

THE UNIVERSITY OF ALBERTA

A COMPARATIVE STUDY OF THE INSTRUCTOR'S ROLES AS  
PERCEIVED BY ALBERTA INSTITUTES OF TECHNOLOGY  
INSTRUCTORS AND ADMINISTRATORS

by



GEORGE WILLIAM CARTER

A THESIS

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

DEPARTMENT OF INDUSTRIAL AND VOCATIONAL EDUCATION

EDMONTON, ALBERTA

SPRING, 1973

## ABSTRACT

The main purpose of this study was to determine the role of an Institute of Technology instructor as perceived by the Institute instructors and administrators.

An instrument consisting of fifty stimulus items describing typical instructor activities was designed to collect respondents' perceptions of the behavioral, prescribed, and normative roles of an Institute instructor, depending on which of the three forms of the instrument was administered.

One form of the instrument requested the respondent to give his perception of what an instructor actually does (behavioral cognitions), another, what an instructor is directed to do (prescription cognitions), and the third, what an instructor is expected to do (normative expectations).

The responses of NAIT instructors were compared with their counterparts at SAIT, as were the responses of NAIT and SAIT administrators with NAIT and SAIT instructors.

Statistical analysis involved the computation of frequency distributions, response percentages, means, standard deviations, and student t values for tests on means. Probabilities of t were established for the

inputs from the various respondent groups.

The results of the study indicated that there were few significant differences in the way in which Institute of Technology administrators and instructors perceived the behavioral, prescribed, and normative roles of an Institute instructor.

The findings of this study have helped to identify areas of instructor activity where differences in perception between compared groups do exist.

## ACKNOWLEDGEMENTS

The writer wishes to express his sincere appreciation to the many persons who assisted him in the preparation of this study.

Special thanks are extended to Dr. D. Young for his advice during the early stages of the study; to Dr. H. R. Ziel for his encouragement and guidance during the ensuing period that brought it through to completion; and to Dr. J. E. Gallagher and Dr. G. L. Mowat for their willingness to act as committee members.

The cooperation and support of staff members of the Institutes of Technology, and the Department of Operational Research is, also, gratefully acknowledged.

A particular note of appreciation is extended to Mr. Dieter Felburg for his invaluable assistance with the statistical design and data interpretation.

Finally, the writer wishes to express his deepest gratitude to his wife for her great patience and constant encouragement that made completion of the study possible.

## TABLE OF CONTENTS

CHAPTER		PAGE
1.	STATEMENT OF THE PROBLEM AND ITS SIGNIFICANCE . . . . .	1
	Introduction . . . . .	1
	Statement of the Problem . . . . .	3
	Importance of the Study. . . . .	4
	Definition of Terms. . . . .	6
	Delimitations and Limitations. . . . .	8
	Organization of the Study. . . . .	9
	Summary . . . . .	9
2.	REVIEW OF THE LITERATURE . . . . .	11
	Related Studies. . . . .	11
	Role Theory. . . . .	16
	Summary . . . . .	24
3.	RESEARCH PROCEDURES. . . . .	26
	Instrumentation. . . . .	26
	Sources of questionnaire items . . . . .	26
	Format . . . . .	28
	Development of the Instrument. . . . .	29
	Revision of the Instrument . . . . .	30
	Distribution of the Questionnaires . . . . .	31
	Distribution by Divisions of Instruction . . . . .	31
	Returns. . . . .	32

CHAPTER	PAGE
Treatment of Data. . . . .	34
Processing of Questionnaires . . . . .	34
Processing of Data . . . . .	34
Description of Sample. . . . .	35
Population and Sample. . . . .	35
Distribution of Returns. . . . .	35
Summary . . . . .	39
4. ANALYSIS OF THE DATA IN TERMS OF INSTRUCTORS' RESPONSES . . . . .	41
Comparison of Industrial Division Instruc- tors' Perceptions. . . . .	42
Comparison of Business Division Instructors' Perceptions. . . . .	48
Comparison of Technology Division Instruc- tors' Perceptions. . . . .	52
Summary . . . . .	64
5. ANALYSIS OF THE DATA IN TERMS OF SAIT ADMINISTRATORS' AND SAIT INSTRUCTORS' RESPONSES. . . . .	67
Comparisons of SAIT Administrators' and SAIT Instructors' Responses. . . . .	67
Summary . . . . .	78
6. ANALYSIS OF THE DATA IN TERMS OF NAIT ADMINISTRATORS' AND NAIT INSTRUCTORS' RESPONSES. . . . .	82
Comparisons of NAIT Administrators' and NAIT Instructors' Responses. . . . .	82
Summary . . . . .	89

CHAPTER	PAGE
7. SUMMARY, CONCLUSIONS, AND IMPLICATIONS . . .	92
Summary . . . . .	92
Conclusions. . . . .	104
Implications . . . . .	105
BIBLIOGRAPHY . . . . .	110
APPENDIX . . . . .	114

# LIST OF TABLES

TABLE		PAGE
3.1	Questionnaire Returns by Institute . . . . .	33
3.2	Questionnaire Returns by Staff Position. . .	33
3.3	Returns from Business Division Instructors for each of Three Questionnaire Forms. . .	36
3.4	Returns from Industrial Division Instructors for each of Three Questionnaire Forms. . .	37
3.5	Returns from Technology Division Instructors for each of Three Questionnaire Forms. . .	37
3.6	Distribution of Questionnaires . . . . .	38
4.1	Industrial Division Instructors' Perceptions of the Roles of an Institute of Technology Instructor . . . . .	43
4.2	Industrial Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor in Accepting Rules and Regulations. . . . .	44
4.3	Industrial Division Instructors' Perceptions of "Directed" Behavior of an Institute of Technology Instructor in Decision Making . . .	45
4.4	Industrial Division Instructors' Perceptions of "Expected" Behavior of an Institute of Technology Instructor in Developing Curriculum . . . . .	46
4.5	Industrial Division Instructors' Perceptions of "Expected" Behavior of an Institute of Technology Instructor in Influencing Student Enrolments . . . . .	47
4.6	Business Division Instructors' Perceptions of the Roles of an Institute of Technology Instructor . . . . .	49



TABLE		PAGE
4.7	Business Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor in Choosing Methods	50
4.8	Technology Division Instructors' Perceptions of the Roles of an Institute of Technology Instructor . . . . .	51
4.9	Technology Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor in Choosing Methods	53
4.10	Technology Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor in Directing Learning	54
4.11	Technology Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor in Developing Curriculum . . . . .	56
4.12	Technology Division Instructors' Perceptions of "Directed" Behavior of an Institute of Technology Instructor on Acting as a Member of a Profession . . . . .	57
4.13	Technology Division Instructors' Perceptions of "Directed" Behavior of an Institute of Technology Instructor in Directing Learning . . . . .	59
4.14	Technology Division Instructors' Perceptions of "Directed" Behavior of an Institute of Technology Instructor in Developing Curriculum . . . . .	60
4.15	Technology Division Instructors' Perceptions of "Directed" Behavior of an Institute of Technology Instructor in Liaisoning With the Community . . . . .	62
4.16	Technology Division Instructors' Perceptions of "Directed" Behavior of an Institute of Technology Instructor in Accepting Regulations . . . . .	63

TABLE		PAGE
5.1	SAIT Administrators' and SAIT Instructors' Perceptions of the Roles of an Institute of Technology Instructor . . . . .	68
5.2	SAIT Administrators' and Industrial Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor on Choosing Methods . . . . .	69
5.3	SAIT Administrators' and Technology Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor on Accepting Regulations. . . . .	71
5.4	SAIT Administrators' and Industrial Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor on Performing Routine Tasks . . . . .	72
5.5	SAIT Administrators' and Technology Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor on Performing Routine Tasks . . . . .	73
5.6	SAIT Administrators' and Business Division and Technology Division Instructors' Perceptions of "Directed" Behavior of an Institute of Technology Instructor in Developing Curriculum . . . . .	75
5.7	SAIT Administrators' and Technology Division Instructors' Perceptions of the "Directed" Behavior of an Institute of Technology Instructor on Decision Making. . . . .	77
6.1	NAIT Administrators' and NAIT Instructors' Perceptions of the Roles of an Institute of Technology Instructor . . . . .	83
6.2	NAIT Administrators' and Technology Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor on Decision Making. . . . .	85

TABLE	PAGE
6.3	NAIT Administrators' and Industrial Division Instructors' Perceptions of "Expected" Behavior of an Institute of Technology Instructor on Liaisoning with Community. . . 86
6.4	NAIT Administrators' and Technology Division Instructors' Perceptions of "Expected" Behavior of an Institute of Technology Instructor on Performing Routine Tasks . . . 87
6.5	NAIT Administrators' and Technology Division Instructors' Perceptions of "Expected" Behavior of an Institute of Technology Instructor on Decision Making. . . . . 88

## CHAPTER 1

### STATEMENT OF THE PROBLEM AND ITS SIGNIFICANCE

#### INTRODUCTION

The years 1961 to 1969 were marked by unprecedented growth in technical and vocational education in the Province of Alberta.

Under the terms of the federal-provincial Technical and Vocational Training Agreement (1961), the provincial government was financially reimbursed by the federal government for expenditures made in connection with the construction and operation of vocational and technical training facilities and programs. Extensive development of vocational education occurred at both the secondary and post-secondary levels as a result. (Department of Education, 1963:91).

During the first year of the agreement the federal government approved the construction of fifteen vocational high school projects, the complete facilities for the Northern Alberta Institute of Technology, a major building expansion program at the Southern Alberta Institute of Technology, and new buildings and additions at the Schools of Agriculture.

The rapid expansion of Institutes of Technology facilities and programs created an urgent need to recruit

a great many persons as instructors who possessed special skill and knowledge in a designated field.

These were drawn from business and industry of necessity because there were too few persons already in the teaching force who had the kind of experience and qualifications required by the Institutes. Instructors were hired, therefore, on the basis of their business, technical, or professional qualifications and experience. They were not required to have teaching certificates, although some newly appointed instructors did have certificates when they came on staff, or subsequently obtained them.

Certificated teachers were in the minority, however, accounting for only 18.5% of the total instructor population of NAIT and SAIT according to a study done by Tod (1969:39).

When an instructor came on staff at NAIT he was assigned to either the Business and Vocational, Industrial, or Technology Division. At SAIT he was assigned to one of sixteen departments of instruction. In either instance, he was in a division or department that had been designed to meet the particular and unique instructional demands of specific vocations.

In view of the Institute of Technology instructors' heterogeneous backgrounds of experience and qualifications prior to being employed by the Institute, and their subsequent assignment to a specialized area of instruction,

the question was raised whether these factors might influence their perception of an instructor's role to the extent that there would be significant differences in perception between selected groups.

The central purpose of this study was to collect these perceptions measured on three dimensions of the instructor's role, and compare groups by division, or by departments grouped into divisions.

#### STATEMENT OF THE PROBLEM

The purpose of this study was to investigate the actual, directed, and expected behaviors of an Institute of Technology instructor as perceived by the instructors themselves, and by the Institute administrators.

Specific answers were sought to the following questions:

(1) Is there a significant difference ( $p=.05$ ) in perception between the way NAIT and SAIT instructors view the instructor's role in each of its three dimensions of "actual", "directed", and "expected"?

(2) Is there a significant difference ( $p=.05$ ) in perception between the way NAIT administrators and NAIT instructors view the instructor's role in each of its three dimensions of "actual", "directed", and "expected"?

(3) Is there a significant difference ( $p=.05$ )

in perception between the way SAIT administrators and SAIT instructors view the instructor's role in each of its three dimensions of "actual", "directed", and "expected"?

#### IMPORTANCE OF THE STUDY

It is of importance to instructors and administrators to identify those elements of the instructor's role on which both groups agree, or disagree. The potential for conflict that can result from differing perceptions of the instructor's function and responsibility can be minimized, or possibly removed, if these differences can be identified.

As Bush (1968:246) comments ". . . . a redefinition of the role of the teacher is upon us and may well shape the context and procedures of teacher education for decades to come." As he points out,

According to research, the teacher perceives his main role to be that of purveying knowledge to students, directing their learning -- important work, which he felt was often disrupted by many irrelevant things imposed by administrators and laymen and parents.

The teacher is taught to, and tends to believe, that he should do the whole job himself, i.e. make the tests, grade the tests, return the results, interpret them . . . . While he will accord others some say in the selection of what is to be taught, how it is to be taught is strictly his own affair, not subject to the scrutiny of anyone else. . . .

The administrator does not seem to care so much what the teacher teaches or how he teaches it as long as all teachers do it in approximately the same way. It is much easier to coordinate, another administrative function, if this is so.

A mutually accepted definition of the instructor's role is useful information for those persons who are responsible for preparing and administering in-service instructor education programs. This is particularly so when the program administrators cannot assume that all new staff members have had any previous exposure to teaching practices.

