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**LA THÈSE A ÉTÉ
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A STUDY OF INCENTIVES FOR CURRICULUM TASKS

by Ruth Wright

Thesis presented to the School of
Graduate Studies of the University
of Ottawa in partial fulfillment
of the requirements for the degree
of Master of Arts in Education

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ABSTRACT

The purpose of this study was to develop an instrument to be utilized in the identification of incentives for curriculum decision-making tasks. The construction of the instrument requires the identification of incentives which have been utilized with teachers as potential motivators in the educational context; the identification of curriculum decision-making tasks; and the reduction of the resulting list of incentives to those most appropriate for the curriculum tasks. The original list of incentives for teachers utilized in the educational context was developed from a review of the literature. The resultant list of seventy-seven incentives was examined by nine graduate students and twenty-five classroom teachers to eliminate duplication. Fifty-one incentives remained. The seven curriculum decision-making tasks utilized by Young and Young (1977) were found to be inclusive of all curriculum tasks identified in the literature. A questionnaire was constructed which described each task and asked respondents to rank ten of the fifty-one incentives they felt were most appropriate for each task. The questionnaire was distributed to a randomly chosen sample of full-time classroom teachers who were members of the New Brunswick Teachers

Association. Each teacher was presented with only three of the tasks. A total of 526 usable questionnaires were returned. An analysis of data indicated that only ten of the fifty-one incentives were chosen by more than one third of the sample for each task. These ten incentives were incorporated in the Instrument for the Identification of Incentives for Curriculum Tasks (IIICT). The IIICT is a nine-page instrument consisting of an instruction sheet, a page of questions requesting demographic information, and seven pages each describing a curriculum decision-making task and presenting the ten incentives to be ranked according to their appropriateness for the described task. The instrument required approximately 45 minutes to complete what may be considered as seven subinstruments which may be administered separately or in differing combinations. The instrument was field tested in a test/retest situation with 204 New Brunswick teachers. Three estimates of reliability were established for each task which may be expressed in terms of a range of reliability for the instrument: (1) the range of contingency coefficient is from 0.69533 to 0.81113; (2) the range of Eta^2 is from 0.67563 to 0.97193; (3) percentage agreement ranges from 86.3 to 98.0. Suggestions for research utilizing the IIICT included: (1) comparative studies between provinces; (2) parallel development of instruments for other educational tasks; (3) an investigation of the relationship between

preferences for curriculum tasks and incentives for the tasks; (4) a comparison of the incentives for curriculum tasks of preservice and inservice teachers; (5) a study of the correlation of incentives for various educational tasks; (6) a direct application of Expectancy Theory to curriculum tasks to predict teacher effort in these tasks; (7) a similar application of Expectancy Theory to curriculum tasks to predict teacher performance on these tasks; (8) a correlative study between effort and performance predictions for curriculum tasks. The study also contains several recommendations for the practical utilization of information provided by an analysis of teacher responses to the IICT. These suggestions could influence current preservice and inservice education of teachers; and may provide direction for policy making for curriculum leaders at each level in the educational hierarchy of a Province.

A STUDY OF INCENTIVES FOR CURRICULUM TASKS

INTRODUCTION

Currently, educational research is being conducted which is investigating varying factors related to curriculum tasks. The examination of teacher participation in these tasks has been a focal point for much of this research. Although there is some controversy about the benefits of teacher participation in curriculum tasks the benefits appear to outweigh the possible adverse effects. Beecher (1978) has even concluded that the effectiveness of the classroom teacher is associated with his degree of participation in curriculum development.

Even with the general agreement that there are benefits for the teacher and for the students in their classroom from teacher participating in curriculum tasks, there is a general lack of willingness among teachers to become formally involved in the process. Connelly (1974) suggested that much of this reticence is due to the unfavorable experience many teachers had when various educational systems placed the task of curriculum development in teachers' hands in the 1950's and 1960's, without establishing training programs and long-term plans which would give the degree of expertise and the support needed for success. These unfavorable experiences

have led to public dissatisfaction, mistrust of current decision-making practices, and distrust by teachers of their ability to be effective participants in the curriculum decision-making process. Teachers feel curriculum tasks are threatening and outside their normal job expectations. (Friesen, 1977; Schaffarzick, 1976).

If the confidence of teachers is to be restored and if they are to become an integral and effective part of the curriculum development process, means must be found to motivate their willing participation. Harmer (1977) described a need for "a radically different classroom life space, a radically different curriculum self-concept, and a radically different reward system." (p.752)

Although the need to increase teacher participation in curriculum decision-making has been discussed extensively in current literature, there appears to have been no effort to identify the incentives which will motivate teachers to become involved in the process. The purpose of this study is to explore the theory related to the utilization of incentives in organizational settings and to develop an instrument which will facilitate the identification of those incentives appropriate for use with curriculum tasks.

The thesis consists of two chapters. Chapter one reviews literature pertinent to motivation within organizations and the role of incentives. It discusses the tasks

involved in the curriculum decision-making process. A third section of the chapter presents incentives utilized with teachers in educational settings. The final section of the chapter includes a detailed statement of the purpose of the study. The second chapter describes the development of an instrument for the identification of incentives specific to curriculum tasks. The final sections of the chapter discuss the results of field tests of the instrument, its potential usefulness, and implications for further research.

CHAPTER ONE

Review of Literature

Introduction

It is widely recognized that the effective use of human resources is a central problem of management. If educational leaders are to understand the factors involved in determining the behavior related to educational tasks, they must identify those factors in the work setting which result in workers behaving differently. Knowledge of the factors existing in the educational setting seems especially limited.

There are several popular theories of motivation in current literature which attempt to explain behavior in work settings. These theories are examined in the first section of this chapter.

Vroom (1964) believed that motivation is related to the choices made by individuals among a variety of alternatives. The amount of effort an individual exerts to carry out a task is largely determined by the outcomes he sees available to him as the result of his work. Research utilizing this theory and its modifications has suggested that these incentives are task specific. Consequently, it is necessary to identify the parameters of tasks before it is possible to determine which incentives are specific to those tasks.

Since this thesis is concerned with only curriculum tasks, the latter are described in section two of this chapter. Section three identifies incentives which have been utilized with teachers in educational settings. The final section of the chapter contains a statement of the purpose of the study.

Motivation and Behavior

Dalton & Lawrence (1971) summarized the importance of motivational efforts in organizations by saying "there are few activities in an organization which have greater importance to its performance than those which are included in the goal setting, measurement and reward cycle." (p.1) In spite of their importance, efforts to channel the energy of employees toward organizational goals have been confusing and only minimally successful. Although several theories of motivation have emerged from studies in other areas, those related to motivation in organizational settings are most relevant to this study.

Vroom and Decci (1970) classified historical models of managerial theory of motivation as belonging to three distinct approaches: the paternalistic, the scientific and the participative. Each of these approaches is discussed briefly.

Paternalistic Approach Basic to this concept of motivation is the assumption that effective performance of a job is dependent upon satisfaction. The organization is the source of unconditionally available rewards for all who are

its members. These rewards include wages, job security, predictable promotional systems and well established salary increments.

Investigations of this approach have found it unsatisfactory. For example, Brayfield and Crockett (1955) investigated the relationship between job satisfaction and motivation to perform. They determined that the correlation between job satisfaction and productivity was not strong. Further investigation of the same relationship by Dunn and Stephens (1972) led to a conclusion that satisfaction and performance were caused by somewhat different factors.

Scientific Approach. This approach is founded in the methodology basic to scientific management and suggests that a person will be motivated to work if rewards and penalties are directly related to performance. Taylor (1947) developed theories basic to the approach. He maintained that the daily task of each employee should be fixed and that a large bonus should be paid each time a task is completed within the assigned time limit. The manager was to set individual quotas for his employees. The employee was to be held responsible only for what he could control and if production was low, the job should be re-designed and one or more incentives and control systems activated which would insure adequate motivation to keep production levels high. (Koontz and O'Donnell, 1964)

This approach to motivation has been attacked by many managerial theorists including McGregor (1957) who maintained that:

the essential task of management is to arrange organizational conditions and methods of operation so that people can achieve their own goals best by directing their own efforts toward organizational efforts. (p.89)

A successful manager, he argued, is one who can integrate the goals of the organization with those of the individual.

The scientific approach requires an external control system and extensive monitoring of individual behavior to ascertain the degree to which standards are maintained. It is grounded in considerable psychological research and theory and based on what is generally referred to as the "Law of Effect" or the principle of reinforcement (Vroom & Deci, 1970). Basically, the contention was that if a behavior is rewarded, its probability of reoccurrence is increased.

A problem arose concerning the types of rewards available to the manager to disperse. Maslow (1943), Tannenbaum (1962), and Alderfer (1972), among others, showed that the range of human needs is very broad and that reward may come from many sources including family, peers, and the nature of the job itself. The manager cannot directly control all the rewards available, thereby limiting his effectiveness as controller. The complexity of some job situations and

organizational positions makes it impossible to measure the performance of individuals effectively, therefore, the administration of the rewards and controls becomes difficult (Katz, 1964). External control is weakened and the motivational advantage of the reward breaks down.

Participative Approach The final approach has emerged from the writings of McGregor (1957), Likert (1961), Leavitt (1965), Vroom (1964) and others. Management is viewed as an integrative factor between planning for the job and job performance. Employees are given objectives and are allowed to determine for themselves, within limits, how the objectives will be achieved. Authority is less important as a means of control and work groups and individuals are given opportunities to become decision-making units. Incentives for effectiveness are found, at least partly, within the work itself or within the work group.

Participative management does not deny the importance of productivity, nor does it minimize the importance of measurements and incentives in the job situation. Instead, it is the view of man that has changed. Man is seen as active, reactive, and proactive. He is constantly testing his environment and altering his reactions to it. Anthony (1965) maintained that individuals have an ubiquitous tendency to seek ways to control their environment and that managers must utilize this tendency in achieving organizational goals.

In examining motivation within the organizational setting, it is impossible to disregard what Dalton (1971) described as the "paradox of control." Often the attempts of a manager to obtain control of an employee's behavior result in less actual control. This decline in real control tends to lead to more pressure to exert more control. This paradox is evident in the models described by Merton (1940), Selznick (1949), and Gouldner (1954), (March & Simon 1958). These models do not deny that managerial efforts to control affect behavior, but they do focus attention on the unanticipated consequences which can be categorized as problems relating to compliance and problems relating to resistance. Both of these problem types underline the concept that each individual is involved in an attempt to control his environment (Dalton & Lawrence, 1971). Specific rewards may be seen by the individual as a means of obtaining more control of his environment and the anticipation of these rewards may have a strong motivational effect on the employee when they are perceived as available for the completion of a particular task or the attainment of a specific goal (Homans, 1961).

Tannenbaum (1968) postulated that the amount of control housed in a particular individual in an organizational setting varies with time. This necessitates the presence of a formal system of control to coordinate the activities

of the members within the organization. It is also possible for members to occupy positions in more than one control group within the organization at the same time. Consequently, the individual receives information from more than one system at a time which may result in conflict. These systems may be defined by the organization, or by the individual. The possibility exists that an individual may be in a position in which he is evaluating effort or productivity while he is being evaluated; he, then, is occupying both a maintenance position and a decision-making position (Lawler & Rhode, 1976). The interaction of these positions influences what an individual perceives as being rewarding at a given point in time and evidence exists which suggests that people may seek situations in which their control is not complete. McClelland (1971) has suggested that the highest intrinsic motivation occurs when an individual perceives that his chance of achieving a goal is approximately equal to his chance of not achieving the goal.

Dalton & Lawrence (1971) concluded that:

not only is there a tendency for individuals to act to control parts of their environment to fulfill their needs, but there is a tendency to explore, to find answers, to develop new skills, even when no other end is expected to be served... Working on a challenging task,

and intriguing problem or a new territory has value in and of itself, if the task is in that band of tasks or problems which lies just beyond the individual's present capacity to control parts of his environment in the future. (p.18)

Of the three approaches discussed, the participative seems to have had the most influence in current theories of motivation. Several contemporary theories of motivation are discussed which attempt to explain human behavior.

Major Contemporary Theories

Campbell, Dunnette, Lawler, and Weick (1970) suggested that current motivation theories have become either content theories or process theories. Unfortunately, these categories are not mutually exclusive. Content theory is chiefly concerned with specific variables or classes of variables that motivate people (such as rewards and needs). Process theory is concerned with these same variables, but also is concerned with discovering the interactive dynamics between the variables. Utilizing this classification system, Maslow's Need Hierarchy Theory, Need Achievement Theory and Hersberg's Motivation - Hygiene Theory are considered content theories. Equity Theory and Expectancy/Valence Theory are considered process theories because they stress the interactive dynamics of identifiable variables.

Individual characteristics, job characteristics and work environment characteristics have been identified in

motivation theory as being crucial in the explanation of human behavior. These variables have been succinctly summarized by Porter & Miles (1974) and in Porter & Lawler (1975) as illustrated in Table 1. Atkinson (1964) and Vroom (1964) have shown that individual differences greatly influence effort and performance. Maslow's Need Theory can also be considered in this category with its emphasis on needs of the individual. Herzberg et al (1959) and Herzberg (1966, 1968) may be considered to be concentrating on the second set of variables. The Roethlisberger & Dickson (1939) studies, on the other hand, concentrated on the third set of variables.

Of the contemporary models of motivation, two have generated considerable empirical research. These are the Motivation - Hygiene Theory and Expectancy Theory. Following is a discussion of each of these.

Motivation - Hygiene Theory

Herzberg (1957) postulated the existence of two classes of work motivators--extrinsic and intrinsic. Intrinsic motivators relate to the content of the job and include achievement, recognition, responsibility, and advancement. Extrinsic motivators are those derived from the organization and are less directly related to the influence of the individual including pay, technical supervision, human relations, company policy, working conditions, and job security. These extrinsic motivators were referred to as "hygiene

I. Individual characteristics	II. Job characteristics (example)	III. Work environment characteristics
1. Interests	Types of intrinsic rewards	1. Immediate work environment
2. Attitudes (examples)	Degree of autonomy	Peers
Toward self	Amount of direct performance	Supervisor(s)
Toward job	Feedback	2. Organizational actions
Toward aspects of the work situations	Degree of variety in tasks	Reward practices
3. Needs (examples)		System-wide rewards
Security		Individual rewards
Social		
Achievement		Organizational climate

Table 1. Variables Affecting the Motivational Process in Organizational Settings (after Porter & Miles, 1974)

factors" in Herzberg's later works (Herzberg, 1966), and factors related to job content were called "motivators." Intrinsic job features can lead to high job satisfaction. The absence of hygiene factors leads to job dissatisfaction. Knoop (1976) concluded that there was a direct relationship between the presence of satisfiers and organizational effectiveness.

Locke (1976) criticized the Herzberg model on the basis of seven major points. He maintained that the theory created a mind-body dichotomy which is unrealistic since it is the mind that allows man to discover his physical and psychological needs and the means of satisfying them. Secondly, he noted that Herzberg neglected the possibility that needs may act in more than one direction. Thirdly, Herzberg's purported parallel between man's needs and the motivator and hygiene factors really does not exist. Locke's fourth criticism was that the incident-classification system utilized in collecting data is logically inconsistent. A fifth criticism was that the defensiveness on the part of the employees may influence their satisfaction, and Herzberg has neglected this possibility. The contention that Herzberg's results relied completely on frequency data which presumed that responses are caused solely or mainly by the needs and values of the people responding was the sixth criticism. This ignored the possibility that there were factors in the

job itself which may influence satisfaction. Finally, insufficient attention was paid to individual differences.

The Herzberg model has generated many empirical studies. Several of these indicated that individual factors may be both satisfiers and dissatisfiers (Dunnette, Campbell, and Hackel, 1967). Results of the studies have been found to vary in interpretation utilizing different methods of analysis (Hunt and Hill, 1969). Like McGregor, Herzberg indicated that the individual and the organization can work synergistically, but both theorists tended to oversimplify the concept of satisfaction by polarization (Dalton & Lawrence, 1971).

Expectancy Theory

Since it has been recognized that the motivation-hygiene theory is deficient in its explanation of organizational motivation, an alternative must be considered. Many theorists endeavored to explain the phenomenon Herzberg treated in terms of expectancies. Hunt and Hill (1977) suggested that the Vroom (1964) expectancy model is a justifiable alternative. Lawler (1973, 1976) acknowledged this model as the current most dominant motivational theory in organizational psychology. The expectancy theory is synonymous with expectancy-valence theory, with path-goal theory, with valence-instrumentality theory, with instrumentality theory, and with valence-expectancy-instrumentality

theory (Steers & Porter, 1975). The Vroom model, and several alterations made to the model, are discussed in this section.

Tolman (1932), Lewin (1938), Edwards (1954), Peak (1955), Rotler (1955) and Atkinson (1958) provided the psychological model for Vroom's (1964) theory. Basic to the theory is the assumption that it is the anticipation of reward that energizes behavior and the perceived value of various outcomes that gives behavior its direction, i.e., there is a learned connection between behavior and outcome expectancy. It is the perceptions of the individual that are important, not the objective reality. (Vroom, 1964)

In the Vroom model, "expectancy" is defined as a belief concerning the likelihood that a particular act will be followed by a particular outcome. "Valence" is a measure of the strength of an individual's preference for a particular outcome. Valence may be either positive or negative and is a function of the degree to which the outcome is perceived as being related to the needs of the individual. "Instrumentality" indicates an individual's perception of the relationship between a first level outcome (organizational goal) and a second level outcome (incentive or reward).

Vroom (1964) defined valence for a first level outcome as "a monotonically increasing function of an algebraic sum of the products of the valence of all outcomes (second level)

and his conceptions of its instrumentality for the attainment of the outcome." (p.17) Valence is measured by a ranking of goals on a Likert-type scale in terms of their desirability. A scale was utilized on which the employee could indicate his perception of the likelihood that the behavior would lead to each of the identified goals. Expectancy relates efforts to first level outcomes and is expressed as subjective probability ranging from 0 to 1. Motivation to achieve a goal was described by Vroom as "force." Expressed as an equation:

$$\text{Force} = \text{Valence} \times \text{Expectancy}$$

The theory has really postulated two classes of outcomes which would be included in the organizational setting: those directly linked with behavior such as money, promotion and recognition; and those not obtained as a direct result of a particular action such as food, clothing, shelter, and status. The motivational force an individual exerts is a function of valence and expectancy which is determined by valence (Campbell, 1970).

Lawler & Rhode (1976) expressed the equation as:

$$M = (E \times V)$$

where M = motivation, E = expectancy, and V = valence. (p.20)

Vroom's theory was concerned with the future consequences which are not influenced by previous reinforcement history. It has been utilized extensively without modification as a basis for empirical studies but the model is often seen as

more useful in its changed form (Campbell and Pritchard, 1976). A brief review of the major modifications follows.

In a test of his expectancy theory, Vroom (1966) utilized a sample of forty nine graduating students of a school of industrial management. Instrumentality-goal index scores were used to determine the extent to which students perceived organizational membership as providing the means of achieving desired goals. (Instrumentality-goal index scores are the correlations between valence and instrumentality.) Vroom hypothesized that the higher the instrumentality-goal index, the greater the likelihood of the organization's being chosen as a work site. Ratings were obtained for the preferences for fifteen different goals and the extent to which they were perceived as being attainable through three different organizations. Expectancy was estimated on the basis of whether the student received a job offer from the organization. A strong positive relationship was found between the student's choice of an organization and the highest instrumentality-goal index score providing strong support for the expectancy theory.

Galbraith & Cummings (1967) elaborated on the Vroom model by using it to predict productivity of operative workers in a heavy equipment manufacturing plant. The sample of thirty-two was selected to include workers with a wide range of alternative levels of performance. They distinguished between first and second level outcomes.

Frist level outcomes, performance on the job, were to be predicted by the researchers. Second level outcomes were the events to which performance could lead. Three sources of second level outcomes were considered: those which the organization as a whole may provide for performance (money, fringe benefits, promotions); support of supervisors; and acceptance by the work group. Graphic rating scales were utilized to measure the instrumentality of the performance for the outcomes and for the desirability of the outcomes. Expectancy was considered to be high by the investigators on the basis that the worker's expectations that he could produce at a high level would be equal to one because jobs were independent and productivity is a function of the individual's effort. A modified analysis of variance and step-wise multiple regression were utilized. The investigators concluded that their results were supportive of the Vroom theory.

