adjust stimuli to match prescribed ratios.

**It will be appreciated that Figure 4 contains elements previously illustrated in both Figure 3 (the major variables involved in job-related learning) and Table IX (the dynamics involved in job-related learning).

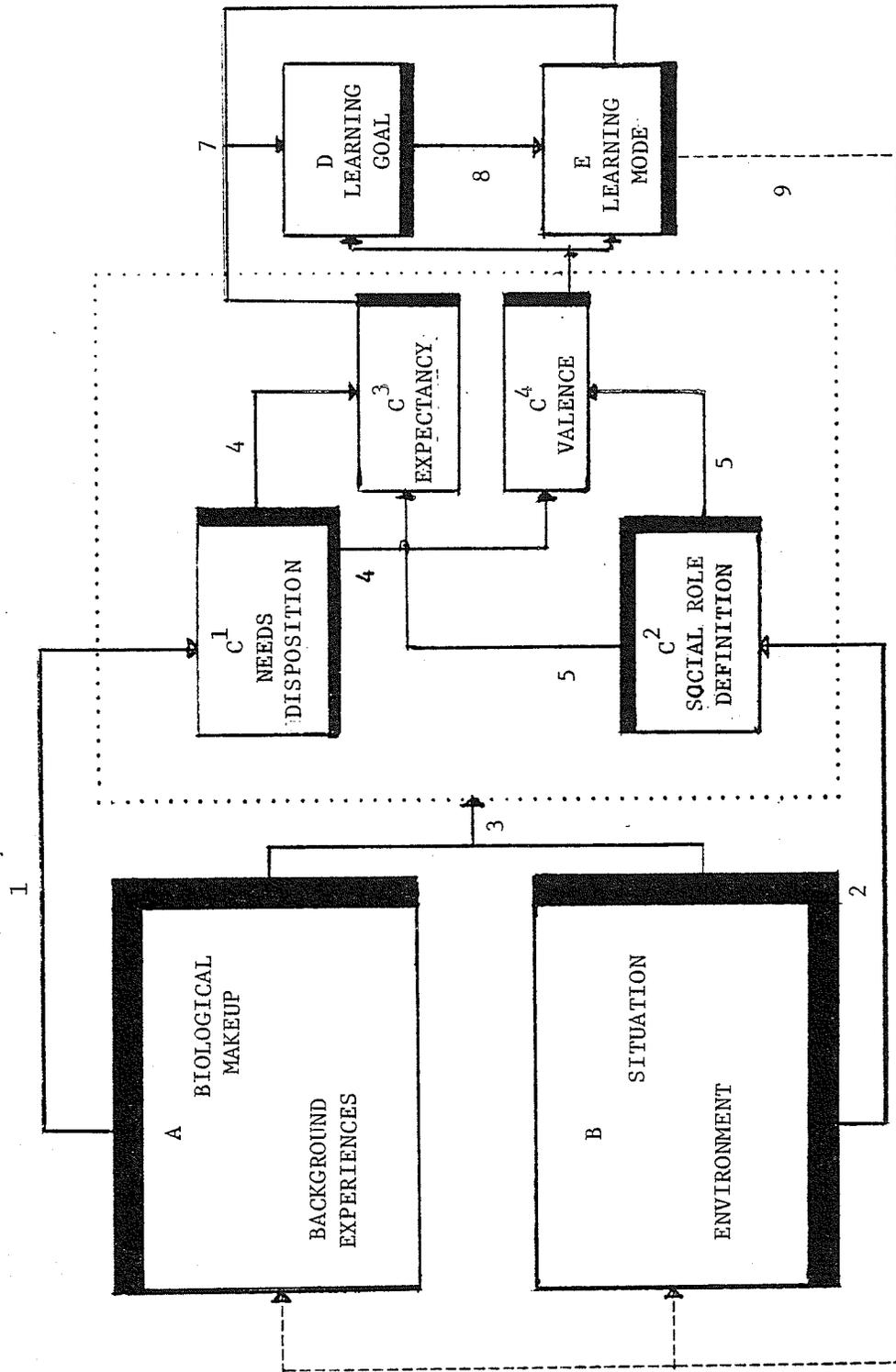


FIGURE 4

Phenomenological Model of the Process by Which Teachers Resolve Their job-related Learning Needs

factors stemming from the environment/situation (box B), have, for the most part, only an indirect influence upon learning decisions. To explain, the sum total of a learner's attitudes towards specific attributes in his biological makeup and background experiences determine his needs disposition (box C^1). By the same token, the sum total of a learner's attitudes towards specific roles defined by the sociocultural milieu determine the predilection he will have for certain kinds of learning outcomes (social role definition, box C^2). A learner's needs disposition and social role definition have a more direct bearing (than do the forces represented in boxes A and B). As this is depicted in Figure 4, these two variables (C^1 and C^2) serve as interpretive screens through which a learner responds to fortuitous promptings for learning. An example of such a prompting stemming from a learner's background would be the receipt of a prestigious scholarship, while an example of a fortuitous prompting stemming from a learner's environment/situation would be a directive by the superintendent's department requiring all teachers to demonstrate competency in speed writing by a specified date. These kinds of dynamic promptings are represented by lines 1, 2, and 3 in the model.