Such information might, also, be of assistance to vocational education administrators in planning and deciding what types of instructor activity should be changed, modified, encouraged, or discontinued. An analysis of the instructor's role could help to focus attention on those areas that require better understanding by both the instructors and administrators.

Boy and Pine (1963:7) further endorse the need to identify the teacher's role. Although they are referring to secondary school teachers, their comments may be applied with equal pertinence to technical and vocational instructors when they say,

The role of the teacher must be clearly defined and his public image must be redrawn so that the identity of the classroom teacher is sharply delineated . . . .

If a teacher does not define his role, if he does not develop a professional identity, then someone else will describe the function for him.



This study, by identifying the extent to which instructors engage in various activities associated with teaching, might aid in clarifying, or redefining, their role and function.

#### DEFINITION OF TERMS

##### Instructor

An instructor is any person on the Institute of Technology staff who is so classified by the Institutes, and whose primary function is to instruct students. This category includes instructors, senior instructors, section heads, and department heads.

##### Administrator

An administrator is any person on the Institute of Technology staff whose primary function is to supervise or direct instructors and support staff in the fulfilment of their respective duties. Included in this classification are the Presidents, Administrative and Academic Vice Presidents, Division Directors, and Assistant Directors.

##### Behavioral Role

A behavioral role comprises the duties, tasks, functions, operations, and responsibilities that a respondent believes an instructor actually does or performs in the fulfilment of his role.

Gross et al. (1966:14) describe the role thus;

. . . . the behavior of actors occupying social positions. A role defined in this way does not refer to normative patterns for what actors should do, not to an actor's orientation to his situation, but to what actors actually do as position occupants.

Behavioral roles are, in essence, activity cognitions to the extent that the player of a focal role states what he actually does in relation to a given activity.

#### Prescribed Role

A prescribed role comprises the duties, tasks, functions, operations, and responsibilities that a respondent believes an instructor is directed to do, or perform, in the fulfilment of his role.

#### Normative Role

A normative role comprises the duties, tasks, functions, operations, and responsibilities that a respondent believes an instructor is expected to do, or perform, in the fulfilment of his role.

Newcomb (1951:280) describes such a role as:

". . . . the ways of behaving which are expected of any individual who occupies a certain position constitute the role . . . associated with that position."

## DELIMITATIONS AND LIMITATIONS

### Delimitations

This descriptive study was delimited to:

- (1) Instructors and administrators in the Northern and Southern Alberta Institutes of Technology.
- (2) An examination of the prescribed, the behavioral, and the normative roles of an Institute of Technology instructor as perceived by the instructors and the administrators.

Non-instructional, service, and support staff were excluded from the study.

### Limitations

The results of the study were subject to the assumptions that the expectations held for the instrument by the designer were shared and understood by the respondents, and that the intervals between the five possible response choices on a Likert-type scale were equal.

Limitations on the study were imposed, also, by the following factors:

- (1) The effectiveness of the technique used to elicit staff perceptions of the instructor's roles.
- (2) The degree of participation as indicated by the small percentage of returns from some departments

as compared to the total possible returns.

(3) The small administrator population as compared to the instructor population.

#### ORGANIZATION OF THE STUDY

The first chapter details the problem, importance of the study, defines terms, and notes the delimitations and limitations that pertain.

The remainder of the thesis is organized as follows:

Chapter 2 reviews related studies on the subject. Chapter 3 describes the development of the instrument and the research procedures that were used in collecting and treating the data. An analysis of the replies to the questionnaires by NAIT and SAIT instructors is given in Chapter 4, by SAIT administrators and SAIT instructors in Chapter 5, and by NAIT administrators and NAIT instructors in Chapter 6. The concluding chapter summarizes the findings of the study and presents some recommendations for further research.

#### SUMMARY

In this chapter a brief description was given of developments in Alberta's Institutes of Technology that generated an urgent need for new instructors, many of whom had never had previous teaching experience. Based on the assumption that their varied backgrounds

might influence their perception of the role of an instructor; the study's purpose was to collect these perceptions and compare those of one select group with another. Several needs for such a study were suggested. Terms were defined and specific statements of the problem given. The chapter concluded with an organizational outline of the remainder of the study.

## CHAPTER 2

### REVIEW OF THE LITERATURE

This chapter presents a review of the literature as it pertains to studies done on the role of teachers. In the first section, the findings of some behavioral studies on teacher attitudes, morale, conflicts, and stresses are described, each of which makes some contribution to the development of a role concept for teachers.

In the second section, selected material is examined that gives further definition and explanation of the role concept so that it may be operationalized.

Even though there is a paucity of studies that deal specifically with defining the role of a vocational instructor, and none on the role of an Institute of Technology instructor, per se, there is a good deal of literature available on role concept and role theory. Some selection has been made from this material that was considered to have direct application to the study being undertaken.

### RELATED STUDIES

As noted, there have been few empirical studies done on the role of vocational education teachers, but

there have been a number of surveys and analyses made of vocational agriculture teachers' performance and relationships with significant others.

Wingen (1957) selected the parents of vocational agriculture students as his reference group to determine if they considered that the vocational teachers were doing a satisfactory job. Calhoun and Watson (1953) chose, instead, Junior and Senior High School vocational agriculture students to determine their likes and dislikes of instructors' performance. Basinger (1955) had superintendents rate their teachers' performance using a general appraisal, and a ten point competency form for the purpose. The results of Basinger's study were used to identify teaching strengths and weaknesses in various areas of agricultural education.

In a study by Bailey (1956) in which administrators evaluated their teachers, administrators rated vocational agriculture teachers on an eleven point competency scale. Analysis of his results indicated that administrators tended to give higher ratings to instructors with the most experience and education.

The importance of administrators and instructors having a mutually clear and precise understanding of the instructor's role was supported by the findings of Lamberth (1959). He discovered that one of the most frequent reasons given by teachers for leaving the teaching profession was because of a lack of understanding

of the instructor's role on the part of the administrators.

The influence that administrator's behavior has on teacher satisfaction was studied by Bidwell (1955). He discovered that the teachers' rate of satisfaction was high when administrators performed in a manner that was congruent with the teachers' expectations of the administrator's role. Apparently when the administrators acted thusly, the teachers were able to predict the administrator's behavior and select the appropriate responses. It would appear that the administrator should not only be aware of the way his role is defined for him by the teachers, but that he should be equally aware of how they perceive their own role.

Nix (1960) analyzed the various roles of vocational agriculture teachers for value orientations and structural stresses. His study was based on a model in which social organization and social disorganization were seen as being influenced by socio-cultural structure, situational factors, and personality factors. The socio-cultural aspect of the study made extensive use of the role concept and focused attention on role conflict, role frustration, role inadequacy, role superfluity, as contributing to role stress, and role fulfillment and role satisfaction as contributing to positive attitudes.

In an empirical research project conducted by Bible and Brown (1963), "significant others" in the form of advisory committee members and a group of professional



extension agents in Pennsylvania were surveyed to determine their perceptions of the role expectations and role performances for vocational agriculture teachers. It indicated that there was a higher consensus among the respondents with regard to role expectations than there was with role performances. This finding reinforced that of another study by Bible and McComas (1963) of vocational agriculture teachers in Ohio in which the participants were the teachers themselves, and the school administrators.

A comprehensive analysis of teacher roles of vocational education teachers in Oklahoma was done by Butker, Solomon et al. (1967). They not only depicted the role of vocational agriculture teachers, but included distributive education, trade and industrial, and technical education teachers as well. Material was secured by group interview sessions and questionnaires from over 1500 respondents.

The study's findings showed that trade and industrial teachers had certain characteristics that tended to differentiate them from their colleagues teaching in other areas. Distributive education teachers reported the highest job satisfaction and technical education teachers, the lowest. The group as a whole showed significant disparities between the four types of instructors included in this group. Although role conflict was substantial, it was not considered excessive. In the

Bible and McComas study (1963), it was found that there was better agreement between the teachers and the "significant others" on role expectations of vocational teachers than there was on role performance.

The study concluded that the concept of role could be operationalized. Of particular importance to others undertaking role studies was the finding that the results of such studies could be translated into useful and meaningful action.

In addition to the foregoing studies which were mostly limited to an examination of various aspects of a vocational agriculture teacher's role, there have been a number of research projects aimed primarily at defining the role of the teacher in systems other than vocational education.

Some of these have focused attention on the teacher's role in relation to administrators by determining the extent to which there is congruence between the teachers and administrators on role expectations and role performances. It has been suggested by some educational authorities, however, that increased emphasis should be placed on study of the teacher's role in relation to the organization in which he finds himself.

Boyan (1967) added a new dimension to the subject when he wrote that the emergent role of the teacher in recent years in the authority structure of the school necessitated that research be done on the distribution of

organizational authority.

Some work has been done, however, on relating teacher role expectations to the internal organization of the school prior to Boyan's recommendations. Soles (1964) reported on a study that endeavoured to determine if there was a significant relationship between teachers' role expectations for the teaching staff and the particular type of internal organization used in the school. He noted that previous role studies had emphasized teacher-pupil, or teacher-administrator relationships, whereas there had been no studies performed in an effort to assess the possible effects of the organizational structure on the role expectations of the teachers.

Both Soles' and Boyan's comments underline the importance of defining teacher roles as a basis for improved understanding and interaction between teachers and school administrators.

#### ROLE THEORY

The concept of role has been used extensively by anthropologists, sociologists, and psychologists in attempts to analyze and conceptualize human behavior. As a result of their interest and that of other disciplines, a considerable body of literature has been developed on the subject.

Westwood (1967) described role theory as a key "linking" concept in the study of man's behavior

by the various social sciences and it has been used by many of those sociologists who have attempted to produce major integrative theories of society.

Educational researchers have used role theory and the role concept as a conceptual tool to facilitate the study of teachers and teaching behavior. Its value has been enhanced by the introduction of statistical analysis of the collected data.

### Role Definitions

Roles have been defined in various ways by different authors.

Sarbin (1954) described a role as a "patterned sequence of learned actions or deeds performed by a person in an interaction situation."

Ivey and Robin (1966) stated that roles were sets of norms or expectations of behavior that are assigned by significant others to a specific position.

According to Sargent (1951),

. . . . . a person's role is a pattern or type of social behavior which seems situationally appropriate to him in terms of the demands and expectations of those in his group.

The presence of significant others in defining role, as noted by Ivey and Robin (1966), is indirectly referred to in a role definition by Biddle (1964). He pointed out that role is a set of cognitions maintained for an actor in a context by a subject person. Involved in a role were both norms and expectations and both own and

attributed cognitions.

This latter concept of role was used as the basis for structuring this study on the roles of an Institute of Technology instructor into the three role dimensions of prescribed, behavioral, and normative.

### Prescribed Role

According to Newcomb (1951), a prescribed role can be operationally defined if a list of behaviors which are demanded of an incumbent in a specific role is prepared and then presented to a number of respondents who are knowledgeable about the job in question. At least fifty percent of the respondents would have to agree that the behavior described was demanded behavior for the position in order for it to be accepted as an operational definition.

He differentiated between the prescribed role and the operational role by stating that,

. . . . when a role is prescribed, however, it carries with it definite prescriptions toward other persons in related positions. Thus, the position of mother carries with it the implication of certain ways of behaving toward children, just as the position of store clerk carries with it certain ways of behaving toward customers, toward employers, and toward other clerks.

Thus, in a study of instructor behavior, activities can be described that imply certain ways of response and reaction by instructors toward students, administrators, and members of the outside community, to which the respondents are requested to give their perceptions of

demanded or directed behavior by the authorities. What the respondents perceive as directed or ordered behavior by the authorities may be at variance with what they perceive as being the normative expectations held for the role. The two perceptions of prescribed roles and normative roles do not, necessarily, have to agree and when they do not, the seeds of potential role conflict are sown. In the first instance the respondent may be influenced by what he perceives to be the formal or informal standards set for the group by the authorities. He is giving his assessment of the degree to which he believes administrative direction and order is imposed on the instructor's role and to which he may, or may not, subscribe. In the second instance, the normative expectations are those that the respondent thinks the players of a focal role should, or ought to do, in relation to a given activity without formal directives or instruction from administration.

The class statement used to analyze the Institute of Technology instructor's role in the present study was:

1. Prescribed Cognitions

- a. What the player of a focal role states he is directed to do in relation to a given activity.
- b. What players of selected counter roles (administrators) perceive that players of focal roles are directed to do in relation to a given activity.

### Behavioral Role

The behavioral role is how the individual actually performs his role (Newcomb, 1951). It may be influenced by how the incumbent perceives the standards of the players themselves, or of groups of players inside his role-set. The role set in the present study consists of students, colleagues, administrators, and members of the community at large.

Some authors refer to it as role enactment, but in so doing enlarge its meaning beyond that enunciated by Newcomb, to include gross skeletal movement, verbal and motoric gestures, posture and gait, and other such role mechanics (Sarbin, 1954). For the purposes of this study the mechanics of role behavior were excluded.