Mitchell & Biglan (1971) disputed the Galbraith and Cummings' claim that their findings supported the Vroom theory on the basis that their hypothesis was inadequate. They also disputed the assumption that a value of one could be assigned as the subject's expectancy was faulty. Criticism was also leveled at the specific outcomes utilized since the outcomes chosen from the study may have excluded some outcomes related to performance. In addition, the sample may

have been faulty, and possibly should have been chosen on the basis of measured worker's intentions to exert effort, or on the basis of actual effort exerted. Second level outcomes must also be determined to be of importance to the subjects themselves.

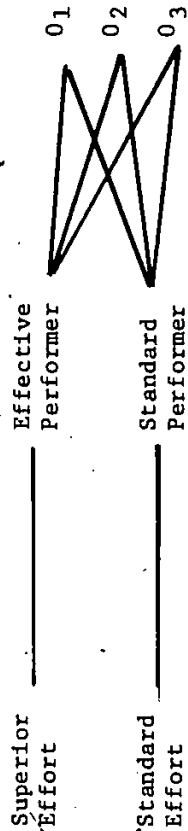
Graen (1969) attempted to broaden the Vroom model's conceptual base by considering attitude theory and knowledge of the interpersonal influence process. The Graen model considered the full spectrum of job behavior in a system of multiple employment roles, especially efficient performance as opposed to standard performance. For a particular role there was a set of standards which indicated if the individual had or had not met the role expectations. The model was also concerned that all possible outcomes of meeting or not meeting the standards of the task were identified. Three major classes of outcomes were identified: those which are intrinsically granted or withheld, those externally mediated outcomes which pressure for conformity, and the externally mediated outcomes specified by the organization as attached to the role. The effort that an individual exerts to achieve the role or task is a function of the attraction to the role and the expectancy that a particular amount of effort will result in the role expectation. Campbell & Pritchard (1976) maintained that "basically, Graen is trying to predict the probability of

superior effort expenditure." (p.76)

A schematic representation of the Graen model is shown in Figure 1. In the model, path-goal utility is similar to Vroom's motivational force. It is composed of goal attraction which is similar to valence of performance, and path efficacy which is similar to Vroom's expectancy. External pressure toward an effort level is a type of valence index, while pressure to comply is a measure of instrumentality. Internal pressures are basically pressures for intrinsic consequences of the effort level multiplied by the effort level of the sum of the consequences. Probability of a superior effort is the sum of the three components of the model.

A model proposed by Porter & Lawler (1968) is less complex than those described so far. It attempted to avoid dealing with discrete effort levels. The value of rewards utilized in the model refers to the perceived attractiveness of possible outcomes, both extrinsic and intrinsic. Effort, in the model, is distinct from performance (sum of successful role achievement, but not limited to productivity). The term "reward" is synonymous with "outcome" in the Vroom and Graen models. Effort is determined largely by the individual's perceived "value of reward" (valence) and "effort reward probability" which is composed of the probability that performance depends on effort and that reward depends on performance.

Utility of effort leads
 Expectancy that effort leads to performance
 Attraction of performance goal
 Instrumentality of performance level X for attaining the outcome
 Attraction or outcome (ex. pay, promotion)



(1) Path Goal Utility

(2) External Pressures =
 Toward Superior Effort

(3) Internal Pressures =
 Toward Superior Effort

Perception of effort levels other persons expect him to exert multiplied by the perceived amount of pressure those persons apply to influence his compliance.

Attraction to various intrinsic consequences of superior effort multiplied by the expectancy that superior effort will lead to these consequences.

$$\text{PROBABILITY OF SUPERIOR EFFORT} = (1) + (2) + (3)$$

Figure 1: Model of Expectancy after Graen (1969)

Basically, the model suggests that an individual's effort toward performing is a "multiplicative function of the perceived value of rewards and the perceived contingency between expending effort and obtaining rewards, which, in turn is a multiplicative function of the value of reward and effort reward." (Campbell & Pritchard, 1976, p.78) Feedback occurs over time as the perceived effort-reward changes with the actual extrinsic and intrinsic reward practices. Feedback also occurs as the individual's perception of the equitability between reward and performance changes. The model is summarized in Figure 2.

The model just described was a second attempt by these researchers. In 1967 they endeavored to predict effort from perceived instrumentalities in relation to seven researcher-chosen rewards. Their hypotheses were not strongly supported. Mitchell & Biglan (1971) attributed the failure of this attempt to their dependence on researcher-chosen rewards rather than rewards identified by the subjects.

Cummings & Schwab (1973)^a described the Porter & Lawler (1968) model as being useful in its suggestion that the administration of rewards can be utilized to increase performance and effort.

The Porter & Lawler model has been further modified by Lawler (1971, 1973) to include more of the factors which determine the individual's expectancy that effort will lead

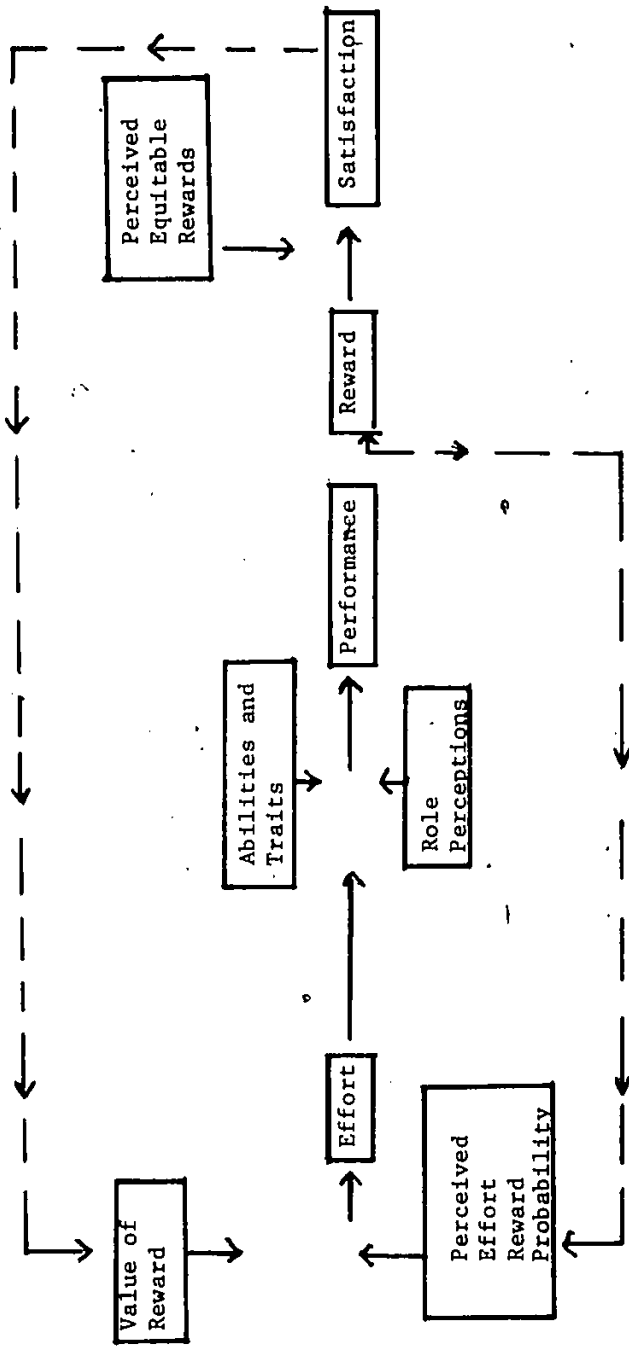


FIGURE 2: EXPECTANCY MODEL: PORTER AND LAWLER,
1968, p.17.

to task accomplishment. Specifically, these include: task information, the individual's past experience with similar tasks, and the individual's self esteem (confidence that he is capable of doing the task). A schematic representation of the resultant model appears in Figure 3. In essence, this model suggests that the effort executed by an individual toward a particular task goal will be directly influenced by his valence for the perceivable outcomes, and, further, that these outcomes are evaluated in terms of their potential for satisfying a need or needs. Valence exists at two levels: valence of the task goal and valence based on needs. Similarly, there are two levels of instrumentality: of the task and of the need satisfaction. Expectancy is influenced by all these factors.

In addition to the necessity of rewards being those perceived as important by the individual, studies utilizing expectancy theory to predict the behavior of engineers have indicated that incentives must also be perceived by the individual as being appropriate to the specific task. Arvey & Neel (1974) utilized an incentive list for engineers developed by Bandy to predict expectancies, but found that their predictions were not as accurate as they had anticipated. In attempting to identify the cause of the lack of significance in their data, they interviewed part of their sample and were told that many of the incentives

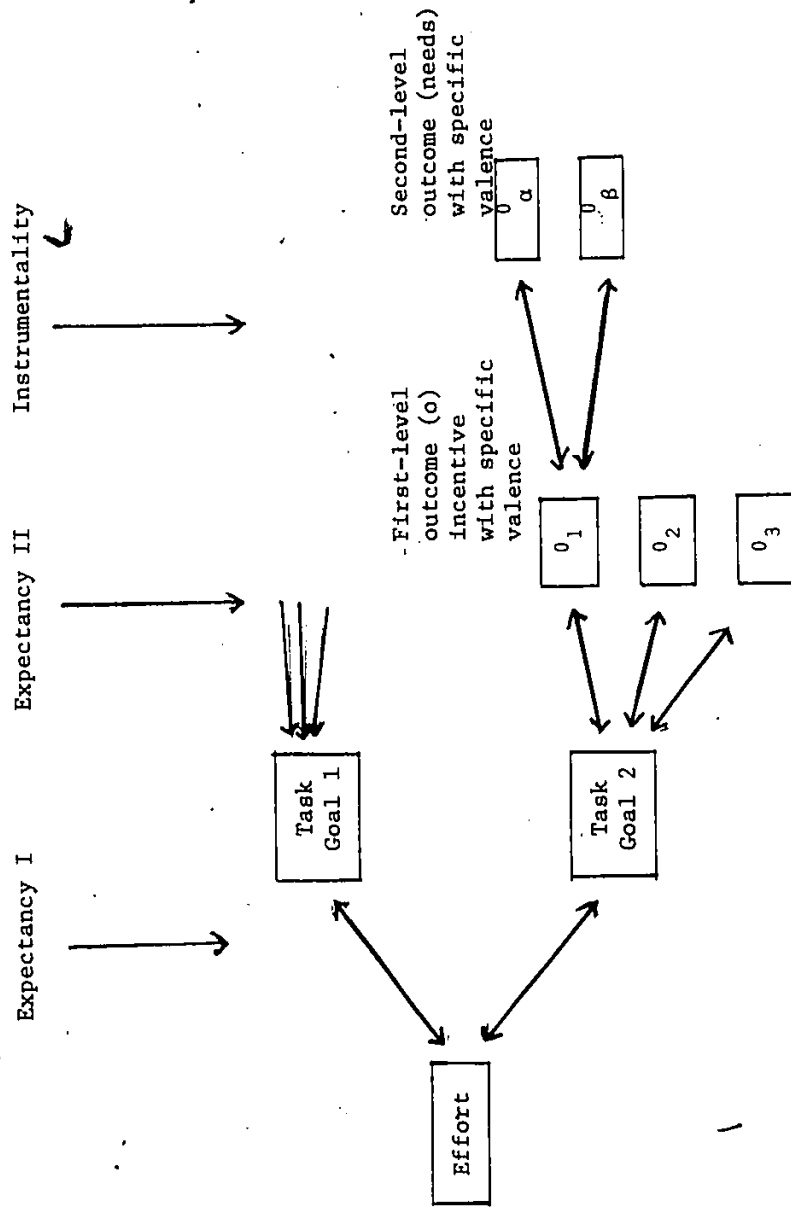


Figure 3: A specific representation of a hybrid expectancy model of work motivation.

identified by the Landy instrument really did not represent those seen as appropriate to the job being done by the group of engineers in the sample population. Ivancevich (1976) partly replicated the Arvey & Neel study by using the Landy instrument with a similar group of employees and predicting expectancies. They also developed an instrument paralleling that of Landy's based on incentives identified by the sample population as being suitable for the job being done. Expectancies were more significant with the second instrument, verifying the Arvey & Neel conclusion.

In summary, predictions of the effort employees are willing to exert toward an organizational goal can be made on the basis of expectancy theory. The most significant expectancies, and therefore, the greatest effort, can be predicted when the incentives offered are those considered appropriate to the task of the employee.

There are many motivation theories which may be applicable to the educational setting. Of these theories, the most suitable has been the extension of the Expectancy Theory proposed by Vroom (1964). Research utilizing this model has indicated that performance in tasks is related both to the type of task and to the specific incentives available. Educators should expect a specific group of incentives to be available as motivators for educational tasks.

The idea that incentives must be considered for educators is supported by Spuck (1974):

Educational institutions, like all organizations, must provide incentives which induce cooperative behaviors from organizational members. The greatest portion of the fiscal expenditures of school districts are directed toward providing rewards which will attract and hold teachers within the system and which will motivate them to become productive members of their profession. (p.18)

It is also evident that consideration must be given to the specific types of productive activity the institution is seeking from teachers in the provision of incentives. If increased participation in curriculum tasks is desirable, the incentives offered must be those the teachers see as being appropriate to these tasks.

A review of the literature has revealed no attempt to identify incentives specific to curriculum tasks and there appears to have been few attempts to identify the specific tasks which are part of the curriculum work. It is necessary, then, to identify first curriculum tasks before incentives specific to these tasks can be determined. An examination of the tasks identified as being curricular follows.

Curriculum Tasks

Basic to an identification of curriculum tasks is the acceptance of a working definition of the word "curriculum." For the purpose of the thesis, a curriculum has been defined as a written plan depicting the scope and sequence of the school's or system's projected educational program. At a more specific level, a curriculum is a document which may be utilized as a plan for guiding instructional strategies. Ideally, it should contain a statement of the goals for which the curriculum was designed, a body of culture content which may be utilized in realizing the goals, a statement of an evaluation scheme which reflects both the effectiveness of the curriculum and of the curriculum system, and specific statements of the intentions for use of the document in guiding instructional strategies (Young & Young, 1977). This definition is in keeping with that proposed by Beauchamp (1975) who further suggested that a curriculum system is the specific system of decision making and action utilized in curriculum planning, curriculum implementation, and curriculum evaluation. This definition clearly distinguishes between instruction and curriculum. It is possible, within the bounds of the definition, to describe a curriculum for a particular subject.

There is paucity of literature related directly to the identification of curriculum tasks. Russell (1975) identified four "considerations" which may be interpreted as tasks; the selection and the organization of curriculum content; the designing of and planning of learning experiences; the selection of and preparation of teaching aids and media; and the establishment of processes and procedures for evaluation of curriculum effectiveness.

Cook & Doll (1973), in describing a program for the total professional involvement of teachers in curriculum planning, identified seven tasks; establishing curriculum plans, choosing objectives, developing materials, piloting materials, revision of materials, evaluation, and the production of a written statement regarding the curriculum. Olson (1976) maintained that the choice and adaptation of curricular materials to local conditions is a curricular task.

A useful model of curriculum decision-making tasks was developed by Young & Young (1977) for use in the study of curriculum decision-making preferences of Alberta teachers (Figure 4). Their model identified seven distinct types of curriculum tasks which encompass those identified above and are consistent with the definition of "curriculum" utilized here. A brief description of each of the seven types follows:

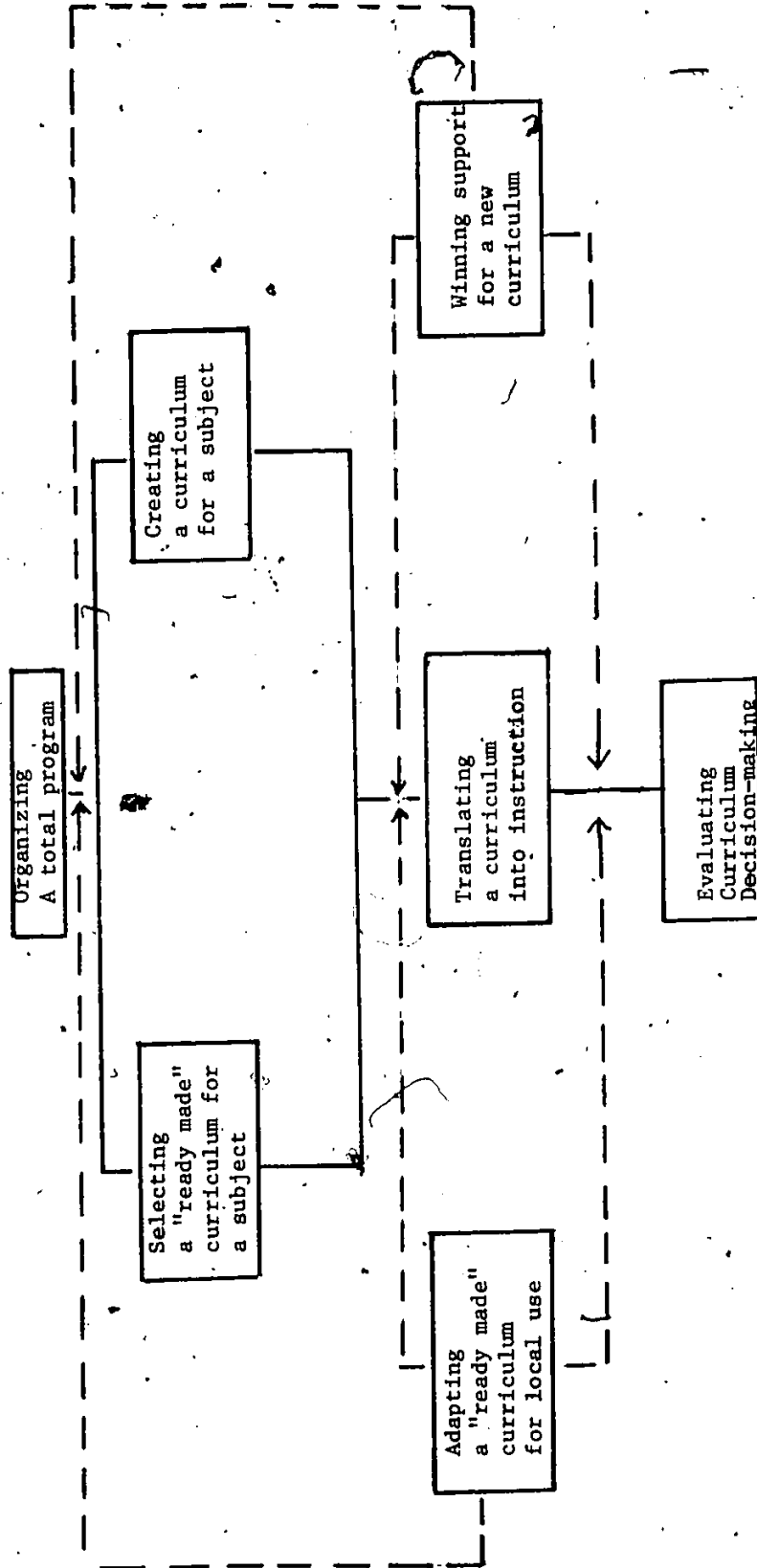


FIGURE 4: A Model of Seven Kinds of Curriculum Tasks
(After Young and Young, 1977, p.19)

Organizing a program: establishing a philosophical framework within which the curriculum worker selects components which are consistent with the goals of the total program.

Selecting a "ready made" curriculum: this may be from an external source or from materials available within the system.

Creating a curriculum: utilizing the selected goals as a basis for choosing the basic ideas, skills, or themes to be developed.

Translating a curriculum into instruction: planning how a subject will be taught (this is planning for instruction, not the actual instructional process).

Adapting a curriculum: changing an existing curriculum to meet the needs of a particular group of students.

Winning support for a new curriculum: identifying groups from whom support is needed and cultivating their support.

Evaluating curriculum decision-making: assessing the effectiveness of the process of curriculum decision-making and of the product.