But the composite influence which bears most directly and profoundly on the question whether or how a learner will resolve his autonomous job-related learning need stems from a learner's existential situation (C). As this may be inferred from inspection of Figure 4, the concept of existential situation embraces the sum total of the unique meanings a learner has ascribed to the array of forces impinging upon him, whether directly (C^1 and C^2) or indirectly (A and B), in a given time frame. If a learner interprets the sum

total of these meanings as indicating a high probability that he will be able to resolve a problematic professional learning issue by way of a certain learning goal, he will have a positive attitude (expectancy, box C³) towards that goal. Similarly, if a learner interprets the sum total of perceptions impinging on him as pointing to the likelihood that participation in a given learning endeavour will enable him to resolve an existential need, he will have a positive attitude (valence, box C⁴) towards that learning goal.

It was seen with the aid of Figure 4 that job-related learning is a pervasively subjective process. Implicit in this model are several corollaries. Inspection of Figure 4 shows that job-related learning is, by and large, an a historical process. To be sure, events which have occurred in a learner's past could, and often do enter (lines 1 and 2) into a learner's decision to pursue a certain learning goal. However, such decisions could also stem from events arising from the current environment (line 3) or from anticipated consequences of a specific learning project planned for the future (line 9).

Another corollary which is exemplified in Figure 4 is that learning is a highly idiosyncratic enterprise. This idiosyncricity derives first from the fact that a learner has opportunities to make evaluative interpretations of aspects in his perceptual field at several junctures in the "history" of each learning project. Quite clearly, a learner who has a favourable attitude towards say, attributes a, c and j in his experiential background, will demonstrate a qualitatively different needs disposition than would a learner who has an overall negative attitude towards this same configuration of

attributes. This idiosyncricity could derive, second, from an accident of birth, or from fortuitous circumstances. Could is used advisedly, inasmuch as one learner may derive a different set of learning implications from a particular event or accident than would another learner.

A final corollary that may be inferred from the model presented in Figure 4 is that evaluations a learner attaches to a job-related learning project he has completed, may be used as input (line 9) for reaching decisions whether and how to resolve an emergent professional learning issue in the future.

CHAPTER VII

IMPLICATIONS FOR PRACTICE AND RECOMMENDATIONS FOR FURTHER RESEARCH

I. IMPLICATIONS FOR PRACTICE

The literature reviewed at the outset of this study attributed pervasive teacher disaffection towards current continuing education practice to a dearth of basic insights into the process by which teachers resolve their job-related learning needs. This study has generated insights which show promise in helping to correct this situation. Several of the more critical insights are discussed briefly below.

The evidence confirmed, first of all, the fundamental postulate of perceptual psychology, that learning is essentially a subjective process. Put in other words, much of the evidence collected in this study contradicted the popularly held view that learning is caused by the psychological and social forces impinging upon the learner. It was found that while such forces could, indeed, "cause" learning, these forces generally assumed potential power only until such a time that a learner evaluated them as instruments for achieving self-selected learning goals. Inasmuch as this finding is valid, it would imply the following kinds of undertakings: the development of process strategies designed to help teachers to become better aware of their professional learning needs; the development of tools and procedures that would enable supervisors of in-service

programs to understand the inner life of the learner; the management of the work place in such a way as to help teachers to identify incongruities in their taken-for-granted actions; most basically, weaning away teachers from organic relationships (that is, those relationships conditioned by precedent and habit) and helping them to evolve contractual relationships (that is, those relationships resulting from a conscious definition of one's existential situation and one's role in that situation).

Another finding of this study that has important implications for practice is that job-related learning generally proceeds episodically and segmentally in response to changing evaluations by the learner of circumstances in his perceptual field. Among other things, this finding implies the need in plans for in-service programs of opportunities for continuous re-evaluations of learning priorities in the face of possible changes in a given situation. Further, this finding justifies the legitimation of random experiential learning as a useful complement to more formal modes of learning. This study showed that random experiential learning can serve two important purposes: to meet emergent learning needs, and to develop in teachers increasing autonomy and skill in directing their future job-related learning needs.

Still another finding in this study that has implications for those guiding job-related learning is that decisions to learn involve at least two sets of evaluations--evaluations about ends, and evaluations about means. Persons who conduct assessments intended to estimate the level of commitment there might be towards a specific

professional development opportunity should ensure that the respondents are aware of probable psychic costs of getting involved.

The findings of this study also have implications beyond those related to the facilitating of learning at the individual or school level. Almost self-evident is the need for faculties of education to have a working knowledge of important characteristics of adult learning; in particular, the characteristic of self-directed learning. The adoption of this aim will require faculties to examine their training goals. In some cases, faculties will need to supplement the traditional course fare with learning experiences designed to help teachers-to-be to confront professional problems through the prism of their own experience and to construct appropriate personal solutions. The adoption of sound adult learning principles will further require faculties of education to make their resources continuously available to practitioners. Such profferings should respect, as much as this is practical, the psychic schedules of those in the field.