When an actor is playing a behavioral role he may be influenced by the way he perceives the standards set for the role by himself, or by groups inside his role-set. There may be a distinct difference, however, between his expectations for the role and its enactment. As McGrath (1964) noted, "It is important to distinguish between behaviors expected of a person in a particular role and the behavior that a person actually exhibits while acting in that role." He explained that the behavior of a role incumbent may or may not meet the expectations that the incumbent and others in counter roles hold for that role. The actual performance, behavior, or activity, may not come up to the standards or expectations set for the role.

Butker et al. (1967:21) pointed out that a behavioral role identified by a series of activity cognitions, unlike a norm, does not necessarily imply any consensus among persons participating in the definition of a particular role, although there will be some agreement due to the experience gained from repeated interactions in similar situations. The players themselves have learned to anticipate what another actor will do, thereby facilitating their actual behavioral responses.

Players in counter roles determine from observation and from vis-a-vis contact with role players what behavioral actions may be anticipated. The better the actors and their counter roles understand an instructor's behavioral role the less chance there is for friction or confrontation to develop between them.

In defining an Institute of Technology instructor's behavioral role, respondents were asked to estimate the incidence of a number of activities performed by instructors.

The second class of statements used to analyze the Institute instructor's role was:

## 2. Activity cognitions

- a. What the player of a focal role states he actually does in relation to a given activity.
- b. What players of selected counter roles (administrators) perceive that the players of a focal role actually do in relation to a given activity.



### Normative Expectations

Normative expectations consist of a set of generalized behaviors distributed on a continuum ranging from the acceptable and approved to the unacceptable and disapproved modes of behavior in a given situation. They have their genesis in role expectations which have been defined by various authors as follows:

Role expectations are patterns of evaluation. . . .  
 Role expectations organized (in accordance with general value orientations) the reciprocities, expectations, and responses of those expectations in the specific interaction system of ego and one or more alters. . . . What an actor is expected to do in a given situation both by himself and others constitute the expectations of that role.  
 (Parsons and Shils, 1951:191-192)

### Expectation

This is a cognition consisting of a belief (or subjective probability distribution) held by a person which maps behavior traces for a cognitively held framework, actor, and context. (Biddle, 1964:156)

Sarbin (1954:226) believed that a person could not enact a role for which he lacked the necessary role expectations, which Sarbin felt were acquired through experience. He, also, divided role expectations into rights and obligations.

Rights are role expectations in which the actor of the role anticipates certain performances from the actor of a reciprocal role. . . . Obligations (or duties) are role expectations in which the actor of a role anticipates certain performances directed toward the actor of the reciprocal role.

The normative or role expectation concept has

been used as an independent variable in the analysis of role conflict which can occur when a person occupies two or more positions simultaneously wherein the role expectations for each position are incompatible. Also, if a role incumbent and a reference group perceive a role differently there is a possibility that the incumbent will experience some elements of role conflict. Role conflict may even occur if the incumbent believes that the reference group's expectations are different from his, although they may be the same. Getzels (1957:429) explained this by stating,

. . . . but conflict and misunderstanding can also arise from another source. The differences may not be existential but perceptual. The role incumbent may believe that he and his reference groups have significantly different views when they are actually the same, or conversely that they are the same when in fact they are different. In either case, conflict is a result not of any real differences in expectations but of perceived differences in expectations.

If a role study seeks to identify potential areas of role conflict it would analyze an incumbent's and reference group's perceptions of what constituted the normative expectations for a given position. In this study an attempt was made to define the normative expectations held for the instructor's role by the instructors and by their reference group or counter-roles, the administrators, with a view to discovering significant differences in perception.

The third general class of statement used

to analyze the Institute instructor's role was:

### 3. Normative Expectations

- a. What the player of a focal role states he is expected to do in relation to a given activity.
- b. What players of selected counter-roles (administrators) perceive that the players of a focal role are expected to do in relation to a given activity.

## SUMMARY -- CHAPTER 2

In Chapter 2 a number of studies related to teacher roles were reviewed, particularly as they related to the various roles of vocational agriculture teachers.

Studies by Wingen and Bailey attempted to define role expectations and role performance for teachers by using parents, students, or administrators as the teachers' reference or counter-role groups. Two such studies reported that the perceptions of teachers and those of their counter-roles on teacher role expectations and role performance showed more consensus on role expectations than on role performance when the perceptions of the two groups were compared.

The second section of the chapter reviewed the literature for definitions of the prescribed role, the behavioral role, and normative expectations. It was noted that studies of role expectations for teachers had been useful in identifying potential areas of role conflict.

The three general classes of statement around which this study's objectives were designed were listed as (1) Prescribed cognitions (what a player is directed to do) (2) Activity cognitions (what a player actually does) and (3) Normative expectations (what a player is expected to do).

## CHAPTER 3

### RESEARCH PROCEDURES

#### INSTRUMENTATION

The instrument used in collecting data for this study consisted of fifty statements, or cue items, describing typical instructor activities. A respondent was requested to give his perception of the extent to which the described activities were what an instructor actually does (behavioral cognitions), what an instructor is directed to do (prescription cognitions), or what an instructor is expected to do (normative expectations). Whereas the instrument used identical cue items for collecting three different sets of perceptions, only one form of the instrument was administered to a respondent. A respondent might have replied to Form A (his perceptions of what an instructor actually does), Form B (his perceptions of what an instructor is directed to do), or Form C (his perceptions of what an instructor is expected to do).

#### Sources of questionnaire items

Cue items were selected, or formulated, by reference to literature describing teachers' roles, functions, activities, and responsibilities.

A study by Butker et al. (1967) was particularly useful in providing a number of cue items and a rationale for grouping the statements describing teacher activities under activity categories.

Fishburn (1966) referred to a monograph entitled "Six Areas of Teacher Competence". It described the professional roles of the teacher as (1) a director of learning (2) a counseling and guidance person (3) a mediator of the culture (4) a member of the school community (5) a link between the school and the community, and (6) a member of the profession.

This list compared in some respects with one by Sorenson et al. (1963) in which the teacher is described as (1) Advisor (2) Counselor (3) Disciplinarian (4) Information giver (5) Motivator (6) Referrer. Weaver and Cenci (1960) ascribed to the teacher the roles of a professional person, an analyst, a director of thinking, and an evaluator, among others.

From reference to the foregoing descriptions in the literature of typical instructor activities, and by the writer's decision to include specific instructor activity categories that were considered to be pertinent to the study of Institutes of Technology instructors' roles, the following activity category list was formulated:

1. Choosing methods and procedures of instruction
2. Acting as a member of a profession

3. Directing the learning process
4. Developing curriculum objectives and content
5. Providing liaison between the Institute and the business and industrial community
6. Accepting Institute rules and regulations
7. Influencing student enrolments
8. Performing routine non-instructional tasks
9. Relating to others outside the Institute
10. Participating in the decision making process.

Activity category Items 1, 4, and 7 were based on the Butker study. Items 2, 3, and 5 were adapted from the descriptions of either Fishburn, or Weaver and Cenci, of the teacher's roles, and Items 6, 8, 9, and 10 were included by the writer to collect data on specific Institute of Technology instructor activities of importance to the study.

#### Format

The instrument was designed so that it could be administered and answered with minimum inconvenience to the respondents. A standardized IBM 5056 General Purpose Answer Sheet was used so that the responses could be machine scored and the data readily transferred to unit record cards for computer processing.

Responses to each item were on a five point Likert-type scale ranging from "always" to "never". It was assumed that the intervals between each of the five

responses were equal.

### Development of the Instrument

In the development of the instrument seventy activity cue items were prepared in total for ten instructor activity categories. After analysis and item revision these seventy items were subsequently reduced to fifty. To prevent a block of questions appearing together on the instrument that described a single activity category, a random selection was made of the fifty items to determine the order in which they would appear on the questionnaire.

The final distribution of items according to activity categories was:

1. Choosing methods and procedures of instruction.  
Items: 6, 18, 21, 29, 32, 39, 46.
2. Acting as a member of a profession.  
Items: 7, 8, 33, 35, 36, 47, 50.
3. Directing the learning process  
Items: 11, 12, 19, 25, 26, 37.
4. Developing curriculum objectives and content.  
Items: 1, 9, 24, 31, 34, 45.
5. Providing liaison between the Institute and the business and industrial community.  
Items: 5, 22, 40, 41, 43.
6. Accepting Institute rules and regulations.  
Items: 3, 15, 27, 28, 48.



7. Influencing student enrolments.  
Items: 2, 13, 23, 49.
8. Performing routine non-instructional tasks.  
Items: 4, 10, 30, 44.
9. Participating in extra-mural activities.  
Items: 14, 20, 42.
10. Participating in the decision making process.  
Items: 16, 17, 38.

#### Revision of the Instrument

The first draft of seventy items was submitted to several administrators in the Institutes of Technology for their comments and criticisms. The individual items were discussed, also, with Dr. D. Young, Department of Industrial and Vocational Education, and analyzed on the basis of content and structure. Wang's (1932) "Suggested Criteria for Writing Attitude Statements" was applied with the result that the number of cue items was reduced to fifty from the original seventy. The phraseology was changed on some items to remove ambiguities, or to make the item applicable to all three of the instrument's forms.

After this first major revision of the descriptive statements the questionnaire was applied to a selected group of nine Institute instructors and administrators with three respondents for each of the three forms of the instrument. On their recommendations to improve certain cue items, the instrument was revised a second time to

put it in its final form.

#### Distribution of Questionnaires

The total number of eligible instructors and administrators was determined by reference to the Institute administration and faculty staff lists as contained in the 1970-71 calendars.

The questionnaires were distributed by department heads to the instructors in their departments in approximately equal numbers of each of the three forms. The distribution of questionnaire forms is shown in Table 3.6. Completed forms were returned to a designated person at each Institute and collected by the writer.

To preserve anonymity the respondents were not required to identify themselves. The questionnaires and the response sheets were coded, however, to indicate the respondent's Institute, Division of Instruction, Form of the questionnaire, and the questionnaire serial number.

Copies of the correspondence associated with the instrument, and its three forms appear in the Appendix.

#### Distribution by Division of Instruction

Whereas SAIT's organization of instruction was by departments, NAIT make a further grouping by placing departments into either the Industrial, Business and Vocational, or Technology Division. For convenience in analyzing the results of this questionnaire and making comparisons<sup>1</sup> by division of instruction, SAIT's depart-

ments that had counterparts at NAIT were grouped according to NAIT's divisional structure.

Three departments of SAIT for which there were no counterparts at NAIT were assigned, for purposes of grouping by division, to the Business and Vocational Division, or to the Technology Division.

### Returns

Three questionnaires were rejected. Two had insufficient responses, and one was returned blank. Out of a total of 887 eligible staff there were 561 returns, giving an overall response of 63.4% (Table 3.1).

Table 3.2 shows the number of eligible staff in each institution and the percentage of responses. Table 3.3 indicates the returns by staff positions of administrators and instructors. The return by administrators was 100% for both institutions, whereas the percentage returns for instructors varied from 45.8% to 77.1%.

Analysis of instructors' responses by Division and by questionnaire form is given in Tables 3.4, 3.5, and 3.6.

The bracketed figures in the "Totals" line in Tables 3.3, 3.4, and 3.5 are the percentage of responses from eligible staff. These ranged from a low of 30.4% return to a high of 87.5%, both percentages being taken from the SAIT data.

TABLE 3.1  
Questionnaire Returns by Institute

	SAIT	NAIT	Total
Number of eligible staff	415	472	887
Number of returns	196 (47.3%)	365 (77.4%)	561 (63.4%)
Percentage of total returns	34.9%	65.1%	

TABLE 3.2  
Questionnaire Returns by Staff Position

		Administrators	Instructors	Total
Number of eligible staff	SAIT	11	404	415
	NAIT	<u>8</u> 19	<u>463</u> 867	<u>473</u> 887
Number of returns	SAIT	11 (100%)	185 (45.8%)	196
	NAIT	<u>8</u> (100%) 19 (100%)	<u>357</u> (77.1%) 542 (62.6%)	<u>365</u> 561
Percentage of total returns		3.4%	96.6%	

## TREATMENT OF DATA

### Processing of the Questionnaires

Completed questionnaire sheets were examined to ensure that the respondents had followed instructions to use a HB pencil for marking their responses on the standardized general purpose answer sheet (IBM 5056) provided for the purpose. Provision was made in the computer tabulation to record errors and omissions on the answer sheets.

### Processing of Data

Data received from each answer sheet were transferred to data cards and computer processed to give frequencies, percentages, means, and standard deviations for each of the fifty items.

Data cards were sorted by (1) Institution (SAIT, NAIT) (2) Division of Instruction (Industrial, Business, Technology) (3) Questionnaire form (Form 1 - Behavioral, Form 2 - Prescribed, Form 3 - Normative), and (4) Ten activity categories.