The schema provided by Young & Young appears to be the only explicit description available of curriculum tasks. It incorporates all the tasks identified by other writers cited.

The specificity of incentives to tasks has become apparent through the discussion of literature related to Expectancy Theory. The remaining section of this chapter examines incentives which have been identified as those utilized in an educational context with teachers.

Incentives

The noun "incentive" may be defined as "that which incites, or tends to incite, action" (Funk & Wagnalls, 1963). It is also considered synonymous with "motivator" and "perceived opportunity," or "potential reward" (Harris, 1976). Incentives, in the organizational context, may be classified as formal or informal and as intrinsic or extrinsic. The two schemata are not mutually exclusive. Formal incentives (rewards) are those which will be granted by the organization through an established system (for example, annual increments and bonuses). Informal incentives are those which are not directly provided by the organization, but are achieved within the organizational setting (for example, peer support). Extrinsic incentives are those potential motivators external to the individual. Intrinsic incentives are those which can only be provided by the individual for himself. The utilization of incentives in educational settings incorporated both systems of classification (Greene, 1972; Jabker & Halenski, 1977).

In an investigation of teacher absenteeism, recruitment, and retention, Spuck (1974) utilized eight categories of rewards available to teachers in high schools. His categories were: material inducements, support and recognition by the community, physical conditions, pride of workmanship, social interaction with peers, agreement with district goals and policy, ability to influence school policy, and environmental working conditions.

Extrinsic and intrinsic categories were utilized by Cory in his investigation of motivators for professional growth of teachers. Fuller & Miskel (1972) utilized a similar approach in examining the source of work attachment among public school teachers. Pincus & Weiler (1975) also used this system in investigating incentives for innovation. Kimball (1976), in a study of the effectiveness of reward and incentives for teachers, and Diaz (1973), in an attempt to develop a conceptual framework for the study of incentives in public education, also classified incentives as intrinsic and extrinsic. Lipe & Jung (1976), in a summary of research related to incentives for student performance, categorized incentives as social, material and aversive. The specific incentives they identified can readily be classified as intrinsic or extrinsic. Jabker & Halinski (1977) examined incentives utilized in encouraging instructional improvement among university professors

in Illinois. They also utilized intrinsic and extrinsic categorizations. A composite list of incentives identified by these researchers is found in Table 2. The development of this table is discussed in Chapter 2 of this thesis.

Diaz (1973) added support to the suggestion that the inducement of teachers to participate in educational activities requires a variety of incentives. He concluded that the incentives must be specific for particular types of activity, however, and used the example of several educational innovations which have required the establishment of specific incentive systems to guarantee implementation.

Purpose of the Study

The literature review in this chapter has indicated that in order to motivate individuals to perform tasks, it is necessary to identify incentives which are indeed motivators for the task. It has further been shown that there are incentives utilized with teachers in the educational settings. There is no evidence, however, that any attempt has been made to identify which incentives, if any, are appropriate in motivating teacher performance of curricular tasks.

The purpose of this study is to develop an instrument which may be utilized in the identification of incentives specific to curriculum tasks. Chapter 2 describes the development of this instrument.

1. Satisfaction from participating in decision-making that affects work.
2. Recognition for effective work accomplished.
3. Praise in private.
4. Assignment to committees to study problems of school.
5. Explicit role definition.
6. Committee membership.
7. Opportunity to address teacher groups.
8. Knowledge that the status of the profession will be increased.
9. Less responsibility (eg. bus duty, fewer teaching hours).
10. Reimbursement for courses.
11. Public recognition.
12. Esteem of colleagues.
13. Opportunity to develop new skills and leadership.
14. Assignment as helper for staff needing assistance.
15. Feeling that your contribution and suggestions are helpful.
16. Feeling that your superior has confidence in you.
17. Opportunity to visit other schools and report on the visit.
18. Authority over peers.
19. Additional training.
20. Promotion.
21. Extra salary for training and experience.
22. Inservice education.
23. Opportunity to work with new teachers.
24. Support, assistance and encouragement from superiors.
25. Job security.
26. Increased self-confidence.
27. Travel funds to visit other systems.
28. Opportunity for publication.
29. More autonomy.
30. Assignment of a classroom assistant.
31. Opportunity to attend workshops and conferences.
32. Special privilege.
33. Increased opportunity to act as a consultant.
34. Release time.
35. Letter of recognition from your superior.
36. Support, assistance and encouragement from peers.
37. Recognition for the school in which you work.
38. Opportunity to improve existing curricula.
39. Knowledge that your suggestions are being considered.
40. Getting along with your supervisor.
41. Opportunity to participate in more areas of policy decision-making.
42. Increased adult contact in school hours.
43. Getting along with your peers.
44. Extra pay.
45. Sense of achievement.
46. Increased effectiveness as a teacher.
47. Challenge of the task itself.
48. Opportunity to teach a preferred group.
49. Good evaluation.
50. Provision of materials for use in your school.
51. Opportunity to work as part of a team.

Table 2: Complete List of Incentive from Literature

CHAPTER TWO

Methodology for Development of the Instrument and Analysis of Data

Introduction

In the first chapter of this thesis, the literature reviewed indicated that incentives play a major role in the motivation of employees to perform tasks. Evidence was also cited which indicated that incentives, to be effective, must be those considered by the employee to be relevant to the tasks involved. There appears to have been no attempt to identify those incentives appropriate for curriculum tasks and few attempts to define operationally curriculum tasks. This chapter describes the development of an instrument to identify those incentives teachers perceive as most appropriate for curriculum decision-making tasks.

The chapter is comprised of four major sections. The first examines studies of incentives utilized with teachers in educational settings in more detail than the descriptions found in Chapter I. It also details the procedure utilized in developing the comprehensive list of incentives included in the previous chapter (Table 2).

Section two of the chapter contains operational definitions of curriculum tasks employed in the instrument. The third section discusses the procedures by which the list of incentives was reduced to the number occurring in the instrument.

The final section of the chapter describes the instrument in its final format and details the administration of the instrument to a sample population. Details of the analysis of data also appear in this section.

Incentives

The term "incentive" occurs in literature related to most social sciences and carries with it connotations which vary considerably. Diaz (1973) provided an extensive compilation of samples of definitions for the term from the fields of economics, psychology, sociology, contracting, education and from general usage. He concluded that the commonality in these definitions is the concept that an incentive is a reward. Specifically, an incentive is a potential, it becomes a reward.

Cory (n.d.), in examining factors which motivate teachers for professional growth, said:

Incentives are assumed to be those conditions and procedures which contribute toward making the teacher more concerned, and more desirous

and willing to grow; to move toward higher and better professional goals; and to work more harmoniously and cooperate more intelligently with teachers, the community, and the administration in the process of developing adequate educational opportunities for pupils. (p.393)

It is in this sense that the term "incentive" is applied in this study, i.e., as a positive potential reward.

The list of possible incentives would be limitless if parameters were not defined for their identification. The incentives utilized in the instrument described here are limited to those which have been identified as existing for teachers in North American systems of education.

A limited number of studies have identified incentives being utilized to motivate teacher behavior. Some of these studies are described here briefly.

Cory (n.d.) surveyed 259 principals and 1,197 teachers in North Central Association schools in an effort to identify incentives employed in these schools to encourage teacher professional growth. From discussions with teachers and principals and from responses to questionnaires, he concluded that incentives exist which will effectively motivate teacher professional growth. Utilizing these incentives, Cory proposed a model for an incentive growth plan.

In an attempt to define a reward system for teachers which would elicit greater pupil achievement, Kimball (n.d.) concluded that no instruments existed which would examine the existing and preferred reward system operating in the educational organizational setting. Consequently, he utilized a literature review to compile a list of possible rewards. Teachers from six "high achieving schools" and six "low achieving schools" in New Hampshire were asked to rate the importance of each of the identified rewards on a five-point Likert-type scale ranging from strong incentive to strong disincentive. His data indicated that, although teachers in the two school types differed slightly in their ranking of rewards, an "ideal" reward system does not exist.

Incentive programmes have enjoyed a period of popularity in educational organizations as well as in other businesses. Most of these have relied almost exclusively on monetary rewards. An extensive study of existing educational incentive programmes was conducted by Diaz (1973). The research provided a conceptual framework for the study of incentives in public education systems. He concluded that three factors were of major importance in the establishment of such a program: the targets (population being motivated) of the programme must be identified, clear goals must be established, and rewards must be appropriate for the goals and to the target.

Jabker & Halinski (1977) attempted to determine the effects of instructional improvement programmes on faculty. They compiled a list of formal and informal rewards identified from the responses of professors to open-ended questions in a write-in questionnaire. Three hundred sixty professors ranked the importance of these rewards on a five-point Likert-type scale both as it should be and as it existed. They concluded that there would be more benefit to faculty members engaged in the instructional improvement programmes if reward systems were altered. This provides further support to the contention that a specific group of incentives can be identified for a specific type of work.

In predicting job effort utilizing Vroom's Expectancy Theory, Murphy (1977) interviewed 30 teachers and 10 administrators to develop a list of outcomes (incentives) affecting job effort. The identified incentives were found to differ in their influence on job effort.

From the incentives identified by the studies mentioned above and those identified by Fuller and Miskel (1972), Lortie (1975), Killian (1976), MacDonald (1978) and others, a composite list of incentives was compiled. Appendix 1 contains this list as well as the sources from which each specific incentive is derived. It is obvious that the incentives in this table are not mutually exclusive and

could not be incorporated in their existing format as part of an instrument. Further refinement was necessary if the importance of specific incentives were to be ascertained. The procedure utilized in obtaining a comprehensive list of discrete incentives follows.

Development of Incentive List

Each incentive appearing in Appendix I was written on a 3" x 4" index card. Nine graduate students were asked to sort the cards to eliminate duplication of incentives. On the basis of frequency of citing as duplicates, the list was reduced to 51 incentives.

To insure that classroom teachers would agree with the overlap identified by the graduate students, 25 classroom teachers representing all three major divisions in the New Brunswick school system were also asked to sort the cards. The same 51 incentives were identified as discrete. These incentives are listed in Table 2.

In summary, there are incentives which have been employed for teachers in educational organizations. A review of literature has identified many incentives, 51 of which appear discrete to both graduate students and practitioners. It is possible that some of these incentives are more significant for some tasks than for others. More specifically, it should be possible to identify a group of incentives which are considered most appropriate for curriculum tasks.

The following section describes the delineation of curriculum tasks to provide operational definitions which can be utilized in the instrument.

Curriculum Tasks

Although many authors have identified some curriculum decision-making tasks, a review of literature has only provided one empirical study which attempted to incorporate all such tasks. Young & Young (1977), in an attempt to evaluate the curriculum decision-making preferences of Alberta teachers, identified seven specific tasks which housed all the decisions made in curriculum design, development, implementation, and evaluation. (These were identified in Chapter 1 of this thesis and their inter-relatedness shown in Figure 4 but further elaboration and support appear in this section.) In identifying their curriculum decision-making tasks, Young & Young employed graduate students at the University of Alberta and classroom teachers to assure the discreteness and inclusiveness of each task. They also pilot tested their instrument three times before its administration to 1,292 teachers in 174 schools in Alberta. Significant differences in teacher preferences were found to support the conclusion that the decision-making categories they suggested were discrete.

In describing the formulation of their seven types of curriculum decision-making, Young & Young did not clearly

identify support from literature for the types of decisions they identified. An extensive review of literature related to curriculum decision-making has revealed only decision types included in their paradigm. Following is a more detailed discussion of their curriculum decision-making tasks and additional support from the literature for the existence of such decision-making in curriculum.

Organizing a total program includes determining what the total school program should be doing for students; evaluating the contribution of traditional subject to these goals; and deciding how these and new subjects can be optimally organized in the total educational program (Young & Young, 1977, questionnaire). These divisions are what Cook & Doll (1973) referred to as curriculum planning and what Ingram (1974) considered as assessing the needs for curricula. Beauchamp (1964) considered this viewing of the total program as an imperative element in curriculum planning.

Selecting a "ready-made" curriculum includes the location of curricula currently available for specific subjects, evaluating them, assessing their appropriateness for local usage, and the assessment of the demands these curricula make on the existing school resources and teachers. Ingram (1974) identified the examination of existing curricula materials as a facet of curriculum development. Olson

(1976) and Russell (1976) also identified the examination of, already existing materials as part of the curriculum decision-making process.

Adapting a "ready-made" curriculum includes decisions concerning how a currently existing program needs to be changed and how such changes can be effected while maintaining a degree of fidelity to the curriculum writer's intents. Specific activities involve decisions related to the emphasis of certain goals, the revision of sequence, the adjustment of content to facilitate different kinds of learners, and the designing of new methods and materials. The existence of working committees in subject areas in various educational jurisdictions attests to the existence of these types of curriculum decisions. Simpkins & Friesen (1969), Cook & Doll (1973), Oberg (1974), among others, also recognized this type of decision making.

Creating a curriculum is the fourth type of curriculum work described by Young & Young. Decisions included here are the clarification of a subject's effect on students, the assessment of contributions made by other fields of study to the subject, sequencing of ideas and skills in the subject and the choice of topics or themes which contribute most readily to the desired skill and idea development. Peltier (1976) referred to this process as the "formulation" of a curriculum, Olson (1976) utilized the same terminology as Young & Young and called the process

"creating". Cook & Doll (1973) and Beauchamp (1975) referred to this process as curriculum construction. Hill (1973) called these decisions part of curriculum organization. Schaffarziqk regarded this a part of program improvement and generally, such decisions are considered part of the curriculum development process.

Translation into Instruction is the fifth category of curriculum decision-making. Although decisions are similar to those made when creating a curriculum, they differ in their level of refinement. The identification of the purpose of a particular curriculum and selection of teaching methods consistent with the purpose are major decisions made in this task. Organizing learning experiences, developing instructional materials and creating units of study supplement these decisions. This type of curriculum decision making is widely recognized and is alluded to by many curriculum writers including Johansen (1967), Simpkins & Friesen (1969), Cook & Doll (1973), Olson (1976), Russel (1976), Oliver (1977).

Winning support for a new curriculum includes the identification of individuals or groups whose support will be necessary for the effective implementation of a curriculum. It also includes the development and timing of strategies to gain the support needed. Most current literature describing curriculum implementation identifies these decisions as imperative for effective dissemination :

of the curriculum. Ingram (1974) and Russell (1976) have both clearly identified this as an imperative part of curriculum decision-making.

Evaluating curriculum decision-making is a process described by Young & Young as reflecting decisions at all the other task levels. Specifically, it includes assessing the effectiveness of each of the other types of decision making. In addition, an appraisal on the utilization of time, money, personnel and expertise, and the quality and effectiveness of the curriculum itself, its implementation and student outcomes occur. The importance of this type of curriculum task becomes apparent as one examines the writings of any curriculum theorist. Beauchamp (1964), Cook & Doll (1973), Hill (1973), Connelly (1974), Olson (1976), Peltier (1976) and Schaffarzick (1976) cite this type of decision-making as imperative.

The seven types of curriculum decision-making tasks identified by Young & Young (1977) have been elaborated. These are considered to be inclusive and operationally defined and are utilized in the instrument developed here.

The following section of this chapter describes the procedure utilized to identify incentives perceived by teachers as appropriate to these curriculum tasks. It discusses the structure of the questionnaire employed, the sample population, the methods of data analysis, and the resulting list of incentives.

Development of an Incentive List Questionnaire To determine if a group of incentives exists that teachers believe most appropriate for curriculum tasks, a questionnaire was utilized. It is comprised of an instruction sheet, a page of multiple choice demographic questions, and seven pages which describe each curriculum task and present the list of 51 incentives. Because of the time required to complete the questionnaire each respondent was presented with the instruction sheet, the personal data page and only three of the seven task pages. Instructions were given to rank the ten most appropriate incentives among the 51 from first choice to tenth choice. (The complete questionnaire is found in Appendix 2.)

Population: The questionnaire was sent to 640 randomly selected members of the New Brunswick Teachers Association who were full-time classroom teachers. Of these, 526 usable questionnaires were returned. This represents response from approximately 10% of the English speaking teachers of the Province. Care was taken to include only full-time teachers in the sample since evidence exists to indicate that there may be differences in preference between full-time teachers, part-time teachers and administrators (Young & Young, 1977).

Questionnaires were distributed through the District Superintendent's office and respondents were given the option of returning the questionnaire through their superintendent or directly to the researcher. The frequency of response to each task is shown in Table 3.

Task Number	Frequency
1. Organizing a Program	214
2. Selecting a "Ready Made" Curriculum	226
3. Creating a Curriculum	226
4. Translating a Curriculum into Instruction	236
5. Adapting a Curriculum	228
6. Winning Support for a new Curriculum	224
7. Evaluating Curriculum Decision-Making	224

Table 3: Frequency of Response to Tasks

Analysis of the Data and Resultant Incentives: The data collected in the study were punched on data processing cards. Analysis was made at the University of Ottawa Computer Center using the SPSS (Statistical Package for the Social Services) program "Frequencies."

Frequency of choice for each item was determined for each rank position and their percentages computed. This was utilized in determining the relative importance of each incentive for each task to the total population. From these frequencies matrices were developed which showed the frequency of choice in each rank across the seven tasks. This provided a measure of relative importance of each incentive across tasks. It was assumed that if a group of

incentives were not appropriate to curriculum tasks, no major differences could be expected in the frequency of choice. Although the rank frequency varied somewhat across tasks, the same group of incentives was ranked highly in each task. The importance of these incentives was also evident from the matrices constructed (Appendix 3). Ten incentives emerged as being clearly more appropriate to teachers for curricular tasks. These are shown in Table 4, with their relative ranking. Each of these incentives was identified as appropriate by more than one-third of the sample.

To this point, the chapter has examined incentives utilized with teachers in North American educational settings and described the development of a comprehensive list of these incentives: curricular decision-making tasks have been identified; and the procedure for reducing the list of incentives to one which includes only those seen by teachers as appropriate for curriculum tasks has been described. The remaining section of the chapter describes the structure of the instrument to identify incentives for curriculum tasks, its field testing and resulting data.

Instrument to Identify Incentives for Curriculum Tasks (IIICT)

The unwieldiness of considering 51 incentives for seven tasks made the questionnaire described in the last section unsuitable for extensive use. The time required to complete the exercise and the inappropriateness of the majority of incentives required its simplification. A more

desirable instrument requires fewer responses and enables each respondent to react to each task. The isolation of the ten most appropriate incentives enabled the development of such an instrument.

The IIICT is comprised of nine pages as follows. The first page contains instructions for completing the instrument. Page two contains multiple choice questions for demographic factors. Pages three through nine each contain the description of a curriculum task and the ten incentives identified above. The respondents were asked to rank all of the incentives from 1 (most appropriate to the task) to 10 (least appropriate to the task) for each task. The instrument requires approximately 45 minutes to complete. It is found in Appendix 4.

Sample: The IIICT was administered to 215 full-time classroom teachers from schools in various parts of New Brunswick. After six weeks, the test was re-administered to 204 of the same teachers. The remaining 11 teachers were not in their schools on the day of the second administration because of their involvement in other professional activities.

Analysis and Presentation of Data: The data were analyzed using the SPSSH programs, Cross-tabulations and Frequencies. Other specially designed procedures were utilized in determination of some of the statistics reported.

Rank	Incentive Number	Incentive	Score *	Percentage **
1	12	Opportunity to improve existing curricula	1102	(69.8%)
2	19	Increased effectiveness as a teacher	1053	(66.7%)
3	14	Feeling that your contributions and suggestions are helpful	847	(53.7%)
4	35	Satisfaction from participating in decision-making that affects work	830	(52.6%)
5	34	Opportunity to develop new skills and leadership	766	(48.5%)
6	28	Provision of materials for use in your school	701	(44.4%)
7	33	Sense of achievement	682	(43.2%)
8	29	Challenge of the task itself	671	(42.5%)
9	2	Increased self-confidence	587	(37.2%)
10	11	Knowledge that your suggestions are being considered	579	(36.7%)

TABLE 4: Ranking of Outcomes According to Score Based on Frequency of Choice in Rank Across Seven Tasks

* Score refers to the total choices of this incentive from a possible 1578.