Finally, the finding that teachers see the various forms of self-directed learning, including random experiential learning, as the most meaningful way to resolve their job-related learning goals suggests a need to modify current approaches to in-service. It would appear, based on direct observation and evidence from Kowalchuk's study (1975), that regularized, large-scale programs such as the annual Special Area Group conferences do not adequately meet the perceived needs of a large segment of the profession. One solution to this situation is the development of a mechanism which can assist organizers of in-service days to elicit and synthesize the concensual

needs of the participants. A more bold and far-reaching solution would be to abandon programs based on "booster shot" and "delivery system" conceptions of in-service and to replace them with a model which views job-related learning, indeed all learning, as a process of constructing personal meaning.

II. RECOMMENDATIONS FOR FURTHER RESEARCH

The recommendations for future research into the phenomenon of job-related learning are organized into three major categories: those bearing on design issues; those deriving from the inherent limitations of the present study; and those suggested by an evaluation of the results of the inquiry.

Wax (1971) cited two criteria for evaluating the appropriateness of designs chosen for exploratory studies: Does it respect the essential nature of the phenomenon that is being investigated? and Does it produce novel insights? A retrospective evaluation of the paradigm which guided this study revealed that it was an effective approach for generating interesting insights into a highly subjective process--job-related learning. Moreover, the design permitted the researcher to investigate promising leads discovered serendipitously during the course of the study. Many of these investigations yielded further insights related to the stated aims of this study. The use of this paradigm is, therefore, recommended to persons who might want to replicate this study.

It will be recalled that this study was delimited to a focus on autonomous, job-related learning projects undertaken by a specific

population in a specific behavioural group (the teaching profession) and in a specific time frame. Persons interested in studying the phenomenon of job-related learning might do so by focusing on another population within the teaching profession, or alternately, on a population from another behavioural system. Such replications could serve to test the universality of the process depicted in the model that was generated in this study.

Another recommendation for research derives from inherent limitations of models. As Verdun (1967) has pointed out, the function of a model is to identify the variables that mediate in a phenomenon one is studying and to place these variables in a coherent relationship to one another. This function the present study has performed (see Figure 4). Needed is followup research whereby interested persons would deduce and test hypotheses related to specific dynamics involved in the process of job-related learning.

Becker (1970) pointed out a related inherent weakness of most models; they seldom achieve conceptual perfection. An evaluation of the concepts used in this study bore out Becker's criticism. For example, so far as the concept of personality is concerned, we need to know more about the relationship between a person's biological endowment and the development of needs dispositions. By the same token, we need to know how such variables as belief system, cognitive style, and other facets of personality influence commitment (or, to use Stebbins' terminology (1975), action orientation) towards certain learning goals but not to others. So far as the concept of environment/situation is concerned, more exploratory work is needed to

investigate the aspects of leisure which seem to nurture the habit of lifelong learning. We need to know, too, how enclaves, psyche groups, and other informal subcultures promote experiential learning. In this connection, we need to know how different organizational patterns, for example, interdisciplinary teams and leadership styles, influence the development of learning-oriented individuals. At the broader societal level, we need to know how schooling mediates the development of positive attitudes towards self-directed learning.

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APPENDICES

APPENDIX A

120 Mossdale Avenue
Winnipeg, Manitoba
February 2, 1976.

Dear Colleague,

As I had mentioned at a recent principals seminar, I am drafting a proposal to do a doctoral study of the way teachers solve their continuing education problems. More specifically, I hope to learn how factors inhering in the school itself and in the person of each teacher influence their self-selected learning activities.

As presently envisioned, the study will entail my collecting and analyzing teachers' perceptions about their job-related learning decisions. This task will require my spending approximately eight weeks in a school eventually selected for the study. This time will be divided between non-participant observation and interviewing.

Every effort will be made to avoid interference with the routines of the school selected for study. As well, every care will be given towards preserving the anonymity of the participant. The results of the study will be made available to participants upon request.

As I see it, the success of this undertaking will hinge on the cooperation of both staff and administration. Would you mind permitting me to address the staff at your school at your next scheduled staff meeting? The purpose of my visit will be to elaborate on the aims of my study and to explain the kinds of involvements it will imply for prospective participants.

Please let me know no later than February 16 whether or not you can accommodate my request. I may be reached at 338 2865 (home) or 474 9011 (University of Manitoba).

Yours truly,

John H. ...

APPENDIX B
CONTINUING EDUCATION ORIENTATION INDEX

CONTINUING LEARNING ORIENTATION INDEX*

Thinking back over your educational activities of the 1975-76 school year, what reasons for your participating seem to be the most meaningful for you?

Using the code provided, indicate the extent to which each of the reasons given below influenced your decisions to participate in continuing learning activities.