The final sorts were then computer processed to give the means and standard deviations of the ten activity category sub-sets. Comparisons for significance of difference of means were made between two selected groups of respondents on the basis of the ten sub-sets, rather than on the complete set of fifty items.

The five possible responses on the Likert-type scale were weighted from five to one in descending order left to right.

The student t test of significance was applied to the means and the t value accepted as significant at the  $p=.05$  level of significance.

#### DESCRIPTION OF SAMPLE

##### Population and Sample

All instructors and all administrators in Alberta's two Institutes of Technology were asked to participate in the study. On the basis of personnel and staff lists in the Institute calendars a data source of 887 was indicated, inclusive of 19 administrators.

##### Distribution of Returns

There were 415 eligible staff at SAIT and 472 at NAIT of which 34.9% of the total were respondents from SAIT, and 65.1% from NAIT (Table 3.1). These percentages of response were somewhat comparable with those of a study done by Wroot (1970) in which returns from the same institutions were 39.6% and 60.4% respectively.

One hundred percent of the administrators at both institutions completed and returned questionnaire answer sheets, as did 45.8% of the SAIT instructors and 77.1% of the NAIT instructors (Table 3.2). Nineteen administrators represented 3.4% of the total sample.

Questionnaire returns on the basis of division of instruction, Business, Industrial, and Technology are given in Tables 3.3, 3.4, and 3.5 for each of the three forms of the questionnaire. The smallest percentage return by division of instruction was for the SAIT Business Division, and highest for the SAIT Industrial Division.

TABLE 3.3

Returns from Business Division Instructors for each of Three Questionnaire Forms

	SAIT	NAIT
Form 1: Behavioral	9	28
Form 2: Prescribed	7	26
Form 3: Expectations	11	22
Totals	27 (30.4%)	76 (80.0%)

The difference between percentages of returns for the two Institutes was smallest for the Industrial Divisions. SAIT's returns were 87.5% and NAIT's 83.4% (Table 3.4).

The difference in percentage returns from eligible respondents in the Technology Divisions was 36.2% as compared to 49.6% difference for the Business Divisions, and 4.1% for the Industrial Divisions. Technology

Division returns are shown in Table 3.5

TABLE 3.4

Returns from Industrial Division Instructors for each of Three Questionnaire Forms

	SAIT	NAIT
Form 1: Behavioral	27	53
Form 2: Prescribed	28	45
Form 3: Expectations	29	43
Totals	84 (87.5%)	141 (83.4%)

TABLE 3.5

Returns from Technology Division Instructors for each of Three Questionnaire Forms

	SAIT	NAIT
Form 1: Behavioral	22	55
Form 2: Prescribed	20	49
Form 3: Expectations	32	36
Totals	74 (33.8%)	140 (70.0%)

The distribution of questionnaires by division of instruction is shown in Table 3.6. The number of questionnaires returned are in brackets. The three forms of the



TABLE 3.6  
Distribution of Questionnaires \*

Institution	Division	Form 1 (Behavioral)	Form 2 (Prescribed)	Form 3 (Expectations)	Total
SAIT	Business	29 (9)	30 (7)	30 (11)	89 (27)
	Industrial	32 (27)	32 (28)	32 (29)	96 (84)
	Technology	73 (22)	73 (20)	73 (32)	$\frac{219}{404} \frac{(74)}{(185)}$
NAIT	Business	32 (28)	36 (26)	32 (22)	169 (141)
	Industrial	56 (53)	56 (45)	57 (43)	95 (76)
	Technology	66 (55)	67 (49)	67 (36)	$\frac{200}{464} \frac{(140)}{(357)}$

\* To instructors only  
Number of questionnaires returned in brackets

questionnaire were distributed in approximately equal numbers to the divisions. The least number of returns for any one form of the questionnaire was 7 from SAIT's Business Division, Form 2: Prescribed. The table records the number of questionnaires distributed to instructors only and does not record the nineteen questionnaires given to administrators.

### SUMMARY -- CHAPTER 3

This chapter has described the development of the instrument, sources of questionnaire items, revision of the instrument, and the grouping of the items into ten activity categories.

Items used in the questionnaire were formulated by reference to studies or research reported in the literature on teacher activities, and by reference to particular Institute of Technology instructor activities on which data was desired. e.g. Instructor's participation in the decision making process.

An instrument initially consisting of seventy items was administered to nine persons for item criticism and comment. On the basis of their replies and additional scrutiny using Wang's "Suggested Criteria for Writing Attitude Statements" (1932) fifty cue items were selected for final inclusion in the instrument.

An identical list of cue items was used to obtain a respondent's perception of an Institute of

Technology instructor's actual, directed, or expected behavior. Three forms of the instrument were designed for this purpose, Form 1: Behavioral, Form 2: Prescribed, Form 3: Expectations.

In the instructions for Form 1 the respondent was requested to indicate on a five point scale ranging from "always" to "never", the extent to which he thought an Institute instructor "actually" did engage in the various activities described in the cue items. In Form 2 the respondent was requested to indicate the degree to which he felt an Institute of Technology instructor was "directed" to do the activities listed, and in Form 3 what he thought the instructor was "expected" to do.

This chapter, also, included a description of the treatment of the data, and an analysis of the distribution of the questionnaires and the number of returns.

The overall return from eligible staff was 34.9% for SAIT and 65.1% for NAIT which compares with the percentage of returns for another study involving the two institutions. It is possible that the low percentage of return from two divisions of the southern Alberta institute might affect the validity of comparisons made with their counterparts at the northern institution. Returns from the Industrial Divisions, however, were within 4% of each other.

## CHAPTER 4

### ANALYSIS OF THE DATA IN TERMS OF INSTRUCTORS' RESPONSES

In this chapter a comparison is made of the responses of SAIT and NAIT instructors to the three forms of the research instrument, in Chapter 5 SAIT administrators with SAIT instructors, and in Chapter 6 NAIT administrators with NAIT instructors.

A respondent answered only one form of the questionnaire which was distributed in approximately equal numbers to the Division instructors and to the administrators.

Form 1 was designed to obtain the respondent's perceptions of what an Institute of Technology instructor actually does (behavioral role), Form 2 -- what an instructor is directed to do (prescribed role), and Form 3 -- what an instructor is expected to do (normative expectations).

The same fifty stimulus items were used for the three forms, but the instructions for completing the forms were different in each case. The items were designed to describe typical teacher activities grouped according to ten major teacher activity categories. An activity group might consist of four or more cue items that

described activities related to a particular instruction function such as "Performing non-routine tasks" (Activity Group 8).

The responses of the various paired instructor or administrator groups were compared by computing student t values for the means, and the probabilities of t, for the ten activity sub-sets. Group responses were considered to be significantly different at the  $p=.05$  level.

Sub-sets in which significant differences were indicated were analyzed by individual cue item to determine the direction of difference between the two groups being tested.

#### Comparison of Industrial Division Instructors' Perceptions

Table 4.1 presents findings relative to the perceptions of the Industrial Division instructors from both institutions compared on three facets of the role of an Institute of Technology instructor. An asterisk beside the value for probability of t indicates a significant difference between the two groups' responses for that particular activity sub-set at the  $p=.05$  level of significance.

A significant difference in perception between the way in which SAIT and NAIT Industrial Division instructors view the way an Institute instructor "actually" responds to the acceptance of regulations and

TABLE 4.1

Industrial Division Instructors' Perceptions of the Roles  
of an Institute of Technology Instructor

(All values are probabilities of t)

Activity Groups	Behavioral	Prescribed	Normative
1. Choosing methods	0.673	0.537	0.526
2. Acting as member of profession	0.646	0.127	0.675
3. Directing learning	0.352	0.166	0.310
4. Developing curriculum	0.467	0.609	0.030*
5. Liaisoning with community	0.956	0.140	0.172
6. Accepting regulations	0.031*	0.050*	0.129
7. Influencing enrolments	0.574	0.405	0.010*
8. Performing non-routine tasks	0.899	0.845	0.968
9. Participating in extra-mural activities	0.157	0.968	0.051
10. Participating in decision making	0.284	0.001*	0.058

\* Asterisk indicates a significant difference in groups' response at  $p=.05$  level

practices is indicated for Activity Group 6.

This sub-set is composed of five cue items for which means and standard deviations are given in Table 4.2.

TABLE 4.2

Industrial Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor in Accepting Rules and Regulations

Activity Group 6 Item Number	SAIT		NAIT	
	Mean	s.d.	Mean	s.d.
3. Obtain permission	3.852	1.610	3.547	1.514
15. Follow procedures	2.111	1.672	1.755	1.697
27. Negotiate loads	1.296	0.724	1.170	0.871
28. Report problems	1.222	0.698	1.113	0.800
48. Discourage use	3.296	1.436	2.453	1.449

In Table 4.2 the mean and standard deviation of SAIT and NAIT instructors' responses to what they perceive an instructor actually does indicates some agreement on Items 3, 27, and 28, and some slight differences on Items 15 and 48.

On Item 3 the mean responses are nearest the "very often" rating on the Likert-type scale used in the study. On Items 27 and 28, they are nearest to "never". The greatest difference in response occurs for Item 48, in which the responses vary between more than "often" for SAIT responses and more than "occasionally" for NAIT

responses.

The perceptions of respondents differ significantly in the way they perceive what an instructor is directed to do on activities related to decision making (Activity Group 10).

An item analysis of responses is shown in Table 4.3.

TABLE 4.3

Industrial Division Instructors' Perceptions of "Directed" Behavior of an Institute of Technology Instructor in Decision Making

Activity Group 10 Item Number	SAIT		NAIT	
	Mean	s.d.	Mean	s.d.
16. Instructional decisions	3.607	1.031	3.622	1.248
17. Influence decisions	2.536	1.201	1.556	1.078
38. Planning decisions	3.464	1.170	2.289	1.272

Based on the mean values for items shown in Table 4.3 it would appear that the respondents' perceptions of directed behavior is similar on matters pertaining to instructional decisions. There is less agreement, however, on the extent to which an instructor is directed to influence presidential decisions, planning and equipment selection decisions. SAIT respondents indicate greater participation in these latter activities than do their NAIT counterparts.



Under normative expectations for an instructor there are significant differences shown for developing curriculum and influencing enrolments (Activity Groups 4 and 7). The item analysis for these two groups is given in Tables 4.4 and 4.5.

TABLE 4.4

Industrial Division Instructors' Perceptions of "Expected" Behavior of an Institute of Technology Instructor in Developing Curriculum

Activity Group 4 Item Number	SAIT		NAIT	
	Mean	s.d.	Mean	s.d.
1. Obtaining opinions	2.586	0.983	2.186	1.118
9. Obtaining approval	3.828	1.560	3.256	1.787
24. Developing outlines	3.966	1.149	3.442	1.563
31. Adapting content	3.207	1.264	2.488	1.624
34. Using guidelines	4.345	0.857	4.349	1.270
45. Keeping current	4.724	0.528	4.349	1.325

The respondents agree very closely on the expected behavior of an instructor in using curriculum guidelines provided by the Institute, and in keeping the subject matter of courses current. The greatest difference in perception occurs on the expected behavior of an instructor in adapting subject matter content to provincial needs over national needs. The SAIT respondents perceive that provincial needs are expected to take precedence over national needs "often", whereas NAIT

respondents perceive that this is expected only "occasionally". Both groups' responses suggest that an instructor is "very often" expected to obtain approval from the Division Director before making course changes.

TABLE 4.5

Industrial Division Instructors' Perceptions of "Expected" Behavior of an Institute of Technology Instructor in Influencing Student Enrolments

Activity Group 7 Item Number	SAIT		NAIT	
	Mean	s.d.	Mean	s.d.
2. Participating in career days	2.724	1.131	1.628	1.001
13. Setting prerequisites	2.517	1.243	2.233	1.324
23. Controlling admission	2.069	0.753	1.651	0.997
49. Accepting student quotas	3.483	1.299	3.442	1.501

The two respondent groups are in general agreement on two "expected" activities of an instructor, setting prerequisite subjects for his courses and accepting staff-student ratios set by administration. On the first activity, the response mean is between "often" and "occasionally", and in the second activity between "very often" and "often".

The two groups have similar perceptions on whether it is expected behavior of an instructor to participate in high school career days to promote enrolment in the instructor's program. SAIT respondents

indicate that an instructor is "often" expected to participate, whereas their counterparts state less than "occasionally".

#### Comparison of Business Division Instructors' Perceptions

In Table 4.6 the perceptions of Business Division instructors are compared.

The only significant difference noted is their perceptions of the "actual" behavior of an instructor in choosing methods of instruction. In Table 4.7 this difference is analyzed by individual items in that activity group.

The closest agreement of responses occurred for Item 46. It had to do with the instructor being available to students at all times during regular hours if the instructor was not in class. The mean response was "very often".