** This represents the total percentage of respondents who chose the incentive.

Frequency tables showing the ranking of each incentive for each task in both the test and retest administrations of the instrument are found in Appendix 4. Data from these tables were utilized to determine a coefficient of attractiveness (A) for each incentive in each task. The coefficients were calculated utilizing the formula:

$$A = \frac{w_{10}f_{i1} + w_9f_{i2} + \dots + w_1f_{ix}}{ION}$$

where $w = 10, w = 9, \dots, w = 1$.

f_i = frequency of subjects choosing rank i
for this incentive and this task

The values of this coefficient appear in Table 5 for each incentive in each task. An examination of the table reveals that the attractiveness of each incentive varies within tasks and that there is variance in attractiveness across tasks.

In determining the stability or consistency of the instrument for each incentive and for each task, data were clustered for analysis. Classes were formed housing the incentives ranked first-to-third, fourth-to-sixth, and seventh-to-tenth, and comparisons made between the test and retest data. This clustering resulted in some loss of information and, therefore, the measurements of reliability may be somewhat depressed. Figure 5 shows the resulting 3 x 3 matrix for incentive 1 in task 1.

	Curriculum Task						
	1	2	3	4	5	6	7
1	0.761	0.799	0.810	0.685	0.818	0.684	0.697
2	0.798	0.757	0.724	0.773	0.838	0.556	0.620
3	0.512	0.553	0.456	0.475	0.434	0.561	0.530
4	0.554	0.624	0.550	0.500	0.510	0.561	0.674
5	0.643	0.553	0.599	0.588	0.613	0.650	0.549
6	0.525	0.641	0.577	0.617	0.597	0.391	0.431
7	0.491	0.376	0.461	0.490	0.468	0.500	0.532
8	0.473	0.465	0.545	0.592	0.491	0.605	0.558
9	0.418	0.353	0.411	0.413	0.403	0.503	0.427
10	0.325	0.378	0.366	0.368	0.328	0.489	0.483

TABLE 5: Coefficients of Attractiveness of Incentives for Tasks

		COUNT	RANK (Retest)			Row Total					
			1-To-3	4-To-6	7-To-10						
Rank (retest)	ROW PCT	COL PCT	TOT PCT	1	2	3					
1-To-3	1	136	98.6	66.7	2	1.4	1.0	0	0.0	139	67.6
4-To-6	2	0	0.0	0.0	26	86.7	12.7	4	13.3	30	14.7
7-To-10	3	1	2.8	0.5	0	0.0	0.0	35	97.2	36	17.6
		COLUMN	137	67.2	26	13.7	39	19.1			
		TOTAL									

CONTINGENCY COEFFICIENT = 0.79091
ETA = 0.96315

FIGURE 5: Stability of Incentive 1 in Task 1

Three estimates of reliability can be extracted from these matrices for each incentive and each task. Each is briefly discussed.

A contingency coefficient is a measure of stability of an instrument over a period of time. It is the measure of association which ranges 0, no association, to 1, complete association.

Eta is an intra-class estimate of reliability. It may be interpreted as setting the maximum possibility of reliability within the class. It ranges from 0 to 1.

Eta^2 provides an approximation of the percentage variance that can be explained in a predicted variable by using a predictor. Specifically, in this study, Eta^2 provides a measure of the percentage of variance on the retest that can be explained by knowledge of the original test results (Roscoe, 1975).

Percentage agreement provides a fourth convenient estimate of reliability available from the data. This is readily calculated from the 3 x 3 matrices by summing the percentages found in boxes 1.1, 2.2, and 3.3. As an example, the percentage agreement for incentive 1 in task 1 would be 96.6 (refer to Figure 5).

Intraclass correlation coefficients are inappropriate for these data because the same individual appears in responses for both sets of data.

Table 6 shows the values of contingency coefficients, Eta values and percentage agreement for each incentive in each task. Eta^2 values are readily estimated by squaring the given Eta value.

From Table 6 it is possible to extract a contingency coefficient for each task expressed as the range of contingency coefficients for all incentives over the task. Table 7 summarizes these. Examination of these ranges reveals that the

		TASK							
		1	2	3	4	5	6	7	
Incentive2	*	0.79091	0.74901	0.77552	0.79399	0.80126	0.77574	0.78960	
	**	0.96315	0.86958	0.84002	0.95775	0.94849	0.93897	0.94420	
	***	96.6	91.6	95.1	95.0	96.5	92.6	93.1	
		0.79512	0.79076	0.79580	0.80391	0.80229	0.76435	0.76194	
		0.96576	0.94294	0.94876	0.97454	0.97799	0.89228	0.93403	
		96.6	95.0	96.7	97.6	98.0	89.7	90.2	
		0.75956	0.75762	0.76803	0.79539	0.78189	0.78937	0.77174	
		0.85852	0.87581	0.88535	0.96865	0.92069	0.95027	0.92943	
	3		90.2	86.8	90.7	96.0	93.1	93.6	90.7
		0.77904	0.75115	0.77926	0.79712	0.77650	0.77332	0.79513	
4		0.90201	0.89026	0.86533	0.96005	0.91736	0.90096	0.92899	
		91.7	86.3	92.1	95.0	91.2	90.7	95.6	
	0.77499	0.77936	0.78882	0.80087	0.79577	0.77318	0.76723		
5		0.90585	0.93991	0.93570	0.97169	0.93158	0.91449	0.84640	
		91.2	91.7	93.6	96.1	95.1	90.2	89.2	
	0.76017	0.79941	0.78560	0.80867	0.78826	0.79371	0.72301		
6		0.84242	0.97538	0.95228	0.98594	0.97131	0.84980	0.79371	
		88.7	96.6	93.2	98.0	93.7	96.6	86.3	
	0.77927	0.79884	0.77421	0.77867	0.81048	0.80260	0.77634		
7		0.90241	0.96289	0.91649	0.92927	0.97801	0.97669	0.91287	
		92.1	96.6	92.2	92.6	98.0	97.1	90.7	
	0.75558	0.80501	0.79626	0.79934	0.78572	0.79393	0.76935		
8		0.90395	0.97324	0.97010	0.97334	0.93995	0.96103	0.87972	
		88.8	97.1	95.5	96.0	92.7	94.6	90.2	
	0.777014	0.81113	0.78619	0.79248	0.78409	0.79764	0.76442		
9		0.91579	0.97938	0.93962	0.94806	0.94484	0.97349	0.90285	
		93.1	98.5	95.6	94.6	94.6	96.1	89.2	
	0.78843	0.79822	0.76362	0.79273	0.69533	0.78532	0.78308		
10		0.97521	0.94276	0.94055	0.93579	0.88407	0.96684	0.92366	
		97.6	96.1	96.1	93.6	93.1	95.1	93.1	

Eta^2 provides an approximation of explainable variance.

TABLE 6: Contingency Coefficients, Eta Values, and Percent Agreement for Each Incentive in Each Task.

* Contingency Coefficient

** ETA

*** Percentage Agreement

association values are high and would appear even higher if Eta values were considered concurrently.

On the basis of the above analysis of data, it is possible to conclude that the instrument developed in this study is highly reliable. Although a single reliability figure for the entire instrument is not available, an examination of the data from Table 6 suggests that its reliability may be expressed as the range of reliability of its parts. In terms of the contingency coefficients this range is 0.69533 to 0.81113. Although contingency coefficients are considered to range from 0 to 1 in potential value, their range is limited somewhat by the amount of variance in the second administration explainable as the result of the first administration (expressed here as an Eta value).

Another expression of the reliability of the instrument is possible by considering the range of Eta^2 scores. This range can also be calculated from the values given in Table 6 by squaring the Eta values. The range for Eta^2 scores in the instrument is 0.67563 to 0.97193.

		Range
Curriculum Tasks	1	0.75558 - 0.79512
	2	0.74901 - 0.81113
	3	0.76362 - 0.79626
	4	0.77867 - 0.80867
	5	0.69533 - 0.81048
	6	0.80260 - 0.76435
	7	0.72301 - 0.79513

TABLE 7: Range of Contingency Coefficients
For curriculum tasks

A third estimate of reliability of the whole instrument is the expression of the range of percentage agreement on all the parts. This represents the percentage of responses which were the same on the first and the second administration of the instrument. This range is from 86.3% to 98.0%.

The literature reviewed suggested that there were different types of curriculum decision-making tasks. Each of these task types has been incorporated in this instrument. It further suggested that employees, in this case teachers, can be motivated to work at specific tasks if the incentives are provided. All the incentives offered teachers for educational tasks have been extracted from the literature and included in the original listing of incentives utilized in the development of the instrument. The literature describing empirical investigations of motivation which have employed Expectancy Theory suggests the existence of a specific group of incentives which are considered most attractive to the employee for each task. The methodology employed in the development of the IIICT has facilitated the identification of the group of incentives considered by New Brunswick teachers as most appropriate for curriculum tasks. The calculated coefficient of attractiveness has also provided a means of determining the relative appropriateness of a specific incentive for a specific task.

With its relatively high reliability and its facility for discriminating among the attractiveness of incentives for curriculum tasks, the IICT is potentially valuable as a research instrument and as a tool in the establishment of curriculum decision-making policy. The concluding sections of this chapter describe some of the potential uses of the instrument and summarize the study.

Conclusion

This study has described the development of an instrument to be utilized in the identification of incentives which are most appropriate for teachers for curriculum decision-making tasks. During the development process it was necessary to identify curriculum decision-making tasks and to formulate a listing of incentives which have been utilized as potential motivators for teachers in relation to educational tasks. From this listing a group of ten incentives has emerged which are most appropriate for curriculum tasks. The identification of these ten incentives represents a contribution to curriculum theory in that, although many curriculum writers discuss the need for incentives to increase teacher participation in particular phases of curriculum decision-making, their references remain vague statements with no specification of the nature of these incentives. This appears to be the first study which has systematically investigated and specified what these incentives are.

An examination of the incentives which emerged as the most appropriate for curriculum tasks reveals that teachers are looking for a different type of incentive system for these tasks than those which are usually planned by those responsible for curriculum decision-making. Rather than seeking financial reward or other extrinsic factors, teachers have identified intrinsically rewarding items as most appropriate for curriculum tasks. Increased self-confidence, a sense of achievement, the challenge of the task itself, and the opportunity to develop new skills and leadership are incentives seldom reflected in the plans of curriculum leaders for increasing teacher participation in curriculum decision-making.

The knowledge that their suggestions are being considered and that their contribution and suggestions are, indeed, helpful are often forgotten potential motivators for teachers. Knoop & O'Reilly (1977) identified teachers' desire to participate in more types of decision-making that affects their work. The fact that this emerged as an appropriate incentive for curriculum tasks adds further support to their conclusion.

The provision of new materials for use in their own school was the only extrinsic type of incentive which emerged among the most appropriate for curriculum tasks. Its emergence is not surprising in light of the fact that the

incentives considered most important by the teachers surveyed were the opportunity to improve existing curricula and their increased effectiveness as a teacher.

Further specific information may be acquired from examining the attractiveness of each of the ten identified incentives for each of the specified tasks. From statistics calculated from teacher responses to the instrument it is possible to state that specific groupings of these incentives are most appropriate for individual tasks. This, too, represents a contribution to existing curriculum knowledge in that it provides further evidence that the identified curriculum tasks are discrete and should be considered separately in the formulation of plans for empirical investigations or practical action.

It would appear that the IIICT could be useful in several types of empirical investigations and that its reliability is high enough for its utilization in its present state. Several practical applications of information acquired through its use are also possible. Some of these potential uses are discussed below.

Empirical Investigations: The administration of the IIICT to New Brunswick teachers has provided specific information in relation to the attractiveness of specific incentives to curriculum decision-making tasks. The possibility exists that a different teacher population may

find other incentives more attractive. It would seem reasonable to suggest that a comparative study of the attractiveness of incentives for curriculum decision-making tasks between teachers of two distinct regions would provide meaningful information in this regard.

Young & Young determined that Alberta teachers have preferences for certain types of curriculum tasks and that these preferences are influenced by a number of demographic variables, including age, teaching experience, educational background, and number of years of inservice experience with the same board. As the IICT demonstrates a relationship between incentives and these tasks, it should be possible to hypothesize a correlation between the incentives effective for the specific task and the preferences of the teachers surveyed. This would provide a basis for the formulation of a plan of action which would help motivate teachers in their preferred tasks.

A comparison of the incentives for curriculum tasks considered most important by preservice and inservice teachers could provide useful information in helping to identify changes that occur once regular classroom teaching has become integral to the teacher. The identification of these differences could provide preservice educators with evidence which would help them in providing a realistic presentation of the life of the classroom teacher and might help avoid some of the problems

of disillusionment which so often occur. Such an analysis could also provide information which could be basic to the formulation of procedures for the involvement of new teachers in curriculum tasks. Such a plan could reduce the transfer of existing negative feelings toward these tasks from current inservice teachers to those entering the field.

The fact that a group of incentives exists which is most appropriate for curriculum tasks suggests that a group of incentives should be identifiable for other educational tasks. If such tasks and their incentives were identified, it would be possible to determine if there is a correlation among the incentives across tasks. This information may provide the basis for meaningful conclusions regarding decision-making and motivational procedures for teachers. The IIICT has identified some differences among preference for incentives among the identified curriculum tasks; it is possible that greater differences could exist between the preferred incentives for more varied tasks.

The literature reviewed related to motivation indicated that the effort an individual exerts for a task is a function of the attractiveness of the incentive proffered and that the best predictions of effort for a task based on Expectancy Theory result when the incentives available for the tasks are those the employee considers most appropriate for the task. The incentives included in the IIICT are those identified by New Brunswick teachers as most appropriate to them

for curriculum tasks. The instrument should be useful, then, in empirically predicting effort on these tasks utilizing Expectancy Theory. The instrument further facilitates such an application by providing the means of assessing the attractiveness of the incentive for the task. This measure approximates a measure of valence as described in the theory.

Considerable evidence exists which demonstrates a correlation between predicted effort utilizing Expectancy Theory and actual performance of the task. Studies which report low positive correlation between these variables have been criticized for the inappropriateness of the incentives they have utilized in formulating their predictions. The IIICT could be useful in providing a measure of attractiveness from which valence could be calculated and from which a measure of effort and performance can be obtained.

In addition to the potential empirical studies which have been mentioned, the IIICT may be a useful instrument in the determination of sound practical procedures for curriculum decision-making policy. Some of these implications are discussed in the following section.

Practical Applications: The information available from the IIICT has several practical applications, especially in the field of curriculum leadership. Respondents from New Brunswick have identified two incentives as being of

primary importance for all seven curriculum tasks. These are the potential for increased effectiveness as a classroom teacher and the opportunity to improve existing curricula. Knowing this, the curriculum leader may be well advised to incorporate this knowledge in his planning and to demonstrate that participation in curriculum tasks will in fact result in these ends.

By examining the attractiveness of other incentives for specific curriculum tasks, the curriculum leader can identify factors which would be useful in the formulation of plans to increase teacher participation in each of these tasks. In addition to the two incentives mentioned above as being very attractive for all tasks, analysis has revealed other incentives as being strong third and fourth choices. A knowledge of these preferences for incentives may be utilized in planning for the participation of teachers in each specific task. For example, the opportunity to develop new skills and leadership appears to be a strong incentive for organizing a curriculum but is not as strong for evaluating a curriculum. It remains for the leader to incorporate this information in his plan for attracting teachers to participate in these tasks. Each task should be considered as a unit in the formulation of complete strategies.

Information provided by the IIICT has further practical value both in the preservice and the inservice education of

teachers. The identification of incentives for curriculum tasks provides teacher educators with specific direction in the inculcation of the potential rewards to be attained from participation in curriculum tasks.

At the inservice level, the identification of incentives for specific tasks provides some basis for the development of workshops centered around the identification of the meaningful consequences of participation in these tasks. This should help alleviate some of the teacher resistance to participation in curriculum decision-making.

In examining the responsibility for curriculum leadership, it becomes apparent that curriculum leaders exist at various levels in the educational hierarchy within a Province. Ultimately, however, it is the Department of Education that establishes the policy within which these curriculum leaders must operate. If the Department is genuinely trying to increase effective teacher participation in curriculum decision-making tasks, information extracted from an administration of the IIICT should be helpful in formulating long-term policies within which other levels can effectively motivate teacher participation. Specifically, its policies should provide the means of incorporating the incentives identified as most appropriate by teachers for these tasks.

Summary

The purpose of this study was to develop an instrument which could be utilized in determining the incentives appropriate for curriculum decision-making tasks. The need for such an instrument emerged from a concern that the current role of teachers in curriculum decision-making is less than satisfactory. An examination of the literature related to teacher participation in curriculum decision-making led to the conclusion that better curricula result from teacher participation in these tasks and that such participation will only be effected if proper incentives are identified which help teachers overcome barriers which presently limit their effort. The resultant IIICT provides the means of identifying potential motivators upon which plans can be formulated to overcome some of these barriers. The IIICT houses potential usefulness as an instrument to be utilized in empirical research which may extend present knowledge of the relationships between effort and performance in curriculum tasks. It also provides the curriculum theorist with a list of incentives practitioners feel are appropriate for curriculum decision-making tasks which can be utilized in determining relationships between the identified tasks and other identifiable barriers.

APPENDIX I

Composite List of Incentives and
their Sources in Literature

Incentive	Source(s)
Extra salary for training and experience	Cory (n.d.)
Opportunity to attend summer school	Cory (n.d.), Cook & Doll (1973), Connelly (1974)
Assignment to committees to study problems at school	Cory (n.d.), Murphy (1977)
Commendation for work well done from other teachers or teacher groups	Cory (n.d.)
Opportunity to visit other schools or systems and to report on the visit	Cory (n.d.), Wickert (1973)
Opportunity to attend workshops or conferences	Cory (n.d.), Cook & Doll (1973), Wickert (1973), Peltier (1976)
In-school workshops	Cory (n.d.), Wickert (1973)
Being recognized for professional work in the local press	Cory (n.d.)
Opportunity to work with new teachers	Cory (n.d.), Wickert (1973), Connelly (1974), Peltier (1976)
Assignment to work with members of the staff who need assistance	Cory (n.d.), MacDonald (1978)
Promotion and responsibility	Cory (n.d.), Murphy (1977)
Opportunity to address teacher's groups regarding work	Cory (n.d.)
Opportunity to improve the existing curricula	Cory (n.d.), Murphy (1977)
Additional training	Cory (n.d.), Diaz (n.d.), Friesen (1972)
Feeling that one is doing the best possible job	Cory (n.d.)