- | | |
|------------------------------------|---------------------------|
| 5 VERY FREQUENTLY IMPORTANT FOR ME | 2 SELDOM IMPORTANT FOR ME |
| 4 FREQUENTLY IMPORTANT FOR ME | 1 NEVER IMPORTANT FOR ME |
| 3 SOMETIMES IMPORTANT FOR ME | |

- _____ To retrain for vocational changes.
- _____ To be with friends and associates.
- _____ To satisfy an innate need for information and knowledge.
- _____ To fill an innate yearning for knowledge.
- _____ To undertake group participations as a socially acceptable change from isolated individual study.
- _____ To gain recognition among peers.
- _____ To seek relief from boredom.
- _____ To further expose an insatiably curious mind.
- _____ To understand community problems.
- _____ To make new friends.
- _____ To secure professional advancement.
- _____ To get the satisfaction of accomplishment.
- _____ To experience the pleasure of meeting new people.
- _____ To desire enlightenment.
- _____ To satisfy a desire to be active.
- _____ To satisfy intellectual curiosity.
- _____ To clarify what I wish to be doing five to ten years from now.
- _____ To satisfy an inquiring mind.
- _____ To become a more effective citizen.
- _____ To become acquainted with congenial people.
- _____ To enjoy the pleasure of discourse.
- _____ To enjoy individually oriented activities.
- _____ To increase competence in employment.

- _____ To study for its own sake.
- _____ To overcome the frustration of day-to-day living.
- _____ To find intellectual enrichment and mental stimulation.
- _____ To learn better ways of doing things.
- _____ To engage in the discussion of ideas.
- _____ To believe that the activity provides respectability.
- _____ To seek to contribute to the "common good."
- _____ To feel a social need to be part of an accepted group.
- _____ To satisfy a deep curiosity about life and ideas.
- _____ To develop understanding.
- _____ To use learning situations for social purposes.
- _____ To desire to learn and to know.
- _____ To prepare for service to the community.
- _____ To feel a need to be accepted by others.
- _____ To undertake education as a means to an end.
- _____ To participate in activities that are completely new to me.
- _____ To seek helpful insights about human relations.
- _____ To undertake an activity with a friend.
- _____ To feel a need for more education.
- _____ To enjoy socially oriented learning activities.
- _____ To enjoy seeking knowledge.
- _____ To enjoy education as a means to higher status and prestige.
- _____ To enjoy the association with other people.
- _____ To upgrade occupational competency.
- _____ To enjoy acquiring more knowledge.
- _____ To pursue a path of intellectual curiosity.
- _____ To exchange ideas and information.
- _____ To develop creative expression (art, music, dance, speaking etc.).
- _____ To associate with others of similar interests.
- _____ To enjoy the satisfaction that comes from learning.
- _____ To fulfill a need for personal associations and friendships.
- _____ To compensate for unfavorable acceptance by associates.
- _____ To introduce me to new ideas which I can further explore on my own.
- _____ To fill an economic motivation.
- _____ To participate in education as an end in itself.

PLEASE GO BACK AND UNDERLINE THE FIVE STATEMENTS THAT ARE THE MOST IMPORTANT FOR YOU.

APPENDIX C

LEISURE SATISFACTIONS CHECK LIST

and

LEISURE ACTIVITY INDEX

INGHAM STUDY INSTRUMENT

LEISURE SATISFACTIONS CHECK SHEET

Instructions

You are asked to read all of the statements on the accompanying Leisure Activity Index and to select those activities, no more than two, which you consider to be your favorite leisure activities. All 125 activities are to be considered as leisure activities.

Now turn to the Leisure Satisfaction Check Sheet. Write in the name of your favorite leisure activities in the spaces provided at the top of the Check Sheet. If you are unable to find your favorite leisure activities on the list provided simply write the name of the appropriate activities in the spaces provided.

On the Leisure Satisfaction Check Sheet you will find several statements which represent kinds of satisfactions which people might possibly get from their leisure activities. These statements are arranged in groups of six statements each. You are asked to read all six statements in each group and then to check that statement which best describes the kind of satisfaction you get from your favorite leisure activities. Keep in mind that you are being asked to check only those statements which describe the satisfactions you get from your favorite leisure activities. Do not check a statement simply because it describes one of the things that happens during, or as a result of, the activity. For example, a person who participates in amateur plays will constantly be with other people when he is engaging in this activity. However, it may well be that being with other people all of the time is not one of the reasons why participating in amateur plays is one of his favorite leisure activities. You are to check statement #6 in each group whenever you are unable to find among the preceding five statements in that group one which describes one of the satisfactions you derive from the leisure activity in question. Place your check mark (✓) in the space provided after each statement. Do this for each activity you list.

LEISURE SATISFACTIONS CHECK SHEET

(If you have only one favorite leisure activity ignore the remaining space.)