The greatest difference in perceptions of actual behavior occurred on Item 39 in which the activity described was the preparation of written or practical examinations. The NAIT respondents replied that this was actual behavior almost "always". The SAIT respondents perceived this as occurring less often. Their mean response was between "often" and "very often".

Almost the same degree of difference occurred in their perception of whether technical skills were emphasized more than technical knowledge. SAIT's respondents

TABLE 4.6

Business Division Instructors' Perceptions of the Roles  
of an Institute of Technology Instructor

(All values are probabilities of t)

Activity Groups	Behavioral	Prescribed	Normative
1. Choosing methods	0.023*	0.453	0.178
2. Acting as member of profession	0.327	0.286	0.135
3. Directing learning	0.163	0.099	0.621
4. Developing curriculum	0.817	0.801	0.282
5. Liaisoning with community	0.849	0.475	0.682
6. Accepting regulations	0.613	0.051	0.519
7. Influencing enrolments	0.085	1.000	0.475
8. Performing non-routine tasks	0.700	0.706	0.959
9. Participating in extra-mural activities	0.307	0.362	0.737
10. Participating in decision making	0.751	0.094	0.748

\* Asterisk indicates a significant difference in groups' response at  $p=.05$  level

indicated this actual behavior "occasionally", whereas NAIT respondents indicated "often".

TABLE 4.7

Business Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor in Choosing Methods

Activity Group 1 Item Number	SAIT		NAIT	
	Mean	s.d.	Mean	s.d.
6. Taking field trips	2.778	0.972	2.429	0.959
18. Using variety methods	3.333	0.866	3.929	0.858
21. Emphasizing advances	3.333	1.500	4.107	0.685
29. Emphasizing skills	2.222	1.394	3.036	1.427
32. Preparing plan	3.111	1.167	3.679	1.156
39. Preparing exams	3.667	1.225	4.607	0.567
46. Remaining available	3.889	0.928	3.929	1.120

There was, also, a difference for Item 21, although the degree of difference was less than for either Item 29 or 39. For Item 21, respondents were asked if instructors actually emphasized the new advances in their subject matter. The SAIT respondents stated "often", and NAIT respondents "very often".

The other activity items showed only minor degrees of difference of less than one division on the five point scale.

TABLE 4.8

Technology Division Instructors' Perceptions of the Roles  
of an Institute of Technology Instructor

(All values are probabilities of t)

Activity Groups	Behavioral	Prescribed	Normative
1. Choosing methods	0.029*	0.070	0.263
2. Acting as member of profession	0.569	0.035*	0.399
3. Directing learning	0.002*	0.002*	0.119
4. Developing curriculum	0.035*	0.204*	0.970
5. Liaisoning with community	0.060	0.011*	0.404
6. Accepting regulations	0.089	0.015*	0.382
7. Influencing enrolments	0.087	0.057	0.379
8. Performing non-routine tasks	0.911	0.535	0.727
9. Participating in extra-mural activities	0.056	0.856	0.125
10. Participating in decision making	0.139	0.073	0.300
	(0.008)**	(0.011)**	(0.465)**

\* Asterisk indicates a significant difference in groups' response at  $p=.05$  level

\*\* Probability of t for means of group responses

Comparison of Technology Division Instructors' Perceptions

Technology Division instructors' perceptions are shown in Table 4.8.

There was a significant difference in respondents' perception of the instructor's "actual" and "directed" behavior when the two groups' mean of their responses for the total number of cue items was compared by using the t test. The probability of t value for the behavioral role was .008 and .011 for the prescribed role.

The instructors in the Technology Divisions of SAIT and NAIT showed a greater degree of difference in their perceptions of the instructor's roles than did their colleagues in either the Business or Industrial Divisions. Moreover, there was a significant difference in perception between the two groups of respondents on the behavioral and prescribed roles on Activity Groups 3 and 4.

There were more significant differences shown for the prescribed role than there were for the other two roles. There were no significant differences shown for the normative role or "expected" behavior of an instructor.

In Table 4.9 the differences for the Technology instructors' responses for Activity Group 1 are analyzed.

The least difference in means was for activity Item 39, "Preparing written or practical examinations". The responses would seem to indicate that technology

instructors are perceived as actually preparing their own examinations almost "always", instead of having them prepared by others.

TABLE 4.9

Technology Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor in Choosing Methods

Activity Group 1 Item Number	SAIT		NAIT	
	Mean	s.d.	Mean	s.d.
6. Taking field trips	2.818	1.563	2.400	1.029
18. Using variety methods	3.455	1.057	3.945	1.044
21. Emphasizing advances	3.409	0.908	3.873	1.001
29. Emphasizing skills	2.318	1.171	2.909	1.041
32. Preparing plan	2.864	0.941	3.436	1.067
39. Preparing exams	4.636	0.581	4.691	0.466
46. Remaining available	3.955	0.844	4.164	0.811

The remaining items show a range of difference between the means from 0.4 to 0.6, or approximately half a scale point. This would place mean responses translated into degrees on the Likert-type scale between "occasionally" and "often" for field trips, "very often" and slightly less for using a "variety of teaching methods", and emphasizing "skills over knowledge", and between "often" and "very often" for "preparing and following a teaching plan for each lesson presented."



TABLE 4.10

Technology Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor in Directing Learning

Activity Group 3 Item Number	SAIT		NAIT	
	Mean	s.d.	Mean	s.d.
11. Preparing lessons	2.727	1.907	3.200	1.592
12. Giving subject equal emphasis	1.409	1.297	2.400	1.382
19. Providing formal reports	2.682	1.249	2.418	1.100
25. Using audio visual devices	3.545	0.739	3.673	0.883
26. Including preparation time in work load	3.182	1.532	3.691	1.413
37. Providing additional instruction	3.000	1.069	3.764	0.881

The greatest difference in perception of the two respondent groups occurred for Item 12 (Table 4.10) where they were asked to estimate the degree to which an instructor actually gives equal emphasis to non-trade or non-technical subjects. The NAIT response mean fell half way between "occasionally" and "often". The SAIT mean fell between "never" and "occasionally". Based on these results it would appear that the respondents in both Institutes perceive instructors as actually attaching more importance to technical and trade subjects

than they do, perhaps to academic subjects depending on how they may have interpreted the terms non-trade or non-technical.

Both groups of respondents agreed that instructors actually provided additional instruction outside of regular class hours to students who requested help (Item 37). NAIT respondents perceived this as actually occurring slightly more often than their SAIT counterparts when their response mean showed "very often" compared to "often" for SAIT.

About the same degree of difference in perception occurred for Item 26 which sought to determine the extent to which lesson preparation time was considered as part of work load hours. NAIT responses were "very often" and SAIT's often.

There was close agreement on the use of audio visual devices (Item 25) with both group's response mean between "often" and "very often".

Apparently instructors are not expected to provide formal reports on workshops or seminars that they attend (Item 19) since both groups perceive an instructor as actually reporting less than "often".

Both SAIT and NAIT respondents perceive an instructor as actually spending more time in preparing lessons than do teachers in the secondary school system at least "often".

TABLE 4.11

Technology Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor in Developing Curriculum

Activity Group 4 Item Number	SAIT		NAIT	
	Mean	s.d.	Mean	s.d.
1. Obtaining opinions	2.500	0.913	2.509	0.940
9. Obtaining approval	3.318	1.427	2.909	1.378
24. Developing outlines	3.773	1.020	3.964	1.105
31. Adapting content	1.909	1.411	2.673	1.491
34. Using guidelines	3.277	1.510	3.655	1.220
45. Keeping current	3.545	1.371	4.345	0.645

The items in Table 4.11 arranged according to the difference of the means from greatest to smallest are Items 45, 31, 34, 9, 24, and 1.

The NAIT respondents perceived that instructors actually kept their courses current between "very often" and "always", as compared to the SAIT group's responses which were midway between "often" and "very often" (Item 45).

The mean responses for Item 31, "adapting subject matter content to meet provincial needs over national needs" would suggest that neither group attach a great

deal of priority to provincial needs. The NAIT group perceive an instructor actually doing this more than "occasionally", and the SAIT group "occasionally".

There is less difference of perception on the instructor's actual behavior in using curriculum guides provided by the Institute (Item 34), and in obtaining the Division Director's approval before making changes (Item 9). Responses for Item 34 showed that both the SAIT and NAIT groups perceived this as happening more than "often", and "often" for Item 9.

TABLE 4.12

Technology Division Instructors' Perceptions of "Directed" Behavior of an Institute of Technology Instructor on Acting as a Member of a Profession

Activity Group 2 Item Number	SAIT		NAIT	
	Mean	s.d.	Mean	s.d.
7. Improving qualifications	1.700	1.129	2.163	1.247
8. Becoming member of a professional group	1.450	0.826	2.510	1.622
33. Promoting professional image	2.600	1.875	2.714	1.555
35. Relying on Institute for course	1.900	1.373	1.633	0.972
36. Enroling in University	1.850	1.226	2.388	1.304
47. Refraining from accepting second job	1.600	1.273	2.408	1.657
50. Making use of library	2.300	1.750	3.082	1.694

There is a full degree of difference measured on a five point scale in the response means of the two groups of respondents concerning the extent to which an instructor is directed to become a member of an educational or professional organization (Item 8, Table 4.12). NAIT respondents indicate that this is directed behavior one half degree more than "occasionally", compared to SAIT's one half degree less than "occasionally". Either way it would suggest that such membership is not a requirement of the Institutes for their faculty.

The NAIT group perceive that use of the library for professional development is directed behavior "often", compared to the SAIT group's response more than "occasionally" (Item 50). This response may be influenced by the extent to which In-Service Training Program instructors give library assignments to trainees.

It is suggested by the data for Item 47 that the NAIT group perceive that instructors are directed to refrain from accepting other jobs than teaching more than "occasionally" compared to the SAIT group's less than "occasionally".

Almost the same degree of difference occurs for Item 36, "enroling in university education courses leading to a degree," and "improving professional qualifications without receiving financial assistance" (Item 7). The NAIT respondents perceive this as directed behavior more than "occasionally" for both items.

TABLE 4.13

Technology Division Instructors' Perceptions of "Directed" Behavior of an Institute of Technology Instructor in Directing Learning

Activity Group 3 Item Number	SAIT		NAIT	
	Mean	s.d.	Mean	s.d.
11. Preparing lessons	2.000	2.052	2.857	1.814
12. Giving subject equal emphasis	1.800	1.704	1.898	1.418
19. Providing formal reports	2.450	1.395	2.531	1.340
25. Using audio visual devices	2.500	0.946	3.347	1.267
26. Including preparation time in work load	2.100	1.651	3.571	1.555
37. Providing additional instruction	2.350	0.988	3.633	1.302

Nait respondents perceive that instructors are directed to provide additional instruction outside of regular hours to students requesting help "very often", compared to SAIT respondents' perception of slightly more than "occasionally" (Item 37). A slightly larger difference between means occurs for Item 26 "considering lesson preparation time as part of work load hours". The NAIT mean at 3.57 lies approximately half way between "often" and "very often" on the five point scale as compared to the SAIT mean of 2.1 that indicates "occasionally".

The third greatest difference is shown for Item 11 "spending more time on the preparation of their lessons than do secondary school teachers". The NAIT mean at 2.86 is closest to "often". The SAIT mean of 2.00 translates to "occasionally".

There is close agreement on Items 12 and 19, "giving equal emphasis to non-trade or non-technical subjects", and "providing formal reports on professional workshops or seminars which they attend". Both groups indicate that the activity noted in Item 12 is directed behavior "occasionally", and between "often" and "occasionally" for Item 19.

TABLE 4.14

Technology Division Instructors' Perceptions of "Directed" Behavior of an Institute of Technology Instructor in Developing Curriculum

Activity Group 4 Item Number	SAIT		NAIT	
	Mean	s.d.	Mean	s.d.
1. Obtaining opinions	1.900	0.968	1.694	0.983
9. Obtaining approval	3.900	1.210	2.837	1.650
24. Developing outlines	3.400	1.095	4.306	0.871
31. Adapting content	1.500	1.357	1.939	1.376
34. Using guidelines	3.350	1.531	3.796	1.258
45. Keeping current	3.600	1.314	4.347	1.165

Items in Table 4.14 arranged according to decreasing degree of difference of means are 9, 24, 45, 34, 31, and 1. A full degree of difference occurs between respondent groups on Item 9, "obtaining division director's approval before making changes in subject matter content", decreasing to one fifth of a degree difference for Item 1, "obtaining students' opinions before initiating changes in subject matter content" (Item 4). SAIT staff perceive that an instructor is "very often" directed to obtain the director's approval before changing content, whereas NAIT staff indicate "often".

It would appear that both groups perceive that instructors are directed to prepare their own course outlines (Item 24), which suggest that instructors are seen as having some choice of content material for their subject.