Table I: Incentives and their Sources in Literature

Incentives	Source(s)
Knowledge that the status of the profession will be increased	Cory (n.d.)
Recognition for effective work accomplished	Cory (n.d.), Connelly (1974), Murphy (1977), MacDonald (1978)
Satisfaction from participation in decision-making that affects work	Cory (n.d.), Murphy (1977)
Feeling that contributions and suggestions are appreciated	Cory (n.d.), Murphy (1977), MacDonald (1978)
Opportunity to develop new skills and leadership	Cory (n.d.), Wickert (1973), Peltier (1976), Oliver (1977), MacDonald (1978)
Job security	Kimball (1976)
Increase in salary	Diaz (n.d.), Kimball (1976)
Group or personal bonus	Kimball (1976), Abt (1977)
Promotion	Kimball (1976)
Bonus for school from work	Kimball (1976)
Reimbursement for courses	Kimball (1976)
Authority over peers	Kimball (1976)
"Good evaluation"	Kimball (1976)
Assignment of a classroom assistant	Diaz (n.d.), Kimball (1976)
Opportunity to participate in decision-making	Kimball (1976), Murphy (1977), MacDonald (1978)
Increased adult contact in school hours	Abt (1974), Kimball (1976), MacDonald (1978)
Release time	Cook & Doll (1973), Kimball (1976), Peltier (1976), Friesen (1977)
Public recognition or praise	Kimball (1976), Peltier (1976)
Privilege	Kimball (1976)
More autonomy	Kimball (1976)
Feedback	Killian (1976), Kimball (1976)
Praise in private	Kimball (1976)
Support, assistance, encouragement	Kimball (1976)

Table I: Incentives and their Sources in Literature (cont'd)

Incentive	Source(s)
Opportunity to learn new skills	Fuller and Miskel (1972)
Opportunity to inservice, education	Diaz (n.d.), Fuller and Miskel (1972)
Recognition for the school in which you work	Fuller and Miskel (1972)
Control over how teaching is done	Fuller and Miskel (1972)
Extra pay	Diaz (n.d.), Fuller and Miskel (1972); Miller (1977)
Feeling that your superior has confidence in you	Fuller and Miskel (1972)
Salary increments	Fuller and Miskel (1972), Cook and Doll (1973)
Evaluation	Fuller and Miskel (1972), Kimball (1976)
Opportunity to work as part of a team	Fuller and Miskel (1972), Connelly (1974), Murphy (1977), Oliver (1977)
Getting along with your superior	Fuller and Miskel (1972)
Getting along with your peers	Fuller and Miskel (1972), Lipe and Jung (1976)
Job security	Fuller and Miskel (1972), Abt (1974), Lortie (1975), Murphy (1977)
Recognition by teachers association	Fuller and Miskel (1972)
Materials for use in the classroom	Abt (1974), Lortie (1975), Lipe and Jung (1976)
Sense of power over others	Lortie (1975)
Challenge of the work itself	Lortie (1975), Killian (1976)
Sense of achievement	Lortie (1975), MacDonald (1978)
Knowledge that your suggestions are being considered	Lortie (1975)
Professional growth	Diaz (n.d.), Bidwell (1956), Wickert (1973), Peltier (1976), Miller (1977), Oliver (1977), MacDonald (1978)

Table I: Incentives and their Sources in Literature (cont'd)

Incentive	Source(s)
Sense of achievement	Diaz (n.d.), Kimball (1976), MacDonald (1978)
Less responsibility (eg. bus duty)	Kimball (1976)
Increased self-confidence	Kimball (1976), MacDonald (1978)
Salary increase	Diaz (n.d.), Jabker and Halinski (1977)
Promotion (at team level)	Jabker and Halinski (1977), Murphy (1977)
Tenure	Friesen (1972), Abt (1974), Jabker and Halinski (1977)
Definition of role	Diaz (n.d.), Friesen (1972), Jabker and Halinski (1977)
Committee membership	Jabker and Halinski (1977), Murphy (1977), Oliver (1977)
Personal satisfaction with a job well done	Jabker and Halinski (1977), MacDonald (1978)
Increased effectiveness as a teacher	Miller (1972), Feltier (1976), Jabker and Halinski (1977), Murphy (1977), Oliver (1977)
Opportunity to teach a preferred group	Jabker and Halinski (1977)
Esteem of colleagues	Jabker and Halinski (1977)
Opportunity for publication	Jabker and Halinski (1977)
Reduced teaching load	Jabker and Halinski (1977)
Opportunity to present work at a conference	Jabker and Halinski (1977)
Extensive recognition among teachers for the work	Jabker and Halinski (1977)
Travel funds	Jabker and Halinski (1977)
Teaching assistant	Diaz (n.d.), Jabker and Halinski (1977)
Increased opportunity to act as a consultant	Jabker and Halinski (1977)
Letter of recognition from your superior	Jabker and Halinski (1977)

Table I: Incentives and their Sources in Literature. (cont'd)

APPENDIX 2

Questionnaire to Reduce
the Number of Incentives

INCENTIVES FOR CURRICULUM TASKS QUESTIONNAIRE

INSTRUCTIONS

This questionnaire is designed to help identify incentives which encourage teachers to become involved in curriculum tasks. It is comprised of two main sections. The first section is a personal data sheet which allows you to remain anonymous while providing the researcher with information which will be helpful in the analysis of data; the second describes curriculum tasks and asks you to indicate those incentives which seem most appropriate to you for the task described.

SPECIFICALLY YOU ARE TO:

1. Complete the personal data sheet.
2. Read the description of each task carefully and, then, choose ten of the incentives you feel would most encourage you to attempt the task.
3. Rank the ten incentives you have chosen for the task according to their importance to you. The number 1 should indicate the incentive you feel is the most important for the task and number 10 should indicate the incentive you feel is least important.
4. Repeat steps 2 and 3 for each task.

PERSONAL PROFILE

1. I teach mainly:
(a) elementary (b) junior high
(c) senior high grades
2. The number of full time teachers in my school is:
(a) 1 to 5 (b) 6 to 10
(c) 11 to 20 (d) 21 to 30
(e) 31 to 40 (f) 41 or more
3. I have been employed in schools:
(a) 1 year or less (b) 2 to 5 years
(c) 6 to 10 years (d) 11 to 14 years
(e) 15 years or more
4. The total number of years education beyond high school for which I am being paid is:
(a) 2 years or less (b) 3 years
(c) 4 years (d) 5 years
(e) 5 + years
5. The school in which I teach serves a community of:
(a) less than 5,000 (b) 5,000 to 9,999
(c) 10,000 to 29,999 (d) 30,000 to 99,999
(e) 100,000 or more
6. I have participated in curriculum work:
(a) extensively (b) little
(c) never
7. I am:
(a) male (b) female

TASK 1: ORGANIZING A PROGRAM

This task consists of deciding what the total school program should be doing for students, choosing components for the total program consistent with those purposes, and organizing the components of the total program.

INCENTIVES

- _____ esteem of colleagues
- _____ increased self-confidence
- _____ committee membership
- _____ assignment of a classroom assistant
- _____ less responsibility (eg: bus duty, fewer teaching hours)
- _____ support, assistance and encouragement from superiors
- _____ support, assistance and encouragement from peers
- _____ praise in private
- _____ extra salary for training and experience
- _____ authority over peers
- _____ knowledge that your suggestions are being considered
- _____ opportunity to improve existing curricula
- _____ recognition for effective work accomplished
- _____ feeling that your contribution and suggestions are helpful
- _____ increased adult contact in school hours release time
- _____ special privilege
- _____ explicit role definition
- _____ increased effectiveness as a teacher
- _____ opportunity for publication
- _____ travel funds to visit other system
- _____ increased opportunity to act as a consultant
- _____ letter of recognition from your superior
- _____ recognition for the school in which you work
- _____ feeling that your superior has confidence in you
- _____ opportunity to work as part of a team
- _____ getting along with your peers
- _____ provision of materials for use in your school
- _____ challenge of the task itself
- _____ reimbursement for courses
- _____ good evaluation
- _____ extra pay
- _____ sense of achievement
- _____ opportunity to develop new skills and leadership
- _____ satisfaction from participating in decision-making that affects work
- _____ opportunity to participate in more areas of policy decision-making
- _____ opportunity to attend workshops and conferences
- _____ additional training
- _____ job security
- _____ opportunity to address teacher groups
- _____ more autonomy

TASK 1: ORGANIZING A PROGRAM (Continued)

- inservice education
- assignment to committees to study problems of school
- promotion
- public recognition
- opportunity to work with new teachers
- opportunity to visit other schools and report on the visit
- assignment as helper for staff needing assistance
- knowledge that the status of the profession will be increased
- opportunity to teach a preferred group
- getting along with your superiors

TASK 2: SELECTING A "READY MADE" CURRICULUM

This task includes locating and evaluating curricula available for use in a subject or subjects. It includes assessing the appropriateness of these curricula for local use and the demands they make on teachers and existing school resources.

INCENTIVES

- increased self-confidence
- knowledge that the status of the profession will be increased
- opportunity to visit other schools and report on the visit
- public recognition
- good evaluation
- travel funds to visit other systems
- additional training
- feeling that your contribution and suggestions are helpful
- promotion
- recognition for the school in which you work
- support, assistance and encouragement from superiors
- authority over peers
- more autonomy
- opportunity to teach a preferred group
- opportunity for publication
- assignment as helper for staff needing assistance
- esteem of colleagues
- increased opportunity to act as a consultant
- opportunity to work with new teachers
- committee membership
- letter of recognition from your superior
- extra salary for training and experience
- assignment to committees to study problems of school
- inservice education
- increased effectiveness as a teacher
- sense of achievement
- support, assistance and encouragement from peers
- feeling that your superior has confidence in you
- knowledge that your suggestions are being considered
- opportunity to participate in more areas of policy
- decision-making
- opportunity to work as part of a team
- special privilege
- getting along with your supervisor
- explicit role definition
- job security
- assignment of a classroom assistant
- opportunity to attend workshops and conferences
- release time
- getting along with your peers
- less responsibility (eg - bus duty, fewer teaching hours)
- satisfaction from participating in decision-making that affects work

TASK 2: SELECTING A "READY MADE" CURRICULUM (continued)

- _____ opportunity to improve existing curricula
- _____ recognition for effective work accomplished
- _____ increased adult contact in school hours
- _____ provision of materials for use in your school
- _____ challenge of the task itself
- _____ opportunity to develop new skills and leadership
- _____ extra pay
- _____ reimbursement for courses
- _____ opportunity to address teacher groups
- _____ praise in private

TASK 3: CREATING A CURRICULUM

Sometimes "ready made" curricula are not appropriate for local use or are unavailable in a subject area. This task involves developing a curriculum which is appropriate. Its components include determining what a subject can do for a student; choosing goals for the subject; and identifying and sequencing the ideas, skills or themes to be developed.

INCENTIVES

- _____ satisfaction from participating in decision-making that affects work
- _____ recognition for effective work accomplished
- _____ praise in private
- _____ assignment to committees to study problems of school
- _____ explicit role definition
- _____ committee membership
- _____ opportunity to address teacher groups
- _____ knowledge that the status of the profession will be increased
- _____ Less responsibility (eg - bus duty, fewer teaching hours)
- _____ reimbursement for courses
- _____ public recognition
- _____ esteem of colleagues
- _____ opportunity to develop new skills and leadership
- _____ assignment as helper for staff needing assistance
- _____ feeling that your contribution and suggestions are helpful
- _____ feeling that your superior has confidence in you
- _____ opportunity to visit other schools and report on the visit
- _____ authority over peers
- _____ additional training
- _____ promotion
- _____ extra salary for training and experience
- _____ inservice education
- _____ opportunity to work with new teachers
- _____ support, assistance and encouragement from superiors
- _____ job security
- _____ increased self-confidence
- _____ travel funds to visit other systems
- _____ opportunity for publication
- _____ more autonomy
- _____ assignment of a classroom assistant
- _____ opportunity to attend workshops and conferences
- _____ special privilege
- _____ increased opportunity to act as a consultant
- _____ release time
- _____ letter of recognition from your superior
- _____ support, assistance and encouragement from peers
- _____ recognition for the school in which you work
- _____ opportunity to improve existing curricula

TASK 3: CREATING A CURRICULUM (continued)

- knowledge that your suggestions are being considered
- getting along with your superior
- opportunity to participate in more areas of policy decision-making
- increased adult contact in school hours
- getting along with your peers
- extra pay
- sense of achievement
- increased effectiveness as a teacher
- challenge of the task itself
- opportunity to teach a preferred group
- good evaluation
- provision of materials for use in your school
- opportunity to work as part of a team

TASK 4: TRANSLATING A CURRICULUM INTO INSTRUCTION

This task involved clearly identifying the goals of the curriculum and using them as a basis for the development of materials, the organization of units of studies, and the planning of learning experiences for the students. (Please note that this does not include the actual classroom instruction process.)

INCENTIVES

- assignment of a classroom assistant
- praise in private
- opportunity to improve existing curricula
- release time
- opportunity to teach a preferred group
- letter of recognition from your superior
- getting along with your peers
- good evaluation
- opportunity to participate in more areas of policy decision-making
- opportunity to address teacher groups
- promotion
- assignment as helper for staff needing assistance
- committee membership
- support, assistance and encouragement from peers
- knowledge that your suggestions are being considered
- increased adult contact in school hours
- increased effectiveness as a teacher
- increased opportunity to act as a consultant
- opportunity to work as part of a team
- challenge of the task itself
- sense of achievement
- additional training
- inservice education
- opportunity to work with new teachers
- esteem of colleagues
- less responsibility (eg - bus duty, fewer teaching hours)
- extra salary for training and experience
- recognition for effective work accomplished
- special privilege
- opportunity for publication
- recognition for the school in which you work
- provision for materials for use in your school
- extra pay
- opportunity to attend workshops and conferences
- assignment to committees to study problems of school
- opportunity to visit other schools and report on the visit
- increased self-confidence
- knowledge that the status of the profession will be increased

TASK 4: TRANSLATING A CURRICULUM INTO INSTRUCTION (continued)

- _____ public recognition
- _____ explicit role definition
- _____ feeling that your contribution and suggestions are helpful
- _____ authority over peers
- _____ support, assistance and encouragement from superiors
- _____ travel funds to visit other systems
- _____ feeling that your superior has confidence in you
- _____ getting along with your supervisor
- _____ reimbursement for courses
- _____ opportunity to develop new skills and leadership
- _____ satisfaction from participating in decision-making that affects work
- _____ job security
- _____ more autonomy

TASK 5: ADAPTING A CURRICULUM

This task consists of changing an existing curriculum to meet the needs of a particular group of students without changing the intent of the original curriculum writers. The types of decisions related to this task include the stressing of certain goals, changes in the sequence of materials, and designing alternate teaching materials and methods.

INCENTIVES

- public recognition
- opportunity to address teacher groups
- satisfaction from participating in decision-making that affects work
- reimbursement for courses
- opportunity to work as part of a team
- travel funds to visit other systems
- special privilege
- opportunity to improve existing curricula
- support, assistance and encouragement from peers
- increased self-confidence
- less responsibility (eg - bus duty, fewer teaching hours)
- authority over peers
- increased adult contact in school hours
- opportunity to teach a preferred group
- opportunity to work with new teachers
- esteem of colleagues
- support, assistance and encouragement from superiors
- knowledge that your suggestions are being considered
- release time
- opportunity for publication
- feeling that your superior has confidence in you
- challenge of the task itself
- opportunity to develop new skills and leadership
- job security
- promotion
- knowledge that the status of the profession will be increased
- assignment to committees to study problems of school
- opportunity to visit other schools and report on the visit
- assignment as helper for staff needing assistance
- inservice education
- increased opportunity to act as a consultant
- more autonomy
- letter of recognition from your superior
- additional training
- recognition for the school in which you work
- opportunity to attend workshops and conference
- getting along with your supervisor
- opportunity to participate in more areas of policy decision-making

TABLE 5: ADAPTING A CURRICULUM (continued)

_____	getting along with your peers
_____	sense of achievement
_____	provision of materials for use in your school
_____	extra pay
_____	good evaluation
_____	committee membership
_____	increased effectiveness as a teacher
_____	assignment of a classroom assistant
_____	explicit role definition
_____	praise in private
_____	feeling that your contribution and suggestions are helpful
_____	extra salary for training and experience
_____	recognition for effective work accomplished

TASK 6: WINNING SUPPORT FOR A NEW CURRICULUM

For a curriculum to be successfully utilized, it must be accepted by various groups of people. This task involves the identification of groups from whom support will be needed, anticipating their reactions, and developing strategies to win their support.

INCENTIVES

- support, assistance and encouragement from superiors
- opportunity to improve existing curricula
- explicit role definition
- letter of recognition from your superior
- provision of materials for use in your school
- opportunity to develop new skills and leadership
- opportunity to address teacher groups
- opportunity to work with new teachers
- committee membership
- authority over peers
- special privilege
- recognition for the school in which you work
- reimbursement for courses
- opportunity to attend workshops and conferences
- promotion
- increased self-confidence
- knowledge that your suggestions are being considered
- opportunity to teach a preferred group
- getting along with your supervisor
- satisfaction from participating in decision-making that affects work
- assignment to committees to study problems of school
- assignment of a classroom assistant
- feeling that your contribution and suggestions are helpful
- increased opportunity to act as a consultant
- extra pay
- inservice education
- less responsibility (eg - bus duty, fewer teaching hours)
- release time
- getting along with your peers
- job security
- esteem of colleagues
- increased effectiveness as a teacher
- good evaluation
- assignment as helper for staff needing assistance
- increased adult contact in school hours
- sense of achievement
- knowledge that the status of the profession will be increased
- travel funds to visit other systems
- more autonomy

TASK 6: WINNING SUPPORT FOR A NEW CURRICULUM (continued)

- _____ recognition for effective work accomplished
- _____ additional training
- _____ opportunity for publication
- _____ opportunity to visit other schools and report on the visit
- _____ challenge of the task itself
- _____ feeling that your superior has confidence in you
- _____ support, assistance and encouragement from peers
- _____ opportunity to work as part of a team
- _____ public recognition
- _____ praise in private
- _____ opportunity to participate in more areas of policy decision-making
- _____ extra salary for training and experience

TASK 7: EVALUATING CURRICULUM DECISION-MAKING

This task involves assessing the effectiveness of the curriculum decision-making process as well as the effectiveness of the curriculum. It involves judgements about the manner in which time, money, and other resources were utilized. Other decisions include how effectively teachers have utilized the curriculum, and its effects with students.

INCENTIVES

- knowledge that the status of the profession will be increased
- assignment as helper for staff needing assistance
- opportunity to visit other schools and report on the visit
- opportunity to work with new teachers
- public recognition
- promotion
- assignment to committees to study problems of school
- inservice education
- more autonomy
- opportunity to address teacher groups
- job security
- additional training
- opportunity to attend conferences and workshops
- opportunity to participate in more areas of policy decision-making
- satisfaction from participating in decision-making that affects work
- opportunity to develop new skills and leadership
- sense of achievement
- extra pay
- good evaluation
- reimbursement for courses
- challenge of the task itself
- provision of materials for use in your school
- getting along with your peers
- getting along with your supervisor
- opportunity to work as part of a team
- feeling that your superior has confidence in you
- recognition for the school in which you work
- letter of recognition from your superior
- increased opportunity to act as a consultant
- travel funds to visit other systems
- opportunity for publication
- opportunity to teach a preferred group
- increased effectiveness as a teacher
- explicit role definition
- special privilege
- release time
- increased adult contact in school hours

TASK 7: EVALUATING CURRICULUM DECISION-MAKING (continued)

- _____ feeling that your contribution and suggestions are helpful
- _____ recognition for effective work accomplished
- _____ opportunity to improve existing curricula
- _____ knowledge that your suggestions are being considered
- _____ authority over peers
- _____ extra salary for training and experience
- _____ praise in private
- _____ support, assistance and encouragement from peers
- _____ support, assistance and encouragement from superiors
- _____ less responsibility (eg - bus duty, fewer teaching hours)
- _____ assignment of a classroom assistant
- _____ committee membership
- _____ increased self-confidence
- _____ esteem of colleagues

APPENDIX 3

Matrices Showing Frequency of Rank Across
Seven Curriculum Tasks

TASK

	1.	2	3	4	5	6	7	Total
1	41	51	53	43	61	52	38	349
2	39	21	27	30	27	26	31	201
3	25	21	14	8	17	17	18	120
4	7	20	18	10	13	12	10	90
5	11	15	11	9	12	8	10	76
6	11	11	9	12	16	7	8	74
7	3	11	9	9	5	3	5	45
8	4	14	7	8	8	2	9	52
9	4	12	5	6	5	11	8	51
10	3	5	9	11	6	5	5	44
Total	148	181	162	156	170	143	142	1102

RANK

INCENTIVE 1: Opportunity to Improve Existing Curricula

TASK

	1	2	3	4	5	6	7	Total
1	47	45	30	51	30	35	35	273
2	27	28	29	30	33	32	26	205
3	21	18	20	10	17	24	14	124
4	21	15	9	20	15	14	15	109
5	16	10	12	12	11	12	6	79
6	9	11	10	3	4	12	11	60
7	9	10	8	7	8	15	10	67
8	5	5	9	5	4	9	9	46
9	7	7	7	5	8	9	8	51
10	6	7	2	8	5	5	6	39
Total	168	156	136	151	135	167	140	1053

RANK

5

TASK

	1	2	3	4	5	6	7	Total
1	11	12	10	3	1	9	10	56
2	15	11	5	13	6	11	18	79
3	20	16	7	24	4	8	18	97
4	10	17	7	16	8	15	7	80
5	13	16	9	6	12	6	12	74
6	12	18	11	11	10	8	15	85
7	17	11	14	6	23	7	10	88
8	13	10	15	11	14	11	18	92
9	14	12	17	14	13	16	16	102
10	10	15	20	12	12	12	13	94
Total	135	138	115	116	103	103	137	847