MY FAVORITE LEISURE ACTIVITIES ARE:
(Write the name of each activity in the spaces to the right)

1. _____ 2. _____
(ACTIVITY #1) (ACTIVITY #2)

GROUP I

This is one of my favorite leisure activities because:

1. it gives me complete mental relaxation
2. it gives me a good deal of mental relaxation
3. it gives some mental relaxation
4. it gives a trace of mental relaxation
5. it gives no mental relaxation; provides stimulation, or tension
6. none of the above statements describes why I like this activity

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

GROUP II

This is one of my favorite leisure activities because:

1. it gives me a chance to be alone
2. it gives me a chance to be alone most of the time and with other people only occasionally
3. it gives me a chance to be alone part of the time and with people part of the time
4. it gives me a chance to be with other people most of the time
5. it gives me a chance to be with other people all of the time
6. none of the above statements describes why I like this activity

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

GROUP III

This is one of my favorite leisure activities because:

1. it helps me to be more successful in my work

_____	_____
-------	-------

2. it helps me to be more successful in my work but it also gives a little satisfaction in itself
3. it gives me a chance to do what other people in my occupation do
4. it gives me a chance to do something that is a little different from my work and is satisfying in itself
5. it gives me a chance to do something entirely different from my work
6. none of the above statements describes why I like this activity

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

GROUP IV

This is one of my favorite leisure activities because:

1. it gives me a chance to do something that is very simple and routine
2. it gives me a chance to do something that is fairly simple and rarely requires innovation
3. it gives me a chance to develop or maintain a fairly complex ability in something which I do fairly well, and requires some innovation
4. it gives me a chance to develop or maintain a fairly complex ability in something at which I do very well, and requires some innovation; it also gives me a chance to vary the way I engage in the activity
5. it gives me a chance to develop or maintain a complex ability and to produce new and interesting results; either material or non-material
6. none of the above statements describes why I like this activity

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

GROUP V

This is one of my favorite leisure activities because:

1. it gives me a chance to make or produce something, or carry on an activity for a useful purpose or for the pleasure or welfare of others

_____	_____
-------	-------

GROUP VIII

This is one of my favorite leisure activities because:

- | | | | |
|----|--|--|--|
| 1. | it gives me a chance to do what I think will be best for me | | |
| 2. | it gives me a chance to do what I feel like doing | | |
| 3. | it gives me a chance to do what is expected of me | | |
| 4. | it gives me a chance to do something without having to make a choice | | |
| 5. | it gives me a chance to do what my friends would like to do | | |
| 6. | none of the above statements describes why I like this activity | | |

LEISURE ACTIVITY INDEX

The following pages contain a number of brief statements describing many different kinds of leisure activities, or things you might possibly do outside of your regular work. You will find that you engage in some of these activities and not in others. You are to indicate the frequency with which you participate in these activities.

Directions

Print the following information in the appropriate spaces on the special answer sheet: your name, the date, your age, and sex. Go through the list of activities from beginning to end, indicating the extent to which you participated in each one during the past year. Your answers are to be made on the special answer sheet provided. Please make your marks heavy and black between the parallel lines provided for each answer as follows:

Mark the space under Column A if you have participated NOT AT ALL in the activity during the past year.

Mark the space under Column B if you have participated OCCASIONALLY in the activity during the past year.

Mark the space under Column C if you have participated FREQUENTLY in the activity during the past year.

Please use your own best judgment in defining the terms "frequently" and "occasionally." Since participation once in two months might be "frequent" participation for some activities, but for others would only be "occasional," it is impossible to give precise definitions to these terms.

1. Visited others in their home or apartment.
2. Made a systematic effort to improve my vocabulary.
3. Played bridge or other card game with others.
4. Read magazines such as "The Saturday Review of Literature," "Fortune" or "Harpers."
5. Visited an amusement park or carnival.
6. Studied financial or other reports of business or city institutions.
7. Went dancing.
8. Consulted an Encyclopedia, Gazetteer, World Almanac, or other reference source exclusive of a Dictionary.
9. Went on a group picnic.
10. Entered into a serious discussion at a social gathering.
11. Played bingo.
12. Took a course at a university or college.
13. Sampled opinion on a local issue via personal interview.
14. Visited an "Auto Show," "Better Homes Show," etc.
15. Played a musical instrument at home.
16. Read a foreign language newspaper.
17. Helped organize a group, club or organization, e.g. Girl Scouts, political action group, civic action committee.
18. Put together jig-saw puzzles.
19. Attended a convention.
20. Watched variety programs on TV.
21. Attended a lecture given by an expert.
22. Browsed through a book store.
23. Gave a prepared talk before a group.
24. Participated in an amateur play.
25. Attended a family reunion, community old home day, or similar event.
26. Visited a local museum or art gallery.
27. Read poetry.
28. Led community or group singing.
29. Read non-fiction books on social, political, or economic topics.
30. Refinished or redecorated a piece of furniture.
31. Went to a church supper.
32. Helped solicit funds for a charitable or civic cause.
33. Played chess or checkers.
34. Was a panel member at a forum discussion meeting.
35. Did some painting or other art work.
36. Played in a band or orchestra.
37. Read non-fictional material on religious topics.
38. Took a correspondence course.
39. Performed a leadership function in a group, e.g. officer in a club, chairman of a committee, member of an executive committee.
40. Helped care for another person.
41. Went to a county or state fair.