Neither group's mean suggest that instructors are perceived as being directed to give priority to provincial over national needs more often than "occasionally".

When respondents' perceptions of the extent to which instructors are directed to maintain contact with the outside community (Table 4.15) are compared, the greatest difference of opinion is noted for Item 40, "Maintaining membership in the trade unions or professional associations in which they were associated before



becoming Institute instructors". NAIT respondents indicate that this is directed behavior "often" compared to SAIT respondents' reply "occasionally".

The mean of the responses for each of the items making up the activity group are consistently higher for the NAIT group, although in no instance does a mean show an incidence much higher than "often".

The least difference occurs in their opinions of whether it is directed behavior to provide potential employers with an assessment of a student's class performance and record (Item 5). Both groups agree that this happens slightly more often than "occasionally".

TABLE 4.15

Technology Division Instructors' Perceptions of "Directed" Behavior of an Institute of Technology Instructor in Liaisoning With the Community

Activity Group 5 Item Number	SAIT		NAIT	
	Mean	s.d.	Mean	s.d.
5. Providing assessments	2.250	1.293	2.612	1.426
22. Maintaining rapport	2.600	1.759	3.286	1.500
40. Maintaining membership	2.000	1.589	3.163	1.748
41. Providing counsel	1.750	1.482	2.551	1.515
43. Informing public	2.350	1.387	3.306	1.584

In Table 4.16 SAIT respondents indicate a strong "never" in their perceptions of behavior directed toward negotiating with the Public Service Commissioner on work

loads (Item 27), and on reporting problems of salary placement to the Deputy Minister (Item 28). For the same items the NAIT respondents' means indicate a response of slightly more than "never".

NAIT respondents indicate that they perceive that an instructor is directed to obtain permission to use Institute equipment for personal use (Item 3) more often than do their SAIT counterparts. NAIT's mean response of 3.77 is near "very often" compared to SAIT's mean of 2.95 which is near "often". Both groups reply that instructors are directed "occasionally" to discourage the use of tools or equipment for other than regularly scheduled day classes.

TABLE 4.16

Technology Division Instructors' Perceptions of "Directed" Behavior of an Institute of Technology Instructor in Accepting Regulations

Activity Group 6 Item Number	SAIT		NAIT	
	Mean	s.d.	Mean	s.d.
3. Obtain permission	2.950	1.905	3.776	1.611
15. Follow procedures	1.950	1.877	2.735	1.934
27. Negotiate loads	0.950	0.510	1.265	0.930
28. Report problems	0.850	0.366	1.265	0.953
48. Discourage use	2.150	1.496	2.347	1.521

## SUMMARY -- CHAPTER 4

In this chapter comparisons were made between the perceptions of SAIT Industrial, Business, and Technology Division instructors of the "actual", "directed", and "expected" behavior of an Institute of Technology instructor, and their divisional counterparts at NAIT.

Responses to cue items on the instrument were on a continuum from "always" to "never", and weighted : always - 5, very often - 4, often - 3, occasionally - 2, and never - 1. The mean and standard deviation was then computed for every item on the questionnaire. Items were assembled in their respective activity group sub-sets and the accumulated responses to the sub-sets compared by using the t test of significance.

The data indicated significant differences for Industrial Division instructors in their perception of the actual and directed behavior of an Institute instructor in accepting regulations. Analysis of the individual cue items in this activity group (Table 4.2) would suggest that SAIT respondents believe an instructor actually engages in the various activities shown in this sub-set more than do the NAIT respondents. The highest SAIT rating was close to "very often" for the activity described as "obtaining permission to use Institute equipment for

personal use".

Other differences in perceptions of Industrial Division instructors appeared for the expected behavior of an instructor in developing curricula (Activity Group 4), and influencing enrolments (Activity Group 10). It would appear that SAIT respondents perceive that an instructor is expected to adapt course content to meet provincial needs over national needs more often than their counterparts at NAIT, just as they perceive that an instructor is expected to influence student enrolments more often than does the NAIT group.

In considering all the data from the Industrial Division respondents it would appear that there are very few outstanding differences in perception of the various activities of an instructor when the two groups are compared.

The comparison of the Business Division instructors' responses indicated even fewer significant differences than the Industrial Division. The Business Division instructors only difference in perception was for the actual behavior of an instructor in choosing methods (Activity Group 1). The mean of the NAIT responses was consistently higher for activities listed in this sub-set than that of the SAIT responses. Both groups were positive with regard to how often such behavior occurred rating it "often" or higher.

Data from the Technology Division respondents

showed a greater number of significant differences than did the data from the Business and Industrial Division respondents. The Technology Division showed significant differences for three activity groups on an instructor's behavioral role, five significant differences on an instructor's prescribed role, and no significant differences on an instructor's normative role.

In two instances, significant differences were shown in the data in both the behavioral and prescribed role perceptions for the same activity. For example, in Table 4.8 the probability of t value for "Developing curriculum" (Activity Group 4) was .002 for the behavioral and for the prescribed role. Moreover, the mean of the responses for both groups for all the activity items on the behavioral and prescribed role of an instructor showed significant differences in perception between the two groups.

Included in this chapter were the detailed analyses of the cue items in activity groups for which significant differences were indicated.

## CHAPTER 5

### ANALYSIS OF THE DATA IN TERMS OF SAIT ADMINISTRATORS' AND SAIT INSTRUCTORS' RESPONSES

#### Comparisons of SAIT Administrators' and SAIT Instructors' Responses

In Chapter 5 an analysis is made of the data on SAIT administrators' and instructors' perceptions of the "actual", "directed", and "expected" behavior of an Institute of Technology instructor for each of the three divisions of instruction.

Significant differences in perception of an instructor's "actual" behavior were indicated for the administrators and the Industrial Division instructors on "Choosing methods" (Activity Group 1), and "Performing non-routine tasks" (Activity Group 8). When administrators and Technology Division instructors' perceptions were compared significant differences were shown for "Accepting regulations" (Activity Group 6), and "Performing non-routine tasks" (Activity Group 8), Table 5.1.

When the two respondent group's perceptions of an instructor's "directed" behavior were compared significant differences were shown between the administrators

TABLE 5.1

SAIT Administrators' and SAIT Instructors' Perceptions  
of the Roles of an Institute of Technology Instructor  
(All values are probabilities of t)

Activity Groups	Dvsn.	Roles		
		Behavioral	Prescribed	Normative
1. Choosing methods	a.	0.017*	0.518	0.408
	b.	0.324	0.163	0.455
	c.	0.114	0.187	0.463
2. Acting as member of profession	a.	0.872	0.440	0.923
	b.	0.885	0.473	0.595
	c.	0.867	0.075	0.564
3. Directing learning	a.	0.648	0.588	0.477
	b.	0.731	0.379	0.470
	c.	0.598	0.285	0.815
4. Developing curriculum	a.	0.235	0.113	0.822
	b.	0.202	0.018*	0.346
	c.	0.897	0.014*	0.409
5. Liaisoning with community	a.	0.640	0.260	0.564
	b.	0.108	0.393	0.668
	c.	0.546	0.085	0.624
6. Accepting regulations	a.	0.800	0.574	0.669
	b.	0.189	0.565	0.270
	c.	0.031*	0.543	0.401
7. Influencing enrolments	a.	0.250	0.917	0.890
	b.	0.178	0.796	0.696
	c.	0.839	0.507	0.923
8. Performing non-routine tasks	a.	0.011*	0.867	0.164
	b.	0.455	0.333	0.358
	c.	0.031*	0.502	0.637
9. Participating in ex-mural activities	a.	0.778	0.895	0.867
	b.	0.503	0.960	0.394
	c.	0.339	0.803	0.133
10. Participating in decision making	a.	0.828	0.203	0.494
	b.	0.974	0.163	0.909
	c.	0.930	0.008*	0.862

\* Significant difference at  $p=.05$  level

a. Industrial Division b. Business Div. c. Technology Div.

and the Business Division, and Technology Division instructors on "Developing curriculum" (Activity Group 4).

The only other difference in perception of "directed" behavior was between administrators and Technology Division instructors on "Participating in decision making" (Activity Group 10).

There were no significant differences between the two group's responses for any "expected" instructor activities.

TABLE 5.2

SAIT Administrators' and Industrial Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor on Choosing Methods

Activity Group 1 Item Number	Administrators		Instructors	
	Mean	s.d.	Mean	s.d.
6. Taking field trips	2.000	0.000	2.519	1.156
18. Using variety methods	2.500	0.577	3.741	1.059
21. Emphasizing advances	3.250	0.500	3.741	0.903
29. Emphasizing skills	2.750	0.500	2.593	0.971
32. Preparing plan	2.000	0.816	3.630	1.149
39. Preparing exams	4.250	0.500	4.704	0.542
46. Remaining available	3.500	0.577	4.000	1.109

Activity Group 1 - Choosing Methods (Table 5.2)

Industrial Division instructors rate an instructor's actual behavior in choosing methods of instruction consistently higher than do the administrators, except



for the one activity of "Emphasizing skills and knowledge" (Item 29). In this instance administrators indicate that such action occurs slightly more often than do the instructor respondents.

The greatest difference in means occurs for Item 32 "Preparing and following a teaching plan for each lesson presented". The administrators' mean would suggest that instructors actually do this "occasionally" as compared to the instructor respondents' response mean of 3.6 which places the incidence of the occurrence of the behavior approximately midway between "very often" and "often".

Administrators also perceive that instructors use a "Variety of teaching methods" (Item 18) halfway between "occasionally" and "often" as compared to the instructors' mean response which is near "very often".

Instructor respondents perceive an instructor as actually "Remaining available to students at all times during regular working hours if not conducting classes" (Item 46) slightly more often than administrators when they indicate "very often".

Almost the same degree of difference pertains to "Preparing written or practical examinations" (Item 39). The instructors' response is close to "always" and the administrators' "very often".

Instructor respondents feel that an instructor is more inclined to emphasize the latest advances in

subject matter content than do the administrators (Item 21).

The degree of difference is approximately half a degree for Items 6, 21, 39, and 46, and one and one-half degrees for Item 32.

TABLE 5.3

SAIT Administrators' and Technology Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor on Accepting Regulations

Activity Group 6 Item Number	Administrators		Instructors	
	Mean	s.d.	Mean	s.d.
3. Obtain permission	3.500	1.000	2.591	1.501
15. Follow procedures	3.250	1.500	1.591	1.764
27. Negotiate loads	1.000	0.000	1.091	0.868
28. Report problems	1.250	0.500	1.273	0.703
48. Discourage use	3.250	0.957	2.227	1.478

Activity Group 6 - Accepting Regulations (Table 5.3)

The SAIT administrators perceive that instructors actually discourage the use of shop equipment for other than regularly scheduled day classes more often than do the instructor respondents (Item 48). About the same degree of difference exists between administrators' and instructors' perceptions on "Obtaining permission to borrow tools for personal use from shops for which the instructor is responsible" (Item 3). The instructors indicate that this happens slightly more than

"occasionally" whereas three-quarters of the administrators believe that it occurs "very often" and one-quarter believe that it occurs "often".

Both respondent groups are in very close agreement that instructors never negotiate work loads with the Public Service Commissioner (Item 27), or report problems regarding their salaries to the Deputy Minister or Minister (Item 28).

The administrators are, also, inclined to believe that instructors actually do follow established procedures in referring unresolved problems to the Minister "often" as compared to the instructors' response of less than "occasionally".

TABLE 5.4

SAIT Administrators' and Industrial Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor on Performing Routine Tasks

Activity Group 8 Item Number	Administrators		Instructors	
	Mean	s.d.	Mean	s.d.
4. Using technical services	3.750	0.500	4.000	0.832
10. Performing clerical tasks	2.500	0.577	3.037	1.160
30. Preparing demonstrations	2.750	0.957	4.000	1.000
44. Accepting schedules	3.750	0.500	4.333	0.620

Activity Group 8 - Performing Routine Tasks (Table 5.4)

This activity group referred to routine non-instructional tasks performed by instructors. The responses indicated that the greatest difference in perception between groups occurred for Item 30 "Preparing laboratory or shop demonstrations". The instructor respondents' mean equates to "very often", and that of the administrators less than "often".

The instructor respondents consistently rate the incidence of each of the four activities listed in the sub-set higher than do their administration counter-group. It would appear that the instructors perceive an instructor as actually spending more time in performing routine non-instructional tasks than do the administrators.

TABLE 5.5

SAIT Administrators' and Technology Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor on Performing Routine Tasks

Activity Group 8 Item Number	Administrators		Instructors	
	Mean	s.d.	Mean	s.d.
4. Using technical services	3.750	0.500	4.045	0.785
10. Performing clerical tasks	2.500	0.577	3.227	1.152
30. Preparing demonstrations	2.750	0.957	3.682	0.780
44. Accepting schedules	3.750	0.500	4.364	0.727

Table 5.5 gives the Technology Division instructors' response mean compared to the administrators' mean on the same activity group items as for the Industrial Division instructors in Table 5.4.