RANK

INCENTIVE 3: Feeling That Your Contributions and Suggestions are Helpful

8

TASK

	1	2	3	4	5	6	7	Total
1	10	9	11	14	13	12	12	81
2	6	14	20	6	8	11	11	76
3	11	15	18	12	13	10	11	90
4	10	21	16	19	18	6	12	102
5	11	15	11	12	17	14	14	94
6	6	10	21	19	9	14	21	100
7	14	7	9	18	14	8	11	81
8	14	15	8	17	13	5	5	77
9	7	7	11	17	9	8	5	64
10	9	6	7	15	12	7	9	65
Total	98	119	132	149	126	95	111	830

RANK

INCENTIVE 4: Satisfaction From Participating in Decision-Making That Affects Work

TASK

	1	2	3	4	5	6	7	Total
1	5	20	12	12	4	10	6	69
2	11	16	12	14	7	7	10	77
3	8	17	17	16	12	6	9	85
4	7	14	21	13	14	12	17	98
5	11	18	20	19	9	9	11	97
6	8	22	13	7	20	6	8	84
7	5	23	13	19	14	7	10	91
8	1	11	9	16	9	7	5	588
9	8	8	9	11	5	10	6	60
10	11	4	6	8	7	7	4	47
Total	75	153	132	135	104	81	86	766

RANK

INCENTIVE 5: Opportunity to Develop New Skills and Leadership

TASK

	1	2	3	4	5	6	7	total
1	8	5	2	8	7	9	5	44
2	10	9	4	10	7	9	10	59
3	9	15	10	16	8	10	8	76
4	14	5	10	15	8	9	12	73
5	9	14	8	23	11	12	9	86
6	7	13	11	16	13	7	12	79
7	6	11	13	8	4	16	12	70
8	5	12	16	14	14	10	12	76
9	13	14	8	4	13	7	9	67
10	6	12	11	10	15	4	13	71
Total	87	110	93	117	99	93	102	701

RANK

INCENTIVE 6: Provision of Material for Use in Your School

TASK

	1	2	3	4	5	6	7	Total
1	4	6	14	12	4	2	10	52
2	16	15	8	20	7	7	4	77
3	11	14	16	12	9	6	13	81
4	15	16	9	11	9	9	11	80
5	14	12	5	10	12	10	10	73
6	11	15	6	11	8	5	9	65
7	7	13	7	6	14	6	5	58
8	6	11	17	11	6	11	6	68
9	7	3	20	10	7	10	5	62
10	7	7	13	8	12	11	5	63
Total	98	112	115	111	88	77	78	679

RANK

INCENTIVE 7: Sense of Achievement

TASK

	1	2	3	4	5	6	7	Total
1	15	5	11	19	10	2	18	83
2	19	10	7	20	21	8	19	104
3	18	11	8	16	11	8	6	78
4	15	11	9	7	6	5	17	70
5	17	8	3	7	3	14	11	63
6	11	5	1	4	9	4	5	39
7	3	12	0	12	9	12	10	58
8	9	8	3	9	10	9	7	55
9	5	11	9	13	4	9	10	61
10	15	13	11	7	7	8	4	60
Total	130	94	62	114	90	74	104	671

RANK

INCENTIVE 8: Challenge of the Task Itself

TASK

	1	2	3	4	5	6	7	Total
1	5	20	15	7	0	10	6	63
2	3	16	9	7	2	16	6	59
3	10	10	7	10	2	11	17	67
4	8	7	7	7	5	6	6	46
5	6	4	11	9	9	6	5	50
6	11	8	11	12	5	5	11	63
7	7	17	4	8	6	6	5	53
8	12	2	13	4	10	9	10	60
9	15	6	9	5	8	7	9	59
10	5	5	17	7	8	12	13	67
Total	82	95	103	76	55	55	88	587

RANK

INCENTIVE 9: Increased Self-confidence

TASK

	1	2	3	4	5	6	7	Total
1	13	4	5	5	8	1	7	43
2	7	10	10	2	15	6	18	68
3	10	9	11	7	10	6	10	63
4	5	8	9	11	10	6	7	56
5	7	6	11	4	4	5	7	44
6	6	8	7	3	3	4	8	39
7	13	11	16	8	6	8	10	72
8	10	20	15	12	1	13	6	77
9	7	8	15	10	6	11	8	65
10	4	7	5	15	3	7	11	52
Total	82	91	104	77	66	67	92	579

RANK

INCENTIVE 10: Knowledge That Your Suggestions Are Being Considered

APPENDIX 4

Instrument for the Identification
of Incentives for Curriculum Tasks
(IIICT)

INSTRUCTIONS

This questionnaire is composed of eight sections which require responses. The first is a personal data sheet. The remaining sections each describe a curriculum task. Please read each task description carefully, then rank the list of incentives below the task from 1 to 10.

The incentive you rank as "1" should be the one you feel would most encourage you to attempt the task and "10" should be the least significant to you.

Name: _____

School: _____

PERSONAL PROFILE

1. I teach mainly:
(a) elementary grades (b) junior high grades
(c) senior high grades
2. The number of full time teachers in my school is:
(a) 1 to 5 (b) 6 to 10
(c) 11 to 20 (d) 21 to 30
(e) 31 to 40 (f) 41 or more
3. I have been employed in schools:
(a) 1 year or less (b) 2 to 5 years
(c) 6 to 10 years (d) 11 to 14 years
(e) 15 years or more
4. The total number of years of education beyond high school for which I am being paid is:
(a) 2 years or less (b) 3 years
(c) 4 years (d) 5 years
(e) more than 5 years
5. The school in which I teach serves a community of:
(a) less than 5,000 (b) 5,000 to 9,999
(c) 10,000 to 29,999 (d) 30,000 to 99,999
(e) 100,000 or more
6. I have participated in curriculum work:
(a) extensively (b) little
(c) never
7. I am:
(a) male (b) female

TASK 1: ORGANIZING A PROGRAM

This task consists of deciding what the total school program should be doing for students, choosing components for the total program consistent with those purposes, and organizing the components of the total program.

INCENTIVES

- _____ opportunity to improve existing curricula
- _____ increased effectiveness as a teacher
- _____ feeling that your contributions and suggestions are helpful
- _____ satisfaction from participating in decision-making that affects work
- _____ opportunity to develop new skills and leadership
- _____ provision of materials for use in your school
- _____ sense of achievement
- _____ challenge of the task itself
- _____ increased self-confidence
- _____ knowledge that your suggestions are being considered

TASK 2: SELECTING A "READY MADE" CURRICULUM.

This task includes locating and evaluating curricula available for use in a subject or subjects. It includes assessing the appropriateness of these curricula for local use and the demands they make on teachers and existing school resources.

INCENTIVES

- satisfaction from participating in decision-making that affects work
- increased self-confidence
- challenge of the task itself
- increased effectiveness as a teacher
- knowledge that your suggestions are being considered
- provision of materials for use in your school
- opportunity to improve existing curricula
- sense of achievement
- feeling that your contributions and suggestions are helpful
- opportunity to develop new skills and leadership

TASK 3: CREATING A CURRICULUM

Sometimes "ready made" curricula are not appropriate for local use or are unavailable in a subject area. This task involves developing a curriculum which is appropriate. Its components include determining what a subject can do for a student; choosing goals for the subject; and, identifying and sequencing the ideas, skills or themes to be developed.

INCENTIVES

- feeling that your contributions and suggestions are helpfull
- opportunity to improve existing curricula
- opportunity to develop new skills and leadership
- knowledge that your suggestions are being considered
- increased self-confidence
- increased effectiveness as a teacher
- challenge of the task itself
- sense of achievement
- provision of materials for use in your school
- satisfaction from participating in decision-making that affects work

TASK 4: TRANSLATING A CURRICULUM INTO INSTRUCTION

This task involves clearly identifying the goals of the curriculum and using them as a basis for the development of materials, the organization of units of study, and the planning of learning experiences for the students. (Please note this does not include the actual classroom instruction process.)

INCENTIVES

- _____ provision of materials for use in your school
- _____ challenge of the task itself
- _____ feeling that your contributions and suggestions are helpful
- _____ sense of achievement
- _____ increased self-confidence
- _____ opportunity to improve existing curricula
- _____ satisfaction from participating in decision-making that affects work
- _____ increased effectiveness as a teacher
- _____ opportunity to develop new skills and leadership
- _____ knowledge that your suggestions are being considered

V.

TASK 5: ADAPTING A CURRICULUM

This task consists of changing an existing curriculum to meet the needs of a particular group of students without changing the intent of the original curriculum writers. The types of decisions related to this task include the stressing of certain goals, changes in sequence of materials, and designing alternative teaching materials and methods.

INCENTIVES

- _____ opportunity to develop new skills and leadership
- _____ sense of achievement
- _____ increased effectiveness as a teacher
- _____ opportunity to improve existing curricula
- _____ feeling that /your contributions and suggestions are helpful
- _____ satisfaction from participating in decision-making that affects work
- _____ increased self-confidence
- _____ provision of materials for use in your school
- _____ knowledge that your suggestions are being considered
- _____ challenge of the task itself

TASK 6: WINNING SUPPORT FOR A NEW CURRICULUM

For a curriculum to be successfully utilized, it must be accepted by various groups of people. This task involves the identification of groups from whom support will be needed, anticipating their reactions, and developing strategies to win their support.

INCENTIVES

- increased effectiveness as a teacher
- opportunity to develop new skills and leadership
- challenge of the task itself
- satisfaction from participating in decision-making that affects work
- increased self-confidence
- provision of materials for use in your school
- knowledge that your suggestions are being considered
- opportunity to improve existing curricula
- feeling that your contributions and suggestions are helpful
- sense of achievement

TASK 7: EVALUATING CURRICULUM DECISION-MAKING

This task involves assessing the effectiveness of the curriculum decision-making process as well as the effectiveness of the curriculum. It involves judgements about the manner in which time, money and other resources were utilized. Other decisions include how effectively teachers have utilized the curriculum, and its effects with students.

INCENTIVES

- _____ sense of achievement
- _____ knowledge that your suggestions are being considered
- _____ provision of materials for use in your school
- _____ increased effectiveness as a teacher
- _____ opportunity to develop new skills and leadership
- _____ feeling that your contributions and suggestions are helpful
- _____ increased self-confidence
- _____ challenge of the task itself
- _____ satisfaction from participating in decision-making that affects work
- _____ opportunity to improve existing curricula

APPENDIX 5

Frequency Tables for Test and Retest
with IIICT Showing Rank vs Incentives

COUNT ROW PCT COL PCT TOT PCT	INCENTIVE										
	1	2	3	4	5	6	7	8	9	10	
1	75 36.8 36.8 3.7	72 35.3 35.3 3.5	11 5.4 5.4 0.5	17 8.3 8.3 0.8	12 5.9 5.9 0.6	6 2.9 2.9 0.3	0 0.0 0.0 0.0	3 1.5 1.5 0.1	4 2.0 2.0 0.2	10 4.0 4.0 0.2	10 4.0 4.0 0.2
2	35 17.2 17.2 1.7	42 20.6 20.6 2.1	7 3.4 3.4 0.3	15 7.4 7.4 0.7	40 19.6 19.6 2.0	25 12.3 12.3 1.2	21 10.3 10.3 1.0	16 7.8 7.8 0.8	3 1.5 1.5 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0
3	28 13.7 13.7 1.4	26 12.7 12.7 1.3	8 3.7 3.7 0.4	13 6.4 6.4 0.6	27 13.2 13.2 1.5	19 9.3 9.3 0.9	23 11.3 11.3 1.1	29 14.2 14.2 1.4	12 5.9 5.9 0.6	19 9.3 9.3 0.9	19 9.3 9.3 0.9
5	11 5.4 5.4 0.5	11 5.4 5.4 0.5	31 15.2 15.2 1.5	18 8.8 8.8 0.9	39 19.1 19.1 1.9	34 16.7 16.7 1.7	11 5.4 5.4 0.5	22 10.8 10.8 1.1	24 11.8 11.8 1.2	3 1.5 1.5 0.1	0 0.0 0.0 0.0
6	16 7.8 7.8 0.8	10 4.9 4.9 0.5	36 17.6 17.6 1.8	32 15.7 15.7 1.6	27 13.2 13.2 1.3	22 10.8 10.8 1.1	25 12.3 12.3 1.2	12 5.9 5.9 0.6	17 8.3 8.3 0.8	7 3.4 3.4 0.3	7 3.4 3.4 0.3
7	5 2.5 2.5 0.2	17 8.3 8.3 0.8	19 9.3 9.3 0.9	34 16.7 16.7 1.7	21 10.3 10.3 1.0	11 5.4 5.4 0.5	31 15.2 15.2 1.5	21 10.3 10.3 1.0	14 6.9 6.9 0.7	31 15.2 15.2 1.5	31 15.2 15.2 1.5
8	13 6.4 6.4 0.6	3 1.5 1.5 0.1	20 9.8 9.8 1.0	19 9.3 9.3 0.9	9 4.4 4.4 0.4	20 9.8 9.8 1.0	51 25.0 25.0 2.5	17 8.3 8.3 0.8	41 20.1 20.1 2.0	11 5.4 5.4 0.5	11 5.4 5.4 0.5
9	11 5.4 5.4 0.5	5 2.5 2.5 0.2	33 16.2 16.2 1.6	6 2.9 2.9 0.3	8 3.9 3.9 0.4	20 9.8 9.8 1.0	12 5.9 5.9 0.6	21 10.3 10.3 1.0	24 11.8 11.8 1.2	64 31.4 31.4 3.1	64 31.4 31.4 3.1
10	7 3.4 3.4 0.3	0 0.0 0.0 0.0	5 2.5 2.5 0.2	14 6.9 6.9 0.7	9 4.4 4.4 0.4	28 13.7 13.7 1.4	11 5.4 5.4 0.5	42 20.6 20.6 2.1	36 17.6 17.6 1.8	52 25.5 25.5 2.5	52 25.5 25.5 2.5

RANK VS INCENTIVE FOR TASK 1 - TEST

COUNT ROW PCT COL PCT TOT PCT	INCENTIVE									
	1	2	3	4	5	6	7	8	9	10
1	76 37.3 37.3 3.7	54 26.5 26.5 2.6	5 2.5 2.5 0.2	23 11.3 11.3 1.1	7 3.4 3.4 0.3	22 10.8 10.8 1.1	0 0.0 0.0 0.0	11 5.4 5.4 0.5	4 2.0 2.0 0.1	2 1.0 1.0 0.1
2	39 19.1 19.1 1.9	39 19.1 19.1 1.9	19 9.3 9.3 0.9	14 6.9 6.9 0.7	21 10.3 10.3 1.0	50 24.5 24.5 2.5	14 6.9 6.9 0.7	3 1.5 1.5 0.1	5 2.5 2.5 0.2	0 0.0 0.0 0.0
3	22 10.8 10.8 1.1	40 19.6 19.6 2.0	7 3.4 3.4 0.3	32 15.7 15.7 1.6	35 17.2 17.2 1.7	21 10.3 10.3 1.0	6 2.9 2.9 0.3	20 9.8 9.8 1.0	3 1.5 1.5 0.1	18 8.8 8.8 0.9
4	17 8.3 8.3 0.8	17 8.3 8.3 0.8	32 15.7 15.7 1.6	33 16.2 16.2 1.6	20 9.8 9.8 1.0	27 13.2 13.2 1.3	8 3.9 3.9 0.4	29 14.2 14.2 1.4	10 5.0 5.0 0.5	0 0.0 0.0 0.0
5	8 3.9 3.9 0.4	12 5.9 5.9 0.6	36 17.6 17.6 1.8	23 11.3 11.3 1.1	22 10.8 10.8 1.0	17 8.3 8.3 0.8	14 6.9 6.9 0.7	21 10.3 10.3 1.0	22 10.8 10.8 1.1	29 14.2 14.2 1.4
6	26 12.7 12.7 1.3	14 6.9 6.9 0.7	27 13.2 13.2 1.3	35 17.2 17.2 1.7	18 8.8 8.8 0.9	13 6.4 6.4 0.6	24 11.8 11.8 1.2	21 10.3 10.3 1.0	7 3.4 3.4 0.3	19 9.3 9.3 0.9
7	7 3.4 3.4 0.3	5 2.5 2.5 0.2	52 25.5 25.5 2.5	12 5.9 5.9 0.6	36 17.6 17.6 1.7	4 2.0 2.0 0.2	17 8.3 8.3 0.8	24 11.8 11.8 1.2	14 6.9 6.9 0.7	33 16.2 16.2 1.6
8	3 1.5 1.5 0.1	7 3.4 3.4 0.3	17 8.3 8.3 0.8	12 5.9 5.9 0.6	18 8.8 8.8 0.9	13 6.4 6.4 0.6	47 23.0 23.0 2.3	14 6.9 6.9 0.7	36 17.6 17.6 1.8	37 18.1 18.1 1.8
9	3 1.5 1.5 0.1	16 7.8 7.8 0.8	9 4.4 4.4 0.4	12 5.9 5.9 0.6	3 1.5 1.5 0.1	21 10.3 10.3 1.0	51 25.0 25.0 2.5	18 8.8 8.8 0.9	41 20.1 20.1 2.0	30 14.7 14.7 1.5
10	3 1.5 1.5 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	8 3.9 3.9 0.4	24 11.8 11.8 1.2	16 7.8 7.8 0.8	23 11.3 11.3 1.1	43 21.1 21.1 2.1	51 25.0 25.0 2.5	36 17.6 17.6 1.8

RANK VS INCENTIVE FOR TASK 2 - TEST

COUNT ROW PCT COL PCT TOT PCT	INCENTIVE									
	1	2	3	4	5	6	7	8	9	10
1	34.8 21.6 34.8 33.5	21.4 21.6 21.2	5 2.5 0.2	10 4.9 0.5	19 9.3 0.9	10 4.9 0.5	3 1.5 0.1	33 16.2 11.6	9 4.4 0.4	0 0.0 0.0
2	44 21.6 22.2	41 20.1 22.0	11 5.4 0.5	17 8.3 0.8	11 5.4 0.5	36 17.6 1.8	19 9.3 0.9	19 9.3 0.9	4 2.0 0.2	2 1.0 0.1
3	38 18.6 1.9	35 17.2 1.7	15 7.4 0.7	15 7.4 0.7	34 16.7 1.7	30 14.7 1.5	11 5.4 0.5	12 5.9 0.6	11 5.4 0.5	3 1.5 0.1
4	12 5.9 0.6	18 8.8 0.9	19 9.3 0.9	24 11.8 1.2	26 12.7 1.3	22 10.8 1.1	18 8.8 0.9	23 11.3 1.1	24 11.8 1.2	18 8.8 0.9
5	9 4.4 0.4	13 6.4 0.6	19 9.3 0.9	47 23.0 2.3	38 18.6 1.9	18 8.8 0.9	15 7.4 0.7	16 7.8 0.8	14 6.9 0.7	15 7.4 0.7
6	7 3.4 0.3	16 7.8 0.8	20 9.8 1.0	23 11.3 1.1	16 7.8 0.8	21 10.3 1.0	31 15.2 1.5	9 4.4 0.4	25 12.3 1.2	36 17.6 1.8
7	7 3.4 0.3	11 5.4 0.5	29 14.2 1.4	17 8.3 0.8	22 10.8 1.1	14 6.9 0.7	26 12.7 1.3	20 9.8 1.0	22 10.8 1.1	36 17.6 1.8
8	54 25.4 0.5	11 5.4 0.5	40 19.0 2.0	27 13.2 1.3	20 9.8 1.0	8 3.9 0.4	38 18.6 1.9	16 7.8 0.8	16 7.8 0.8	17 8.3 0.8
9	4 2.0 0.2	12 5.9 0.6	32 15.7 1.6	12 5.9 0.6	5 2.5 0.2	21 10.3 1.0	20 9.8 1.0	29 14.2 1.4	32 15.7 1.6	37 18.1 1.8
10	1 0.5 0.0	3 1.5 0.1	14 6.9 0.7	12 5.9 0.6	13 6.4 0.6	24 11.8 1.2	23 11.3 1.1	27 13.2 1.3	47 23.0 2.3	40 19.0 2.0