42. Listened to classical music.
43. Listened to news reports on TV or radio.
44. Read magazines such as "Life," "Saturday Evening Post," or "McCall's."
45. Became thoroughly absorbed in a work of art or music.
46. Wrote a poem, song, play, or story.
47. Went shopping for someone else.
48. Traveled out-of-town (20 miles or more) to visit relatives or friends.
49. Attended a conference or workshop.
50. Drew up plans for landscaping, remodeling, or building a house.
51. Took snapshots or photographs.
52. Read serious works that dealt with literature, art, or music.
53. Took a course in a public school adult education program.
54. Made a trip out-of-town to visit an art gallery or museum.
55. Chatted or visited with one or more of my neighbors.
56. Read books on history or philosophy.
57. Purchased books from a book club.
58. Dined with friends at a hotel or restaurant.
59. Obtained books from a public library.
60. Planned and pursued a reading program for myself.
61. Took a pleasure trip over-night or longer.
62. Read more than one daily newspaper.
63. Actively pursued some serious collection such as antiques, prints, paintings, stamps, etc.
64. Conducted personal experiments (e.g. growing of plants, rearing of fish, etc.) to learn directly about the effect of various factors.
65. Produced an article of craftwork (leather, metal, crocheting, knitting).
66. Talked socially over the telephone.
67. Read serious books that dealt with scientific topics.
68. Actively discussed issues as a member of a committee at a meeting.
69. Wrote a speech to be delivered or an article to be published.
70. Attended a high school or college reunion or home-coming.
71. Worked on a scrap book of clippings, articles, etc.
72. Asked questions as a member of an audience following a lecture or other presentation.
73. Read biographies.
74. Looked something up in an original source to determine what actually had been said rather than accept statements of others.
75. Expressed my opinion on an issue by writing a letter to the editor or some other official.
76. Learned a new craftwork technique.
77. Attended meetings of a hobby club or group.
78. Planned an auto trip by going over road maps.
79. Participated in a gymnasium class.
80. Visited a person who was sick or in the hospital.

81. Read magazines such as "True Story," "Modern Screen," or "Argosy."
82. Viewed serious films that portrayed historical or social themes or art forms.
83. Designed an article of clothing, furniture, etc.
84. Made and showed home movies.
85. Worked cross word or similar puzzles.
86. Carried a petition for some political or civic cause.
87. Listened to programs that dealt with the analysis of national or world events on TV or radio.
88. Visited a national historical landmark.
89. Attended current popular movies.
90. Did painting or carpentry work around the home.
91. Repaired some mechanical or electrical device.
92. Worked out ways to make household tasks less tedious.
93. Read current events periodicals such as "Time," "Newsweek," or "U.S. News and World Report."
94. Entered into discussion at a relatively small group meeting such as a class or lodge.
95. Took a course given by a community agency, e.g. Y.M.C.A., Red Cross, etc.
96. Regularly attended meetings of a fraternal, social, hobby, or recreational group.
97. Canned or otherwise preserved fruits or vegetables.
98. Voted in a primary or local election.
99. Took a quiz, word test, etc., in a magazine or newspaper.
100. Corresponded with a friend I had not seen in some time.
101. Participated in some type of volunteer social service work.
102. Helped another person with his or her personal problems.
103. Read light popular novels such as westerns, mysteries, adventure, or science fiction.
104. Read "heavier" more serious types of fiction such as "Marjorie Morningstar," "Dr. Zhivago," or "Gone With The Wind."
105. Watched sporting events on TV.
106. Helped coach or manage an athletic team.
107. Attended meetings of an organized discussion group, e.g., Great Books, American Heritage, etc.
108. Actively discussed an issue from the floor at a large meeting such as a town hall or a district meeting.
109. Regularly attended meetings of a business or professional, civic, political, or labor group.
110. Took friends on a tour of a city or section of the country which was new to them.
111. Engaged in winter sports.
112. Tried out new recipes.
113. Took a course offered by my employer to members of his organization.
114. Regularly attended meetings of a literary, art, or music group.

115. Traveled out-of-town (50 miles or more) to see a play, concert, or opera.
116. Thought about abstruse subjects such as the nature of reality, the place of man in the scheme of things, immortality of the soul, etc.
117. Read non-fiction books on health and dietary topics.
118. Attended local dramatic or musical productions.
119. Made a model of a boat, plane, train, etc.
120. Was active in an organization to promote the welfare of those with whom I work.
121. Engaged in summer sports.
122. Attended athletic contests.
123. Attended horse racing meets.
124. Listened to sporting events on radio.
125. Carried on a conversation with a stranger on a public conveyance.