In comparing the Industrial Division and Technology Division instructors' means, the values shown for the Technology Division responses agree closely with those of the Industrial Division except on Item 30, "Preparing demonstrations". The Technology Division instructors perceive this as actually occurring less often than their colleagues in the other Division, but still more often than do the administrators. Presumably this may be accounted for by the Institute practice of having laboratory technicians employed in some teaching areas to assist in setting up teaching demonstrations.

About the same degree of difference between the values for the instructor and administrator responses exists for the other items in the sub-set in the Technology Division table as in the Industrial Division table.

#### Activity Group 4 - Developing Curriculum (Table 5.6)

In Table 5.6 the response values of the Business Division instructors and the Technology Division instructors are shown in one table and compared with the administrators' response means. The values being compared are for the respondents' perception of the "directed" role of an Institute instructor.

TABLE 5.6

SAIT Administrators' and Business Division and Technology Division Instructors' Perceptions of "Directed" Behavior of an Institute Instructor on Developing Curriculum

Activity Group 4 Item Number	Administrators		Instructors		Div.
	Mean	s.d.	Mean	s.d.	
1. Obtaining opinions	3.000	1.000	1.857	1.345	(b)
			1.900	0.968	(c)
9. Obtaining approval	4.000	1.732	3.000	1.528	(b)
			3.900	1.210	(c)
24. Developing outlines	4.333	0.577	4.143	0.900	(b)
			3.400	1.095	(c)
31. Adapting content	2.667	2.082	1.286	1.254	(b)
			1.500	1.357	(c)
34. Using guidelines	5.000	0.000	2.571	0.535	(b)
			3.350	1.531	(c)
45. Keeping current	4.667	0.577	4.571	0.535	(b)
			3.600	1.314	(c)

(b) Business Division Instructors

(c) Technology Division Instructors

The administrators apparently perceive that instructors are directed to obtain student opinions before initiating changes in subject matter content more often than do the instructor respondents in both Divisions (Item 1). Instructors do not rate the activity as even being different "occasionally" whereas the administrators perceive it as being directed "often".

There is somewhat closer agreement on the directions given to obtain the Division Director's approval before implementing course changes. The Technology Division instructors and the administrators agree more closely at "very often" than do the Business Division instructors at "often".

For Item 24 "Developing their own course outlines", the Business Division instructors and the administrators agree that this is directed behavior more than "very often", whereas the Technology Division instructors perceive this as occurring midway between "often" and "very often".

The responses given to Item 31 "Adapting subject matter content to meet provincial needs over national needs" would seem to suggest that administrators are inclined to perceive this as directed behavior more than "occasionally" compared to the instructors' less than "occasionally".

The administrators perception of directed behavior on Item 34 "Using guidelines when provided by the Institute" is an unequivocal "always" as judged from the standard deviation value of 0.00.

The same perception of what is directed behavior for this activity is not shared by the instructors according to the mean values shown for their response. They reply more than "occasionally" for the Business Division instructors and more than "often" for the Technology

Division instructors.

There is fairly uniform agreement on Item 45, "Keeping subject matter current" with the Business Division group assessing this behavior as being directed more than "very often", and the Technology Division instructors' response indicating more than "often".

TABLE 5.7

SAIT Administrators' and Technology Division Instructors' Perceptions of the "Directed" Behavior of an Institute of Technology Instructor on Decision Making

Activity Group 10 Item Number	Administrators		Instructors	
	Mean	s.d.	Mean	s.d.
16. Instructional decisions	4.667	0.577	2.850	1.268
17. Influencing decisions	3.333	0.577	1.950	1.191
38. Planning decisions	3.667	0.577	1.950	1.131

Activity Group 10 - Decision Making (Table 5.7)

A pronounced difference in values exists for administrators' and instructors' perceptions of an instructor's directed behavior in decision making. Administrators' mean values are consistently higher than those of the instructors' by approximately one and one-half steps on the five point scale. Administrators indicate that instructors are directed to participate in making instructional decisions between "very often"



and "always", but instructors reply "often". There is slightly less difference in response for Items 17 and 38. Item 17 makes reference to the instructor influencing presidential decisions on Institute operation. The administrators see this as directed behavior "often" compared to "occasionally" for instructors. The same ratings are given by each group to Item 38, "Exerting some influence on decisions relating to the planning of new buildings and instructional equipment selection".

#### SUMMARY -- CHAPTER 5

In Chapter 5 comparisons were made between SAIT administrators' and SAIT instructors' responses for each of the three divisions of instruction. Their perceptions of an instructor's behavioral role, prescribed role, and normative role were compared by computing probabilities of t values for their responses. Individual cue item responses were compared by using the mean and standard deviation of all respondents' replies to that cue item. The item mean was translated into a corresponding position on the five point scale used to collect perceptions.

When the administrators' responses to the ten activity sub-sets were compared with the instructors' responses, there were four sets of activities for which significant differences in perception were indicated for their perceptions of the behavioral role. Three sets showed significant differences for the prescribed role,

but there were no differences shown in the respondents' perceptions of the normative role.

When sets that showed significant differences were analyzed on an item by item basis the mean values for administrators' responses were generally lower than the Industrial Division instructors' on an instructor's actual behavior in choosing methods and procedures of instruction, and in performing routine non-instructional tasks. The administrators apparently do not perceive an instructor as actually preparing a lesson plan as often as do the instructors, or in using a variety of teaching methods.

The administrators' responses would indicate, also, that they perceive an instructor spending less actual time in performing routine non-instructional tasks such as performing clerical work, or preparing laboratory demonstrations, than do the instructor respondents.

When values of responses for directed behavior were compared, the administrators' responses suggest that they perceive that instructors are directed to obtain student opinions before initiating changes in subject matter content more often than do instructors in the Business Division and the Technology Division. Instructors rate the directed behavior as occurring less than "occasionally" whereas the administrators perceived it as directed behavior "often".

There was somewhat closer agreement on the

directions given to obtain the Division Director's approval before implementing course changes. The Technology Division instructors and the administrators agreed more closely at "very often" than did the Business Division instructors.

For Item 24, "Developing their own course outlines", the Business Division instructors and administrators agreed that this was directed behavior more often than did the Technology Division respondents.

The responses that were given to Item 31, "Adapting subject matter content to meet provincial needs over national needs" would seem to suggest that administrators are inclined to perceive this as directed behavior more than "occasionally" compared to the instructors' less than "occasionally".

The administrators' response to Item 34, "Using guidelines when provided by the Institute", was an unequivocal "always". The value for the standard deviation indicates that all respondents answered in the same way.

The perception of what is directed behavior on the part of the administrators was not shared by the instructor respondents based on the mean values shown for their response. They replied more than "occasionally" for the Business Division and more than "often" for the Technology Division respondents.

There was fairly uniform agreement on Item 45,

"Keeping subject matter current" with the Business Division instructor respondents assessing this behavior as being directed more than "very often", and the Technology Division instructors rating it more than "often".

The data for Technology Division instructor respondents' perceptions of the directed behavior of instructors in decision making showed decidedly less involvement by the instructor than that perceived by the administrators. The Technology Division respondents' means were less than "occasionally" for two items, and less than "often" for the other remaining item. The administrators rated the same items, more than "very often" for one, and more than "often" for the other two.

The data that were detailed in Table 5.1 showed seven significant differences out of ninety possible. This would seem to indicate that the administrators' and instructors' perceptions of the various roles of an Institute instructor were in rather close agreement. This assumption may be supported by the data for the normative role for which no significant differences were identified.

## CHAPTER 6

### ANALYSIS OF THE DATA IN TERMS OF NAIT ADMINISTRATORS' AND NAIT INSTRUCTORS' RESPONSES.

#### Comparisons of NAIT Administrators' and NAIT Instructors' Responses

In Chapter 6 the responses of NAIT administrators and NAIT instructors are compared on their perceptions of the "actual", "directed", and "expected" behavior of an Institute of Technology instructor.

Table 6.1 is a compilation of all the data used to compare the NAIT administrators' responses with those of the NAIT instructor respondents in the Industrial, Business, and Technology Divisions of the Institute.

As in the previous chapter, when significant differences are shown, a detailed analysis of items in the sub-set activity group is undertaken. The values for the means of the responses and standard deviations are used to compare responses to individual cue items. The value of the mean can be translated into an approximate position on a five-point scale -- always, very often, often, occasionally, or never.

When probabilities of  $t$  values are examined (Table 6.1), four activity groups show significant

TABLE 6.1

NAIT Administrators' and NAIT Instructors' Perceptions  
of the Roles of an Institute of Technology Instructor

(All values are probabilities of t)

Activity Groups	Dvsn.	Roles		
		Behavioral	Prescribed	Normative
1. Choosing methods	a.	0.150	0.804	0.283
	b.	0.085	0.960	0.619
	c.	0.070	0.932	0.337
2. Acting as member of profession	a.	0.781	0.839	0.141
	b.	0.777	0.842	0.294
	c.	0.912	0.855	0.058
3. Directing learning	a.	0.567	0.752	0.319
	b.	0.110	0.907	0.345
	c.	0.122	0.576	0.831
4. Developing curriculum	a.	0.088	0.876	0.356
	b.	0.143	0.624	0.507
	c.	0.089	0.831	0.127
5. Liaisoning with community	a.	0.943	0.284	0.026*
	b.	0.416	0.537	0.054
	c.	0.336	0.890	0.164
6. Accepting regulations	a.	0.879	0.337	0.383
	b.	0.730	0.684	0.245
	c.	0.843	0.237	0.132
7. Influencing enrolments	a.	0.803	1.000	0.768
	b.	0.554	0.972	0.088
	c.	0.557	0.621	0.132
8. Performing non-routine tasks	a.	0.439	0.091	0.352
	b.	0.852	0.301	0.087
	c.	0.513	0.215	0.041*
9. Participating in ex-mural activities	a.	0.297	0.640	0.856
	b.	0.217	0.913	0.807
	c.	0.259	0.640	0.912
10. Participating in decision making	a.	0.169	0.384	0.111
	b.	0.121	0.378	0.245
	c.	0.045*	0.700	0.035*

\* Significant difference at p=.05 level

a. Industrial Div. b. Business Div. c. Technology Div.

disparities between the two groups' responses. One of these is accounted for by the Industrial Division group on their perceptions of the "expected" role of an instructor on liaising with the community (Activity Group 5), two others by the Technology Division respondents on "Performing non-instructional routine tasks" (Item 8), and "Participating in the decision making process" (Item 10), and the third by the Technology Division instructors' perception of the "actual" role of an instructor in the decision making process (Item 10).

Activity Group 10 - Decision Making (Table 6.2)

Items 17 and 38 show the most significant disparities in response values. The administrators perceive an instructor as actually participating in influencing the Institute President's decisions more often than do their counter group, and in exerting some influence on decisions relating to the planning of new buildings and instructional equipment selection. The two groups are in close agreement that instructors actually do participate in instructional decisions.

These findings correspond rather closely to the results of comparing SAIT administrators' responses with those of the Technology Division instructors. The SAIT instructors did not, however, rate an instructors' participation in making instructional decisions quite as high as did their NAIT colleagues. They rated the instructor's participation at less than "often"

compared to their colleagues' rating of very often.

TABLE 6.2

NAIT Administrators' and Technology Division Instructors' Perceptions of "Actual" Behavior of an Institute of Technology Instructor on Decision Making

Activity Group 10 Item Number	Administrators		Instructors	
	Mean	s.d.	Mean	s.d.
16. Instructional decisions	4.000	0.000	3.855	0.989
17. Influencing decisions	3.000	1.000	1.168	1.009
38. Planning decisions	3.333	0.577	2.364	1.128

Activity Group 5 - Community Liaison (Table 6.3)

A significant difference in perception occurs between administrators and Industrial Division instructors who responded on an instructor's expected behavior in providing liaison between the Institute and the business and industrial community.

The administrators consistently show higher mean values for the five activities listed than does their counter group. The highest of these is for Item 43, "Informing the general public about Institute courses when opportunities are presented". Administrators perceive this as directed behavior almost "always". The instructor respondents are in fairly close agreement with "very often".



TABLE 6.3

NAIT Administrators' and Industrial Division Instructors' Perceptions of "Expected" Behavior of an Institute of Technology Instructor on Liaisoning with Community

Activity Group 5 Item Number	Administrators		Instructors	
	Mean	s.d.	Mean	s.d.
5. Providing assessment	2.750	1.708	2.417	1.500
22. Maintaining rapport	4.500	0.577	3.861	1.552
40. Maintaining membership	4.250	0.500	3.083	1.746
41. Providing counseling	4.250	0.957	3.611	1.293
43. Informing public	4.750	0.500	4.000	1.454

The greatest difference between response values occurs for Item 40, "Maintaining membership in the trade unions or professional associations in which the instructor was associated before becoming an Institute instructor." The administrators rate this as expected behavior slightly more than "very often". The instructor respondents rate it as "often".