RANK VS INCENTIVE FOR TASK 3 - TEST

COUNT ROW PCT COL PCT TOT PCT	INCENTIVE									
	1	2	3	4	5	6	7	8	9	10
1	48	50	16	8	8	22	3	38	7	4
	23.5	24.5	7.8	3.9	3.9	10.8	1.5	18.6	3.4	2.0
	23.5	24.5	7.8	3.9	3.9	10.8	1.5	18.6	3.4	2.0
	2.4	2.5	0.8	0.4	0.4	1.1	0.1	1.9	0.3	0.2
2	25	47	9	22	30	30	6	22	6	7
	12.3	23.0	4.4	10.8	14.7	14.7	2.9	10.8	2.9	3.4
	12.3	23.0	4.4	10.8	14.7	14.7	2.9	10.8	2.9	3.4
	1.2	2.3	0.4	1.1	1.5	1.5	0.3	1.1	0.3	0.3
3	17	40	12	9	39	28	19	17	11	12
	8.3	19.6	5.9	4.4	19.1	13.7	9.3	8.3	5.4	5.9
	8.3	19.6	5.9	4.4	19.1	13.7	9.3	8.3	5.4	5.9
	0.8	2.0	0.6	0.4	1.9	1.4	0.9	0.8	0.5	0.6
4	38	11	17	18	16	31	43	13	8	9
	18.6	5.4	8.3	8.8	7.8	15.2	21.1	6.4	3.9	4.4
	18.6	5.4	8.3	8.8	7.8	15.2	21.1	6.4	3.9	4.4
	1.9	0.5	0.8	0.9	0.8	1.5	2.1	0.6	0.4	0.4
5	9	24	5	26	21	17	21	18	38	25
	4.4	11.8	2.5	12.7	10.3	8.3	10.3	8.8	18.6	12.3
	4.4	11.8	2.5	12.7	10.3	8.3	10.3	8.8	18.6	12.3
	0.4	1.2	0.2	1.3	1.0	0.8	1.0	0.9	1.9	1.2
6	31	10	19	19	29	15	24	22	19	16
	15.2	4.9	9.3	9.3	14.2	7.4	11.8	10.8	9.3	7.8
	15.2	4.9	9.3	9.3	14.2	7.4	11.8	10.8	9.3	7.8
	1.5	0.5	0.9	0.9	1.4	0.7	1.2	1.1	0.9	0.8
7	7	8	31	31	15	15	21	20	13	23
	3.4	3.9	25.0	15.2	7.4	7.4	10.3	9.8	6.4	11.3
	3.4	3.9	25.0	15.2	7.4	7.4	10.3	9.8	6.4	11.3
	0.3	0.4	2.5	2.5	0.7	0.7	1.0	1.0	0.6	1.1
8	7	2	43	44	15	19	16	21	30	7
	3.4	1.0	21.1	21.6	7.4	9.3	7.8	10.3	14.7	3.4
	3.4	1.0	21.1	21.6	7.4	9.3	7.8	10.3	14.7	3.4
	0.3	0.1	2.1	2.2	0.7	0.9	0.8	1.0	1.5	0.3
9	11	12	24	10	18	7	33	8	37	44
	5.4	5.9	11.8	4.9	8.8	3.4	16.2	3.9	18.1	21.6
	5.4	5.9	11.8	4.9	8.8	3.4	16.2	3.9	18.1	21.6
	0.5	0.6	1.2	0.5	0.9	0.3	1.6	0.4	1.8	2.2
10	54	0	38	17	13	20	18	25	35	57
	27.9	0.0	19.6	8.3	6.4	9.8	12.3	12.3	17.2	27.9
	27.9	0.0	19.6	8.3	6.4	9.8	12.3	12.3	17.2	27.9
	0.5	0.0	0.4	0.8	0.6	1.0	1.2	1.2	1.7	2.8

RANK VS INCENTIVE FOR TASK 4 - TEST

COUNT	INCENTIVE									
	1	2	3	4	5	6	7	8	9	10
ROW PCT	56	95	1	5	11	20	7	9	0	0
COL PCT	27.5	46.6	0.5	2.5	5.4	9.8	3.4	4.4	0.0	0.0
TOT PCT	27.5	46.6	0.5	2.5	5.4	9.8	3.4	4.4	0.0	0.0
	2.7	4.7	0.0	0.2	0.5	1.0	0.3	0.4	0.0	0.0
	51	34	1	15	36	32	1	14	18	2
	25.0	16.7	0.5	7.4	17.6	15.7	0.5	6.9	8.8	1.0
	25.0	16.7	0.5	7.4	17.6	15.7	0.5	6.9	8.8	1.0
	2.5	1.7	0.0	0.7	1.8	1.6	0.0	0.7	0.9	0.1
	4.5	3.2	1.5	18	36	19	12	19	5	3
	22.1	15.7	7.4	8.8	17.6	9.3	5.9	9.3	2.5	1.5
	22.1	15.7	7.4	8.8	17.6	9.3	5.9	9.3	2.5	1.5
	2.2	1.6	0.7	0.9	1.8	0.9	0.6	0.9	0.2	0.1
	21	16	14	14	27	30	26	17	28	11
	10.3	7.8	6.9	6.9	13.2	14.7	12.7	8.3	13.7	5.4
	10.3	7.8	6.9	6.9	13.2	14.7	12.7	8.3	13.7	5.4
	1.0	0.8	0.7	0.7	1.3	1.5	1.3	0.8	1.4	0.5
	9	6	31	31	24	21	26	25	19	12
	4.4	2.9	15.2	15.2	11.8	10.3	12.7	12.3	9.3	5.9
	4.4	2.9	15.2	15.2	11.8	10.3	12.7	12.3	9.3	5.9
	0.4	0.3	1.5	1.5	1.2	1.0	1.3	1.2	0.9	0.6
	11	1	30	35	13	18	31	20	8	29
	5.4	0.5	14.7	17.2	6.4	8.8	15.2	13.7	3.9	14.2
	5.4	0.5	14.7	17.2	6.4	8.8	15.2	13.7	3.9	14.2
	0.5	0.0	1.5	1.7	0.6	0.9	1.5	1.4	0.4	1.4
	5	4	40	28	8	12	30	30	22	25
	2.5	2.0	19.6	13.7	3.9	5.9	14.7	14.7	10.8	12.3
	2.5	2.0	19.6	13.7	3.9	5.9	14.7	14.7	10.8	12.3
	0.2	0.2	2.0	1.4	0.4	0.6	1.5	1.5	1.1	1.2
	3	6	25	34	19	18	36	16	11	36
	1.5	2.9	12.3	16.7	9.3	8.8	17.6	7.8	5.4	17.6
	1.5	2.9	12.3	16.7	9.3	8.8	17.6	7.8	5.4	17.6
	0.1	0.3	1.2	1.7	0.9	0.9	1.8	0.8	0.5	1.8
	2	0	30	15	12	16	24	10	56	39
	1.0	0.0	14.7	7.4	5.9	7.8	11.8	4.9	27.5	19.1
	1.0	0.0	14.7	7.4	5.9	7.8	11.8	4.9	27.5	19.1
	0.1	0.0	1.5	0.7	0.6	0.8	1.2	0.5	2.7	1.9
	1	10	17	9	18	18	11	36	37	47
	0.5	4.9	8.3	4.4	8.8	8.8	5.4	17.6	18.1	23.0
	0.0	0.5	0.8	0.4	0.9	0.9	0.5	1.8	1.8	2.3

RANK VS INCENTIVE FOR TASK 5 - TEST

COUNT ROW PCT COL PCT TOT PCT	INCENTIVE										
	1	2	3	4	5	6	7	8	9	10	
1	50 24.5 24.5 2.5	21 10.3 10.3 1.0	3 1.5 1.5 0.1	12 5.7 5.9 0.6	20 9.8 9.8 1.0	20 9.8 9.8 1.0	7 3.4 3.4 0.3	10 4.9 4.9 0.5	26 12.7 12.7 1.3	26 12.7 12.7 1.3	9 4.4 4.4 0.4
2	33 16.2 16.2 1.6	26 12.7 12.7 1.3	12 6.0 6.0 0.6	19 9.3 9.3 0.9	25 12.3 12.3 1.2	19 9.3 9.3 0.9	17 8.3 8.3 0.8	16 7.8 7.8 0.8	15 7.4 7.4 0.7	15 7.4 7.4 0.7	8 3.9 3.9 0.4
3	21 10.3 10.3 1.0	24 11.8 11.8 1.2	27 13.2 13.2 1.3	20 9.8 9.8 1.0	31 15.2 15.2 1.5	10 4.9 4.9 0.5	17 8.3 8.3 0.8	7 3.4 3.4 0.3	14 6.9 6.9 0.7	14 6.9 6.9 0.7	33 16.2 16.2 1.6
4	21 10.3 10.3 1.0	13 6.4 6.4 0.6	37 18.1 18.1 1.8	18 8.8 8.8 0.9	31 15.2 15.2 1.5	19 9.3 9.3 0.9	16 7.8 7.8 0.8	24 11.8 11.8 1.2	6 2.9 2.9 0.3	6 2.9 2.9 0.3	19 9.3 9.3 0.9
5	14 6.9 6.9 0.7	18 8.8 8.8 0.9	23 11.3 11.3 1.1	32 15.7 15.7 1.6	29 14.2 14.2 1.4	9 4.4 4.4 0.4	33 16.2 16.2 1.6	17 8.3 8.3 0.8	21 10.3 10.3 1.0	21 10.3 10.3 1.0	8 3.9 3.9 0.4
6	11 5.4 5.4 0.5	16 7.8 7.8 0.8	17 8.3 8.3 0.8	49 24.0 24.0 2.4	21 10.3 10.3 1.0	9 4.4 4.4 0.4	20 9.8 9.8 1.0	27 13.2 13.2 1.3	20 9.8 9.8 1.0	20 9.8 9.8 1.0	14 6.9 6.9 0.7
7	18 8.8 8.8 0.9	26 12.7 12.7 1.3	14 6.9 6.9 0.7	14 6.9 6.9 0.7	23 11.3 11.3 1.1	5 2.5 2.5 0.2	17 8.3 8.3 0.8	20 9.8 9.8 1.0	25 12.3 12.3 1.2	25 12.3 12.3 1.2	42 20.6 20.6 2.1
8	11 5.4 5.4 0.5	18 8.8 8.8 0.9	24 11.8 11.8 1.2	8 3.9 3.9 0.4	19 9.3 9.3 0.9	33 16.2 16.2 1.6	31 15.2 15.2 1.5	9 4.4 4.4 0.4	22 10.8 10.8 1.1	22 10.8 10.8 1.1	29 14.2 14.2 1.4
9	14 6.9 6.9 0.7	19 9.3 9.3 0.9	21 10.3 10.3 1.0	18 8.8 8.8 0.9	2 1.0 1.0 0.1	33 16.2 16.2 1.6	18 8.3 8.3 0.8	25 12.3 12.3 1.2	30 14.7 14.7 1.5	30 14.7 14.7 1.5	24 11.8 11.8 1.2
10	11 5.4 5.4 0.5	23 11.3 11.3 1.1	12 5.9 5.9 0.6	14 6.9 6.9 0.7	3 1.5 1.5 0.1	60 29.4 29.4 2.9	25 12.3 12.3 1.2	13 6.4 6.4 0.6	25 12.3 12.3 1.2	25 12.3 12.3 1.2	18 8.8 8.8 0.9

RANK VS INCENTIVE FOR TASK 6 - TEST

COUNT ROW PCT COL PCT TOT PCT	INCENTIVE									
	1	2	3	4	5	6	7	8	9	10
1	53	33	22	21	19	19	13	20	5	0
	26.0	16.2	10.8	10.3	8.8	4.9	6.4	14.2	2.5	0.0
	20.0	16.2	10.8	10.3	8.8	4.9	6.4	14.2	2.5	0.0
	2.6	1.6	1.1	1.0	0.9	0.5	0.6	1.1	0.2	0.0
2	29	29	14	40	17	12	11	19	15	9
	14.2	14.2	6.9	24.0	8.3	5.9	5.4	9.3	7.4	4.4
	14.2	14.2	6.9	24.0	8.3	5.9	5.4	9.3	7.4	4.4
	1.4	1.4	0.7	2.4	0.8	0.6	0.5	0.9	0.7	0.4
3	21	33	24	28	18	18	23	9	7	23
	10.3	16.2	11.8	13.7	8.8	8.8	11.3	4.4	3.4	11.3
	10.3	16.2	11.8	13.7	8.8	8.8	11.3	4.4	3.4	11.3
	1.0	1.6	1.2	1.4	0.9	0.9	1.1	0.4	0.3	1.1
4	11	11	10	12	11	12	25	34	38	40
	5.4	5.4	4.9	5.9	5.4	5.9	12.3	16.7	18.6	19.6
	5.4	5.4	4.9	5.9	5.4	5.9	12.3	16.7	18.6	19.6
	0.5	0.5	0.5	0.6	0.5	0.6	1.2	1.7	1.9	2.0
5	32	11	14	39	26	16	24	10	12	20
	15.7	5.4	6.9	19.1	12.7	7.8	11.8	4.9	5.9	9.8
	15.7	5.4	6.9	19.1	12.7	7.8	11.8	4.9	5.9	9.8
	1.6	0.5	0.7	1.9	1.3	0.8	1.2	0.5	0.6	1.0
6	21	23	22	13	35	12	23	28	9	18
	10.3	11.3	10.8	6.4	17.2	5.9	11.3	13.7	4.4	8.8
	10.3	11.3	10.8	6.4	17.2	5.9	11.3	13.7	4.4	8.8
	1.0	1.1	1.1	0.6	1.7	0.6	1.1	1.4	0.4	0.9
7	13	10	33	10	26	25	26	14	21	26
	6.4	4.9	16.2	4.9	12.7	12.3	12.7	6.9	10.3	12.7
	6.4	4.9	16.2	4.9	12.7	12.3	12.7	6.9	10.3	12.7
	0.6	0.5	1.6	0.5	1.3	1.2	1.3	0.7	1.0	1.3
8	1	18	37	15	30	29	27	17	17	13
	0.5	8.8	18.1	7.4	14.7	14.2	13.2	8.3	8.3	6.4
	0.5	8.8	18.1	7.4	14.7	14.2	13.2	8.3	8.3	6.4
	0.0	0.9	1.8	0.7	1.5	1.4	1.3	0.8	0.8	0.6
9	10	21	9	14	17	31	21	17	32	32
	4.9	10.3	4.4	6.9	8.3	15.2	10.3	8.3	15.7	15.7
	4.9	10.3	4.4	6.9	8.3	15.2	10.3	8.3	15.7	15.7
	0.5	1.0	0.4	0.7	0.8	1.5	1.0	0.8	1.6	1.6
10	13	15	19	3	6	39	11	27	48	23
	6.4	7.4	9.3	1.5	2.9	19.1	5.4	13.2	23.5	11.3
	6.4	7.4	9.3	1.5	2.9	19.1	5.4	13.2	23.5	11.3
	0.6	0.7	0.9	0.1	0.3	1.9	0.5	1.3	2.4	1.1

RANK VS INCENTIVE FOR TASK 7 - TEST

COUNT ROW PCT COL PCT TOT PCT	INCENTIVE										
	1	2	3	4	5	6	7	8	9	10	
1	75 36.8 36.3 39.9	74 36.3 36.6 33.0	14 6.9 6.9 0.7	11 5.4 5.4 0.5	19 9.3 9.3 0.9	3 1.5 1.5 0.1	0 0.0 0.0 0.0	4 2.0 2.0 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 2.0 2.0 0.2
2	32 15.7 15.7 11.6	45 22.1 22.1 22.2	5 2.5 2.5 0.2	18 8.8 8.8 0.9	30 17.6 17.6 1.8	25 12.3 12.3 1.2	17 8.3 8.3 0.8	19 9.3 9.3 0.7	7 3.4 3.4 0.3	7 3.4 3.4 0.3	0 0.0 0.0 0.0
3	30 14.7 14.7 11.5	24 11.8 11.8 11.2	9 4.4 4.4 0.4	20 9.8 9.8 1.0	23 11.3 11.3 1.1	13 6.4 6.4 0.6	21 10.3 10.3 1.0	31 15.2 15.2 0.7	19 9.3 9.3 0.3	19 9.3 9.3 0.3	14 6.9 6.9 0.7
4	8 3.9 3.9 0.4	6 2.9 2.9 0.3	25 12.3 12.3 1.2	16 7.8 7.8 0.8	41 20.1 20.1 2.2	44 21.6 21.6 2.2	18 8.8 8.8 0.9	29 14.2 14.2 1.4	14 6.9 6.9 0.7	14 6.9 6.9 0.7	9 4.4 4.4 0.4
5	9 4.4 4.4 0.4	25 12.3 12.3 1.2	31 15.2 15.2 1.5	38 18.6 18.6 1.9	12 5.9 5.9 0.6	19 9.3 9.3 0.9	18 8.8 8.8 0.9	29 14.2 14.2 1.4	14 6.9 6.9 0.7	14 6.9 6.9 0.7	9 4.4 4.4 0.4
6	11 5.4 5.4 0.5	7 3.4 3.4 0.3	43 21.1 21.1 2.1	33 16.2 16.2 1.6	19 9.3 9.3 0.9	22 10.8 10.8 1.1	26 12.7 12.7 1.3	14 6.9 6.9 0.7	22 10.8 10.8 1.1	22 10.8 10.8 1.1	7 3.4 3.4 0.3
7	12 5.9 5.9 0.6	14 6.9 6.9 0.7	20 9.8 9.8 1.0	26 12.7 12.7 1.3	20 9.8 9.8 1.0	21 10.3 10.3 1.0	32 15.7 15.7 1.6	17 8.3 8.3 0.8	17 8.3 8.3 0.8	17 8.3 8.3 0.8	25 12.3 12.3 1.2
8	13 6.4 6.4 0.6	2 1.0 1.0 0.1	23 11.3 11.3 1.1	18 8.8 8.8 0.9	14 6.9 6.9 0.7	19 9.3 9.3 0.9	39 19.1 19.1 1.9	16 7.8 7.8 0.8	45 22.1 22.1 2.2	45 22.1 22.1 2.2	15 7.4 7.4 0.7
9	7 3.4 3.4 0.3	7 3.4 3.4 0.3	29 14.2 14.2 1.4	10 4.9 4.9 0.5	9 4.4 4.4 0.4	15 7.4 7.4 0.7	24 11.8 11.8 1.2	23 11.3 11.3 1.1	23 11.3 11.3 1.1	23 11.3 11.3 1.1	57 27.9 27.9 2.8
10	7 3.4 3.4 0.3	0 0.0 0.0 0.0	5 2.5 2.5 0.2	14 6.9 6.9 0.7	11 5.4 5.4 0.5	23 11.3 11.3 1.1	11 5.4 5.4 0.5	30 18.6 18.6 1.9	34 16.7 16.7 1.7	34 16.7 16.7 1.7	61 29.6 29.6 3.0