APPENDIX D

STAFF: MOSSDALE JUNIOR HIGH SCHOOL, 1975-76

STAFF: MOSSDALE JUNIOR HIGH, 1975-76

Lawrence Ashby	Gaylene Lavallee
Jessie Bauer	Jean LePray
Dwight Bell	Mark Lender
John Berg	Jan Lyons
George Bilan	Christine McGuire
Raymond Bledsoe	Les McWhiney
Martin Bzovy	Kriss Major
James Chubaty	Lance Millbury
Morley Churchside	Steve Naturk
Arthur Coombs	Stanley Obedzinski
Klaus Dibner	Kenneth Palardy
Stephanie Dudek	Richard Prentice
Francis Entwhistle	Siegfried Rempel
Marlene Fergus	Herbert Schell
Jacob Hertel	Stefan Semchysen
Jerry Hillside	Gordon Sigmon
Jasmine Horner	Erika Sobkowich
James (Jim) Husek	Donna Solls
Marilyn Kane	John Spence
Michael Karabelas	James Stadnyk
George Klein	Dennis Stanavage
Peter Kolesnik	Shirley Tuska
Thomas Kolodka	Randy Warren
Kevin Koneitzko	Barry Wilkinson
Reggie Korol	Andrew Zest
Victor Kroemer	

APPENDIX E
INTERVIEW SCHEDULE

INTERVIEW SCHEDULE

ESTABLISH RAPPORT

EXPLAIN PURPOSE OF THE STUDY

My research is about the process by which teachers continue their education, i.e., by the way they acquire job-related knowledge, skills and attitudes.

Previous researchers have not been very successful in getting much-needed insights into this learning process. Their lack of success stems in part from their reliance on the questionnaire and other indirect techniques to collect information about this complex and highly individualized process. By using depth interviews and direct observation over a period of time, this study will hopefully overcome the apparent deficiencies in previous research; and in so doing, it will present a truer and more comprehensive picture of the way teachers cope with latent or emergent job-related problems. This kind of information promises to be helpful to an increasing number of teachers who are engaged in self-initiated learning.

EXPLAIN SCOPE OF INTERVIEWEE INVOLVEMENT

I will require two main kinds of information from you. First, I will assist you to recall job-related learning activities you had undertaken in the 1975-76 school year. Next, with your help, we will analyze one or more of the activities you had recalled. In this connection, I will ask you such questions as what made you choose a

particular learning package to meet such and such a goal? The questions will be designed to help me reconstruct the process by which you travelled from point A, (the point at which you first realized a job-related learning problem) to point Z (the point at which you believe you resolved this particular problem).

ASSURE CONFIDENTIALITY

INVITE CLARIFICATION QUESTIONS

BEGIN PHASE I OF THE INTERVIEW

The first kind of information I would like you to give me is a list of learning activities that you can recall having undertaken in your role as teacher in the period from September, 1975 to June, 1976.

When I say "learn" I don't just mean the sorts of things you learn in formal institutions, such as the university. I mean any sort of deliberate effort at all to learn something or to learn about something. The kinds of informal learning activities I am talking about include faculty meetings designed to give teachers skill in using informal reading inventories to diagnose students' content-area reading problems, an interdisciplinary meeting called to examine the merits of cross-age tutoring and a division-sponsored workshop on how to conduct effective parent-teacher interviews. More particularly, I would like you to recall and list any kind of continuing education activity which had the following characteristics,

- 1) it must have been a self-selected activity--self-selected in the sense that you either initiated the activity or you selected it from a number of available opportunities

- 2) it was at least 51 per cent motivated by a desire to gain and retain for at least two days a clearly identifiable knowledge,

skill or attitude related to your role as a teacher;

Refer to this list of characteristics as you try to recall the job-related activities in which you participated in the period from September, 1975 to June, 1976.

GIVE SUBJECTS TIME TO RECALL SUITABLE ACTIVITIES. ANSWER QUERIES

DIRECTION

Draw a single line at the end of your list.

PROBE

My experience indicates that teachers make far more attempts to learn than they realize or are able to recall. Can you recall any additional activities you had undertaken, whether at school, at home, at an out-of-town conference, at a series of local professional development lectures and so on? Anything at all can be included, regardless of whether it was easy or hard, serious or fun, big or little--as long as the activities had the characteristics given on your form.

PAUSE BRIEFLY. ASSIST SUBJECTS TO RECALL ADDITIONAL LEARNING ACTIVITIES

DIRECTION

Draw a squiggly line after any additional activities you might have recalled.

PROBE

In the pilot interview I found that teachers needed some help in recalling job-related learning activities. It's so easy to forget over this span of time. In case you have forgotten some job-related learning activities which had the characteristics on your form, I will show you a list of concerns expressed by other teachers. Please

read the list through carefully. Write down any further activities this list may remind you.

DIRECTION

One more task before we wrap this session up. I would appreciate your evaluating the activities you listed. Simply rate your feeling toward each activity. Please use the scale provided on your form. Place a "1" beside any activity to which you were negatively disposed, and a "2" beside any activity to which you "tended to be negatively disposed". Place a "3" beside any activity to which you "tended to be positively disposed," and a "4" beside any activity toward which you were "positively disposed."