RANK VS INCENTIVE FOR TASK 1 - REBEST

COUNT	INCENTIVE									
	1	2	3	4	5	6	7	8	9	10
ROW PCT	77	53	5	21	10	21	0	11	4	2
COL PCT	37.7	26.0	2.5	10.3	4.9	10.3	0.0	5.4	2.0	1.0
TOT PCT	3.8	2.6	0.2	1.0	0.5	1.0	0.0	0.5	0.2	0.1
1	32	42	16	15	19	55	14	3	5	3
2	15.7	20.6	7.8	7.4	9.3	27.0	6.9	1.5	2.5	1.5
3	1.6	2.1	0.8	0.7	0.9	2.7	0.7	0.1	0.2	0.1
4	21	41	18	32	11	16	7	19	3	16
5	10.3	20.1	8.8	15.7	15.2	7.8	3.4	9.3	1.5	7.8
6	10.3	20.1	8.8	15.7	15.2	7.8	3.4	9.3	1.5	7.8
7	1.0	2.0	0.9	1.6	1.5	0.8	0.3	0.9	0.1	0.8
8	23	18	35	29	19	77	5	25	20	3
9	11.5	8.8	17.2	14.2	9.3	13.2	2.5	12.3	9.8	1.5
10	11.3	8.6	17.2	14.2	9.3	13.2	2.5	12.3	9.8	1.5
11	1.1	0.9	1.7	1.4	0.9	1.3	0.2	1.2	1.0	0.1
12	5	7	23	22	25	23	14	22	25	25
13	2.5	3.4	14.2	14.2	12.3	11.3	6.9	10.8	12.3	12.3
14	0.2	0.3	1.2	1.4	1.2	1.1	0.7	1.1	1.2	1.2
15	28	13	36	23	23	10	22	26	8	15
16	13.7	6.4	17.6	11.3	11.3	4.9	10.8	12.7	3.9	7.4
17	13.7	6.4	17.6	11.3	11.3	4.9	10.8	12.7	3.9	7.4
18	1.4	0.6	1.8	1.1	1.1	0.5	1.1	1.3	0.4	0.7
19	7	7	30	22	32	4	23	21	11	38
20	3.4	3.4	19.1	10.8	15.7	2.0	11.3	10.3	5.4	18.6
21	3.4	3.4	19.1	10.8	15.7	2.0	11.3	10.3	5.4	18.6
22	0.3	0.3	1.9	1.1	1.6	0.2	1.1	1.0	0.5	1.9
23	5	7	17	13	19	11	49	5	41	37
24	2.5	3.4	8.3	6.4	9.3	5.4	24.0	2.5	20.1	18.1
25	2.5	3.4	8.3	6.4	9.3	5.4	24.0	2.5	20.1	18.1
26	0.2	0.3	0.8	0.6	0.9	0.5	2.4	0.2	2.0	1.8
27	3	16	9	12	3	17	40	31	47	26
28	1.5	7.8	4.4	5.9	1.5	8.3	19.6	15.2	23.0	12.7
29	0.1	0.8	0.4	0.6	0.1	0.8	2.0	1.5	2.3	1.3
30	3	0	0	8	23	20	30	41	40	39
31	1.5	0.0	0.0	3.9	11.3	9.8	14.7	20.1	19.6	19.1
32	0.1	0.0	0.0	0.4	1.1	1.0	1.5	2.0	2.0	1.9

BANK US INCENTIVE FOR TASK 2 - RETEST

COUNT ROW PCT COL PCT TOT PCT	INCENTIVES									
	1	2	3	4	5	6	7	8	9	10
1	73 35.8 35.8 3.6	51 25.0 25.0 2.5	5 2.5 2.5 0.2	10 4.9 4.9 0.5	16 7.8 7.8 0.8	7 3.4 3.4 0.3	4 2.0 2.0 0.2	29 14.2 14.2 1.4	9 4.4 4.4 0.4	0 0.0 0.0 0.0
2	45 22.1 18.6 2.2	38 18.6 18.6 1.9	17 8.3 8.3 0.8	12 5.9 5.9 0.6	14 6.9 6.9 0.7	30 14.7 14.7 1.5	16 7.8 7.8 0.8	25 12.3 12.3 1.2	5 2.5 2.5 0.2	2 1.0 1.0 0.1
3	42 20.6 13.7 2.1	28 13.7 13.7 1.4	6 2.9 2.9 0.3	19 9.3 9.3 0.9	33 16.2 16.2 1.6	41 20.1 20.1 2.0	10 4.9 4.9 0.5	7 3.4 3.4 0.3	10 4.9 4.9 0.5	8 3.9 3.9 0.4
4	9 4.4 4.4 0.4	22 10.8 10.8 1.1	27 13.2 13.2 1.3	22 10.8 10.8 1.1	34 16.7 16.7 1.7	21 10.3 10.3 1.0	13 6.4 6.4 0.6	22 10.8 10.8 1.1	21 10.3 10.3 1.0	13 6.4 6.4 0.6
5	15 7.4 7.4 0.7	15 7.4 7.4 0.7	17 8.3 8.3 0.8	34 16.7 16.7 1.7	33 16.2 16.2 1.6	25 12.3 12.3 1.2	21 10.3 10.3 1.0	16 7.8 7.8 0.8	9 4.4 4.4 0.4	19 9.3 9.3 0.9
6	5 2.5 2.5 0.2	11 5.4 5.4 0.5	25 12.3 12.3 1.2	27 13.2 13.2 1.3	15 7.4 7.4 0.7	15 7.4 7.4 0.7	27 13.2 13.2 1.3	17 8.3 8.3 0.8	33 16.2 16.2 1.6	29 14.2 14.2 1.4
7	4 2.0 2.0 0.2	12 5.9 5.9 0.6	36 17.6 17.6 1.8	21 10.3 10.3 1.0	22 10.8 10.8 1.1	15 7.4 7.4 0.7	26 12.7 12.7 1.3	15 7.4 7.4 0.7	20 9.8 9.8 1.0	33 16.2 16.2 1.6
8	7 3.4 3.4 0.3	14 6.9 6.9 0.7	22 10.8 10.8 1.1	33 16.2 16.2 1.6	17 8.3 8.3 0.8	15 7.4 7.4 0.7	37 18.1 18.1 1.8	18 8.8 8.8 0.9	18 8.8 8.8 0.9	23 11.3 11.3 1.1
9	4 2.0 2.0 0.2	6 2.9 2.9 0.3	38 18.6 18.6 1.9	14 6.9 6.9 0.7	6 2.9 2.9 0.3	14 6.9 6.9 0.7	29 14.2 14.2 1.4	32 15.7 15.7 1.6	30 14.7 14.7 1.5	31 15.2 15.2 1.5
10	0 0.0 0.0 0.0	7 3.4 3.4 0.3	11 5.4 5.4 0.5	12 5.9 5.9 0.6	14 6.9 6.9 0.7	21 10.3 10.3 1.0	21 10.3 10.3 1.0	23 11.3 11.3 1.1	49 24.0 24.0 2.4	46 22.5 22.5 2.3

RANK VS INCENTIVE FOR TASK 3 - RETEST

COUNT ROW PCT COL PCT TOT PCT	INCENTIVE									
	1	2	3	4	5	6	7	8	9	10
1	54 26.5 26.5 2.6	50 24.5 24.5 2.5	13 6.4 6.4 0.6	10 4.9 4.9 0.5	12 5.9 5.9 0.6	20 9.4 9.4 1.0	3 1.5 1.5 0.1	37 18.1 18.2 11.8	1 0.5 0.5 0.0	4 2.0 2.0 0.2
2	25 12.3 12.3 1.2	42 20.6 20.6 2.1	12 5.9 5.9 0.6	21 10.3 10.3 1.0	27 13.2 13.2 1.3	29 14.2 14.2 1.4	7 3.4 3.4 0.3	22 10.8 10.8 1.1	12 5.9 5.9 0.0	7 3.4 3.4 0.3
3	12 5.9 5.9 0.6	41 20.1 20.1 2.0	14 6.9 6.9 0.7	9 4.4 4.4 0.4	36 17.6 17.6 1.8	31 15.2 15.2 1.5	24 11.8 11.8 1.2	16 7.8 7.9 0.8	9 4.4 4.4 0.4	2 0.6 0.6 0.0
4	37 18.1 18.1 1.8	8 3.9 3.9 0.4	11 5.4 5.4 0.5	18 8.8 8.8 0.9	23 11.3 11.3 1.1	28 13.7 13.7 1.4	40 19.6 19.6 2.0	15 7.4 7.4 0.7	11 5.4 5.4 0.5	13 6.4 6.4 0.6
5	19 9.3 9.3 0.9	28 13.7 13.7 1.4	12 5.9 5.9 0.6	29 14.2 14.2 1.4	21 10.3 10.3 1.0	21 10.3 10.3 1.0	19 9.3 9.3 0.9	21 10.3 10.3 1.0	22 10.8 10.8 1.1	12 5.9 5.9 0.6
6	16 7.8 7.8 0.8	12 5.9 5.9 0.6	18 8.8 8.8 0.9	16 7.8 7.8 0.8	24 11.8 11.8 1.2	14 6.9 6.9 0.7	22 10.8 10.8 1.1	25 12.3 12.3 1.2	25 12.3 12.3 1.2	32 15.7 15.7 1.6
7	16 7.8 7.8 0.8	7 3.4 3.4 0.3	42 20.6 20.6 2.1	32 15.7 15.7 1.6	13 6.4 6.4 0.6	16 7.8 7.8 0.8	21 10.3 10.3 1.0	17 8.4 8.4 0.8	19 9.3 9.3 0.5	15 7.4 7.4 0.7
8	7 3.4 3.4 0.3	4 2.0 2.0 0.2	44 21.7 21.7 2.2	44 21.7 21.7 2.2	20 9.9 9.9 1.0	18 8.9 8.9 0.9	17 8.4 8.4 0.8	17 8.4 8.4 0.8	24 11.8 11.8 1.2	8 3.9 3.9 0.4
9	7 3.4 3.4 0.3	12 5.9 5.9 0.6	24 11.8 11.8 1.2	9 4.4 4.4 0.4	14 6.9 6.9 0.7	7 3.4 3.4 0.3	34 16.7 16.7 1.7	13 6.4 6.4 0.6	40 19.7 19.7 2.0	43 21.2 21.2 2.1
10	11 5.4 5.4 0.5	0 0.0 0.0 0.0	8 3.9 3.9 0.4	16 7.8 7.8 0.8	14 6.9 6.9 0.7	20 9.4 9.4 1.0	17 8.4 8.4 0.8	20 9.4 9.4 1.0	40 19.7 19.7 2.0	58 28.4 28.4 2.8

RANK VS INCENTIVE FOR TASK 4 - RETEST

COUNT ROW PCT COL PCT TOT PCT	INCENTIVE									
	1	2	3	4	5	6	7	8	9	10
1	55	97	0	6	12	22	5	7	0	0
2	27.0	47.5	0.0	2.9	5.9	10.8	2.5	3.4	0.0	0.0
3	2.7	4.8	0.0	0.3	0.6	1.1	0.2	0.3	0.0	0.0
4	51	39	6	16	33	24	3	16	14	2
5	25.0	19.1	2.9	7.8	16.2	11.8	1.5	7.8	6.9	1.0
6	2.5	1.9	0.3	0.8	1.6	1.2	0.1	0.8	0.7	0.1
7	47	27	12	8	43	23	12	20	9	3
8	23.0	13.2	5.9	3.9	21.1	11.3	5.9	9.8	4.4	1.5
9	2.3	1.3	0.6	0.4	2.1	1.1	0.6	1.0	0.4	0.1
10	18	15	14	21	30	26	30	20	19	11
11	8.8	7.4	6.9	10.3	14.7	12.7	14.7	9.8	9.3	5.4
12	8.8	7.4	6.9	10.3	14.7	12.7	14.7	9.8	9.3	5.4
13	0.9	0.7	0.7	1.0	1.5	1.3	1.5	1.0	0.9	0.5
14	11	5	29	41	15	23	25	22	23	10
15	5.4	2.5	14.2	20.1	7.4	11.3	12.3	10.8	11.3	4.9
16	5.4	2.5	14.2	20.1	7.4	11.3	12.3	10.8	11.3	4.9
17	0.5	0.2	1.4	2.0	0.7	1.1	1.2	1.1	1.1	0.5
18	11	1	24	36	18	20	26	27	6	35
19	5.4	0.5	11.8	17.6	8.8	9.8	12.7	13.2	2.9	17.2
20	5.4	0.5	11.8	17.6	8.8	9.8	12.7	13.2	2.9	17.2
21	0.5	0.0	1.2	1.8	0.9	1.0	1.3	1.3	0.3	1.7
22	5	6	48	20	7	10	29	31	29	17
23	2.5	3.9	23.5	9.8	3.4	4.9	14.2	15.2	14.2	8.3
24	0.2	0.4	2.4	1.0	0.3	0.5	1.4	1.5	1.4	0.8
25	3	2	27	31	20	16	39	14	13	39
26	1.5	1.0	13.2	15.2	9.8	7.8	19.1	6.9	6.4	19.1
27	0.1	0.1	1.5	1.5	1.0	0.8	1.0	0.7	0.6	11.0
28	2	0	30	16	14	20	22	14	43	43
29	1.0	0.0	14.7	7.8	6.9	9.8	10.8	6.9	21.1	21.1
30	0.1	0.0	1.5	0.8	0.7	1.0	1.1	0.7	2.1	2.1
31	10	10	14	9	12	20	13	33	48	44
32	0.5	4.9	6.0	4.4	5.9	9.8	6.4	16.2	23.5	21.6
33	0.0	0.5	0.7	0.4	0.6	1.0	0.6	1.6	2.4	2.2

RANK VS INCENTIVE FOR TASK 5 - RETEST

COUNT ROW PCT COL PCT TOT PCT	INCENTIVE									
	1	2	3	4	5	6	7	8	9	10
1	4.8	2.9	0	1.6	1.9	1.3	1.4	3.6	2.2	1.0
2	23.5	14.2	0.0	7.8	7.8	6.4	6.9	17.6	10.8	4.9
3	23.5	14.2	0.0	7.8	7.8	6.4	6.9	17.6	10.8	4.9
4	2.4	1.4	0.0	0.8	0.8	0.6	0.7	1.8	1.1	0.5
5	4.1	2.3	2.9	1.2	2.3	5.9	9.3	2.1	9.3	2.9
6	20.1	11.3	12.7	5.9	12.3	5.9	9.3	10.3	9.3	2.9
7	20.1	11.3	12.7	5.9	12.3	5.9	9.3	10.3	9.3	2.9
8	2.0	1.1	1.3	0.8	1.2	0.6	0.9	1.0	0.9	0.3
9	2.0	1.7	3.3	1.7	3.4	9	1.3	1.6	1.2	3.3
10	9.8	8.3	16.2	8.3	16.7	4.4	6.4	7.8	5.9	16.2
11	1.0	0.8	1.6	0.8	1.7	0.4	0.6	0.8	0.6	1.6
12	1.7	9.3	10.8	2.4	4.0	1.5	2.6	1.6	4.4	7.8
13	8.3	9.3	10.8	11.8	19.6	7.4	12.7	7.8	4.4	7.8
14	0.8	0.9	1.1	1.2	2.0	0.7	1.3	0.8	0.4	0.8
15	1.6	1.9	3.0	3.7	2.5	1.5	1.8	2.7	1.2	5
16	7.8	9.3	14.7	18.1	12.3	7.4	8.8	13.2	5.9	2.5
17	7.8	9.3	14.7	18.1	12.3	7.4	8.8	13.2	5.9	2.5
18	0.8	0.9	1.1	1.2	2.0	0.7	1.3	0.8	0.6	0.2
19	1.3	1.6	1.8	3.6	2.2	1.0	2.5	1.8	2.6	2.0
20	6.4	7.8	8.8	17.6	10.8	4.9	12.3	8.8	12.7	9.8
21	6.4	7.8	8.8	17.6	10.8	4.9	12.3	8.8	12.7	9.8
22	0.6	0.8	0.9	1.8	1.1	0.5	1.2	0.9	1.3	1.0
23	1.5	2.2	1.8	1.6	1.4	8	2.2	2.1	2.4	4.4
24	7.4	10.8	8.8	7.8	6.9	3.9	10.8	10.3	11.8	21.6
25	0.7	1.1	0.9	0.8	0.7	0.4	1.1	1.0	1.2	2.2
26	1.5	1.6	2.9	1.1	2.0	3.9	10.8	15	2.4	2.1
27	7.4	7.8	14.2	5.4	9.8	16.7	9.3	7.4	11.8	10.3
28	0.7	0.8	1.4	0.5	1.0	1.7	0.9	0.7	1.2	1.0
29	7	2.2	1.6	1.8	1	3.7	2.6	2.6	2.5	2.6
30	3.4	10.8	7.8	8.8	0.5	18.1	12.7	12.7	12.3	12.7
31	3.4	10.8	7.8	8.8	0.5	18.1	12.7	12.7	12.3	12.7
32	0.3	1.1	0.8	0.9	0.0	1.8	1.3	1.3	1.2	1.3
33	1.2	2.1	1.2	1.7	7	5.1	2.2	8	3.1	2.3
34	5.9	10.3	5.9	8.3	3.4	25.0	10.8	3.9	15.2	11.3
35	0.6	1.0	0.6	0.8	0.3	2.5	1.1	0.4	1.5	1.1

RANK VS INCENTIVE FOR TASK 6 - RETEST

COUNT POW PCT COL PCT TOT PCT	INCENTIVE									
	1	2	3	4	5	6	7	8	9	10
1	53	33	22	25	14	13	13	26	5	0
	26.0	16.2	10.8	12.3	6.9	6.4	6.4	12.7	2.5	0.0
	26.0	16.2	10.8	12.3	6.9	6.4	6.4	12.7	2.5	0.0
	2.6	1.6	1.1	1.2	0.7	0.6	0.6	1.3	0.2	0.0
2	32	33	17	42	19	9	9	19	15	9
	15.7	16.2	8.3	20.6	9.3	4.4	4.4	9.3	7.4	4.4
	15.7	16.2	8.3	20.6	9.3	4.4	4.4	9.3	7.4	4.4
	1.6	1.6	0.8	2.1	0.9	0.4	0.4	0.9	0.7	0.4
3	19	28	23	27	20	19	22	9	12	25
	9.3	13.7	11.3	13.2	9.8	9.3	10.8	4.4	5.9	13.3
	9.3	13.7	11.3	13.2	9.8	9.3	10.8	4.4	5.9	13.3
	0.9	1.4	1.1	1.3	1.0	0.9	1.1	0.4	0.6	1.2
4	17	12	10	11	8	19	24	32	32	39
	8.3	5.9	4.9	5.4	3.9	9.3	11.8	15.7	15.7	19.1
	8.3	5.9	4.9	5.4	3.9	9.3	11.8	15.7	15.7	19.1
	0.8	0.6	0.5	0.5	0.4	0.9	1.2	1.6	1.6	1.6
5	20	12	19	39	37	13	23	17	17	19
	9.8	5.9	9.3	19.1	14.7	6.4	11.3	8.3	8.3	8.3
	9.8	5.9	9.3	19.1	14.7	6.4	11.3	8.3	8.3	8.3
	1.0	0.6	0.5	1.0	1.5	0.6	1.1	0.8	0.6	0.9
6	25	22	23	16	37	6	29	23	17	11
	12.3	10.8	11.3	7.8	15.7	2.9	14.2	11.3	8.3	5.4
	12.3	10.8	11.3	7.8	15.7	2.9	14.2	11.3	8.3	5.4
	1.2	1.1	1.1	0.8	1.6	0.3	1.4	1.1	0.8	0.5
7	14	5	28	6	31	37	27	15	12	29
	6.9	2.5	13.7	2.9	15.2	18.1	13.2	7.4	5.9	14.2
	6.9	2.5	13.7	2.9	15.2	18.1	13.2	7.4	5.9	14.2
	0.7	0.2	1.4	0.3	1.5	1.8	1.3	0.7	0.6	1.4
8	1	20	29	25	25	22	34	17	14	17
	0.5	9.8	14.2	12.3	12.3	10.8	16.7	8.3	6.9	8.3
	0.5	9.8	14.2	12.3	12.3	10.8	16.7	8.3	6.9	8.3
	0.0	1.0	1.4	1.2	1.2	1.1	1.7	0.8	0.7	0.8
9	7	25	12	10	16	32	15	19	32	36
	3.4	12.3	5.9	4.9	7.8	15.7	7.4	9.3	15.7	17.6
	3.4	12.3	5.9	4.9	7.8	15.7	7.4	9.3	15.7	17.6
	0.3	1.2	0.6	0.5	0.8	1.6	0.7	0.9	1.6	1.8
10	16	14	21	3	9	34	8	27	53	19
	7.8	6.9	10.3	1.5	4.4	16.7	3.9	13.2	26.0	9.3
	7.8	6.9	10.3	1.5	4.4	16.7	3.9	13.2	26.0	9.3
	0.8	0.7	1.0	0.1	0.4	1.7	0.4	1.3	2.6	0.9

RANK VS INCENTIVE FOR TASK 7 - RETEST

ANK

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