Next, evaluate the activities to which you were positively disposed. Select the one activity which was the totally most gratifying job-related learning experience for you in the period from September, 1975 to June, 1976. Draw a bold line under your choice.

Similarly, evaluate the activities to which you were negatively disposed. Select the one activity which you would least care to repeat (assuming the opportunity presented itself). Draw a dotted line under this activity.

DIRECTION

Next time we meet, we will analyze some of the activities you listed today. The purpose of this will be to see if such an analysis coupled with observation that I will be making will enable us to discern a process by which teachers continue their education.

BEGIN PHASE II OF THE INTERVIEW

REITERATE PURPOSE OF STUDY AND SCOPE OF SUBJECTS INVOLVEMENT

DIRECTION

Let's talk now about a specific learning project or episode in which you participated during the period from September 1 to the present.

Perhaps before we continue, it might be useful to check that our meaning of learning is the same. Here is a definition of a learning episode and a learning project. Read the definition to be sure you understand it. That way we will be talking about the same happening.

GIVE SUBJECTS THE DEFINITION SHEET. Clear up any questions.

DIRECTION

Let's talk first about the learning activity which you indicated as your "totally most gratifying learning experience."

GIVE THE SUBJECT THE LIST OF ACTIVITIES HE HAS HANDED IN IN A PREVIOUS INTERVIEW

DIRECTION

Does this activity qualify as a "learning episode project? Does it have all the required characteristics, as these are outlined in the definition sheet I supplied you? If it does, then we are ready to proceed. If not we will have to select another project.

1. How was the need to undertake this learning episode aroused? Can you recall how the idea to undertake this project came to mind? Did it seem to follow logically from a particular set of classroom experiences? Can you tell me more about specifically how

the learning experiences led you to want to undertake this learning project? Was the idea suggested by a colleague, relative or friend? Is this person often the source of similar ideas? What were you doing when the need to undertake this project was born? Daydreaming? Reading a newspaper? Talking "shop" at a picnic with a friend?

2. How did the idea take root? What was your initial attitude to the idea? If negative, what made you subsequently change your mind? Was it further reflection, a particular incident at a university course, remarks made by a principal at a staff meeting, or a particular item in the newspaper board minutes?

Can you recall the circumstances when you decided the idea may be a solution to a specific professional problem? Did you consider alternative solutions? Why were they ruled out in favour of the solution you eventually chose? Did such factors as the amount of time you had at your disposal, availability of suitable resources and the perceived urgency of the need which had to be met have a bearing on your decision? Did anticipated benefits influence the decision? Was recognition you might receive from peers and students a factor? Which factor seemed to have the most "force"?

3. How did you implement your goal?

What kinds of resources and methods did you use to resolve this goal? What human resources did you call upon? Members of your teaching team, the vice principal, a parent of one of the students, or someone from the university? Or several of these people? How specifically did each person you called upon figure in the implementation process? Did any of the persons from whom you sought help

adversely affect the different stages of your learning effort?

What material resources did you use in carrying out your learning plan? In what special ways was each item you used suited to your purpose? Did you confront a situation where badly needed resources, human or material were not readily accessible? Were you at times discouraged by slow progress? What factors within the school milieu inhibited the speed and/or completeness with which you were able to carry out your plan? What factors in the extra-school context enhanced your ability to carry out your plans? What factors in your home situation bore on your ability to expedite your learning goal? How?

Did you accomplish what you wanted to accomplish by undertaking the project in question? Can you specify some of these accomplishments? What knowledge did you gain? What skills did you acquire? How was your attitude changed?

If you did not achieve your objectives to the degree you had hoped, what factors can you cite for the lack of anticipated success? Were competing interests a factor? Which ones? To what extent?

If you achieved your objective to a greater degree than you expected, what factors can you advance for this success? Fortuitous circumstance, for example a TV program on the topic you were studying?

DIRECTION

I am going to read back to you what I think I heard in response to each question I asked. If I mistook some of your statements, please indicate the correction you think is in order. Furthermore,

if as I am reading this additional pertinent information comes to your mind, please let me know as I want to make this account of the learning process as complete and accurate as possible.

DIRECTION

Now let's talk about the learning project you participated in, whether initiated by yourself or by someone else, that you would least care to repeat (assuming such an opportunity presented itself). REPEAT THE SAME SET OF QUESTIONS THAT WERE ASKED IN CONNECTION WITH THE PROJECT THAT WAS SEEN AS "THE TOTALLY MOST GRATIFYING LEARNING EXPERIENCE."

DIRECTION

I am going to read back to you what I think I heard in response to each question I asked. If I mistook some of your statements, please indicate the correction you think is in order. Furthermore, if as I am reading this, additional pertinent information comes to your mind, please let me know as I want to make this account of the learning process as complete and accurate as possible.

DIRECTION

After I have had an opportunity to analyze the information you have provided, along with other relevant data, I may need further help in reconstructing a particular learning experience. Meanwhile, may I thank you for your interest and cooperation to date.