The instructor respondents perceive an instructor as being expected to maintain rapport with prospective employers of students (Item 22), and "Providing students with counseling information on how to apply and interview for a job after graduation", to a lesser extent than the administrators. This difference is slightly more than half a step on the five-point scale.

Fairly close agreement exists for Item 5,

"Providing potential employers with an assessment of a student's class performance and record". Although there is fairly close agreement, nonetheless, this activity is rated by both groups as expected behavior slightly more than "occasionally". It would appear that neither group believe it is expected as consistent behavior.

TABLE 6.4

NAIT Administrators' and Technology Division Instructors' Perceptions of "Expected" Behavior of an Institute of Technology Instructor on Performing Routine Tasks

Activity Group 8 Item Number	Administrators		Instructors	
	Mean	s.d.	Mean	s.d.
4. Using technical services	4.750	0.500	3.806	1.009
10. Performing clerical tasks	4.250	1.500	2.778	1.198
30. Preparing demonstrations	4.000	0.816	3.333	1.568
44. Accepting schedules	4.000	1.414	4.194	1.037

Activity Group 8 - Performing Routine Tasks (Table 6.4)

Administrators rated an instructor's expected behavior in performing routine non-instructional tasks consistently high at "very often" and above. Only one activity (Item 44) indicates a rating lower than that of the instructor respondents.

The greatest difference between the respondent groups' ratings occurs for "Performing clerical work",

(Item 10). Administrators rate this activity as more than "very often" compared to the instructor respondents' slightly less than "often".

Administrators, also, perceive that instructors are expected to make use of the technical services available to them for developing and reproducing instructional material (Item 4) more often than do the instructor respondents.

On the remaining two activities of the sub-set there is somewhat closer agreement. Both groups believe that it is expected behavior for an instructor to prepare laboratory or shop demonstrations (Item 30), and accept schedules prepared for him (Item 44).

TABLE 6.5

NAIT Administrators' and Technology Division Instructors' Perceptions of "Expected" Behavior of an Institute of Technology Instructor on Decision Making

Activity Group 10. Item Number	<u>Administrators</u>		<u>Instructors</u>	
	Mean	s.d.	Mean	s.d.
16. Instructional decisions	4.500	1.000	3.556	1.297
17. Influencing decisions	3.250	1.500	1.972	1.207
38. Planning decisions	4.000	0.816	2.667	1.414

Activity Group 10 - Decision Making (Table 6.5)

NAIT administrators, like their colleagues at SAIT, perceive that an instructor is expected to engage in decision making to a greater degree than do the instructor respondents from the Technology Division. The administrators apparently believe that an instructor is expected to influence the President's decisions concerning the Institute's operation "often" compared to the instructors' "occasionally" (Item 17), and that instructors are expected to "Exert some influence on decisions relating to the planning of new buildings and instructional equipment" (Item 38) "very often".

The instructors responded more than "occasionally" for this item.

The administrators rate the instructors participation in making instructional decisions between "always" and "very often". The instructors rate the same activity about one step lower than the administrators at a point about midway between "often" and "very often".

SUMMARY -- CHAPTER 6

In Chapter 6 the NAIT administrators' perceptions of the role of an Institute instructor were compared with the perceptions of their counter groups, the NAIT instructors in the Industrial, Business, and Technology Divisions.

The data for NAIT administrators and NAIT instructors showed fewer significant differences in perception than did a corresponding comparison of SAIT administrators' and SAIT instructors' perceptions. Whereas the SAIT data identified seven differences, the NAIT data indicated four differences.

The Industrial Division instructors accounted for one significant difference, and the Technology Division instructors accounted for the remaining three.

The Industrial Division instructors perceived an instructor's expected behavior for liaisioning with the community (Activity Group 5) considerably less often than did the administrators.

The Technology Division instructors, likewise, perceived an instructor's expected behavior in performing routine non-instructional tasks (Activity Group 8), and participating in decision making (Activity Group 10) less often than the administrators. The Technology Division instructors showed significant differences in perceptions when compared with the administrators on both the "actual" and "expected" roles of an Institute instructor on participating in decision making (Activity Group 10).

The values for the administrators' responses were consistently higher for most of the individual cue items making up the activity sub-sets.

The fact that significant differences in

perception occurred between the administrators and Technical Division instructors more often than between the administrators and the instructors in other Divisions would lead one to assume that the Technology Division instructors perceive the instructor's role differently than their colleagues in the other Divisions.

It is to be noted that when NAIT Technology Division instructors' responses were compared with SAIT Technology Division instructors that significant differences in perception were indicated for the total set of activities in the behavioral, prescribed, and normative role for an instructor (Table 4.8).

The data in Chapter 6 would indicate that NAIT administrators and NAIT instructors are in rather close agreement regarding the actual, directed, and expected behavior of an Institute of Technology instructor.

## CHAPTER 7

### SUMMARY, CONCLUSIONS, AND IMPLICATIONS

#### SUMMARY

##### The Problem

The main purpose of this study was to investigate the behavioral, prescribed, and normative roles of an Institute of Technology instructor by collecting the perceptions of administrators and instructors. The study was conducted in the Northern and Southern Alberta Institutes of Technology with the Institutes' administrators and instructors as respondents.

Its specific purpose was to determine if there was:

1. A significant difference in perception between NAIT and SAIT instructors of the way in which they viewed an instructor's actual, directed, and expected behavior in performing or reacting to a set of fifty stimuli items.
2. A significant difference in perception between SAIT administrators and SAIT instructors of the three designated roles of an Institute instructor.
3. A significant difference in perception between NAIT administrators and NAIT instructors of the three designated roles of an Institute instructor.

### Procedure

An instrument consisting of fifty cue items describing various teacher activities was prepared to which respondents were requested to give their perceptions of an instructor's behavior for one of three roles, the instructor's actual behavior (behavioral role), directed behavior (prescribed role), or expected behavior (normative role).

The three forms of the questionnaire were distributed in approximate thirds to administrators and to the instructors in each of the three divisions of instruction at both Institutes by persons at NAIT and SAIT who had agreed to supervise the distribution and collection of the questionnaires. Completed forms were returned during June 1971.

There were 561 replies from 887 questionnaires distributed, representing a 63.4 percent return.

The reply forms were machine marked and the collected data were transferred to punch cards for data processing. Frequencies, percentages of responses, means and standard deviations were computed and the latter two tabulated for ten sub-set activity groups. Significant differences at the  $p=.15$  level were indicated in the tabulations.

### Findings

The analysis of the data was presented in



Chapters 4, 5, and 6. In Chapter 4 data from SAIT instructors were compared with those from NAIT instructors. Chapter 5 compared the perceptions of SAIT administrators with SAIT instructors, and Chapter 6 compared the perceptions of NAIT administrators with NAIT instructors. The administrators' perceptions were compared with those of the instructors in the three divisions of instruction.

### Conclusions

The conclusions from this study are presented in three separate sections (a) Institute instructors' perceptions of the instructor's role (b) SAIT administrators' and instructors' perceptions of the instructor's role, and (c) NAIT administrators' and instructors' perceptions of the instructor's role.

### Institute Instructors' Perceptions of the Instructor's Role

#### (a) Industrial Division

Significant disparities exist between the Institutes' Industrial Division instructors with respect to their perceptions of the degree to which an Institute of Technology instructor accepts regulations. This disparity exists for their perceptions of both the instructor's behavioral role and prescribed role. The SAIT respondents perceive an instructor as engaging in the described activities more often than do the NAIT respondents. The greatest difference between the mean values of their responses is for the activity group that includes the

actual behavior of an instructor in discouraging the use of shop or laboratory equipment for other than regularly scheduled day classes. This item was included in the questionnaire to get some reading of the degree to which respondents felt shop equipment was to be used exclusively for day programs, either by administrative order, if such orders existed, or by actual practice. The response to this item would have some implications for Continuing Education courses in the event that such equipment might be needed.

SAIT instructors tend to hold a greater number of directed behavior perceptions for an instructor's involvement in decision making than do their NAIT counterparts, particularly as these opportunities for decision making applied to influencing the President's decisions, and having a voice in planning and equipment selection decisions. Both groups of respondents agreed that instructors were directed to make instructional decisions.

SAIT instructors, also, indicated a higher mean value for an instructor's expected activity in developing curriculum, and influencing student enrolments than their NAIT colleagues. SAIT respondents would suggest that instructors are occasionally expected to control admission of students into their course. This might be interpreted as representing some measure of autonomy in an area that is normally ascribed to the Registrar's office. NAIT respondents perceive the matter of admission control

by instructors occurring less than "occasionally".

The data cited on SAIT and NAIT Industrial Division instructors' perceptions of the roles of an Institute of Technology instructor indicate that the two groups are in agreement on 25 activity groups out of the 30 possible. The lack of significant differences in the collected data would tend to substantiate the conclusion that these two groups are more alike than they are different. The fact that SAIT has been in operation longer than NAIT would not appear to have affected the Industrial Division instructors' perceptions of an instructor's role, nor does it appear that a younger staff at NAIT in terms of years of teaching service, has accounted for any great number of significant differences in perceptions.

(b) Business Division

By divisions of instruction, the instructors in the Business Division show the highest degree of uniformity in perception of an instructor's roles. When SAIT and NAIT Business Division instructor respondents' perceptions are compared there is only one significant difference in perception indicated of the actual behavior of an instructor in choosing methods.

Moreover, there is no apparent difference in their views of the actual and directed behavior of an instructor which would suggest that the potential for

role conflict for the instructor is minimal, if it exists at all.

The activity areas for which there appears to be close agreement are the actual behaviors of an instructor in developing curriculum, liaisoning with the community, performing routine non-instructional tasks, and participating in decision making. For the prescribed role of an instructor the two groups have a high degree of agreement on developing curriculum, influencing enrolments, and performing routine non-instructional tasks. Although the same activities that appear in both the actual and directed roles of an instructor show a high degree of agreement, this agreement does not persist at as high a degree for the expected role of an instructor. It does not reach the point of significant difference, however.

The other activity which shows uniformly high agreement for all three roles is that of performing routine non-instructional tasks.

There doesn't appear to be any obvious reason why the SAIT and NAIT Business Division instructors should show the least number of significant differences in perception from among all the groups compared.

#### (c) Technology Division

Just as the Business Division showed the least number of differences in perception, so the Technology

Division instructors show the greatest number of differences, for which there doesn't appear to be a rational explanation.

Their data show eight significantly different values for probabilities of  $t$  out of 30 possible. Significant differences are shown, also, between the two Technology Division instructor respondent groups when their perceptions of all the activities for each of the behavioral, prescribed, and normative roles of an instructor are compared.

Whereas the Business Division instructors showed relatively close agreement on each of the three roles for a single activity group, the Technology instructors' data show a considerable degree of difference, even though it doesn't reach a significant value.

Two activities show significant differences for both the behavioral and prescribed role. Directing learning, and developing curriculum are both indicated with significant difference values under the behavioral and prescribed roles, whereas the "developing curriculum" activity shows a rather high degree of agreement between the two groups when "expected" behavior of an instructor is under study.

The degree of agreement on choosing methods is consistently low on all three facets of the instructor's role. This might conceivably be an area which the administrators might wish to clarify Institute policy.

NAIT and SAIT Technology Division instructors show the greatest degree of difference in their perceptions of an instructor's behavioral role. When all the activities of the behavioral role are considered the NAIT staff perceive them as actually occurring less often than do their SAIT colleagues. This situation reverses itself for the prescribed and normative role responses, however. NAIT instructors perceive the instructor's activities in these roles occurring more often than do their SAIT colleagues.

The activity for which both groups show the closest agreement is that of performing routine non-instructional tasks. They perceived instructors as being involved in actual, directed, or expected behavior for these activities "often" for Items 4, 10, and 30, and "very often" for Item 44, "Accepting schedules produced for them by others".

In terms of the overall perceptions of Technology Division instructors on three facets of an instructor's role, a significant difference is indicated for each of the three roles. This might warrant the conclusion that there is a significant difference in the perceptions of NAIT and SAIT Technology Division instructors of the role of an Institute of Technology instructor.

SAIT Administrators' and Instructors' Perceptions of an  
Instructor's Role

Significant differences were found between SAIT administrators and SAIT instructors on 7 activity group comparisons out of a total possible of 30 activity groups. In two instances the administrator's perceptions showed significant disparities when compared with the perceptions of two groups of instructor respondents on the same activity sub-set. The Business and Technology Division instructors and the administrators showed significant differences on developing curriculum, and the Industrial Division and Technology Division instructors on performing routine non-instructional tasks.

The two respondent groups' perceptions appear to be in closer agreement on the expected role of an Institute instructor than on either the actual or directed role. There was a high degree of uniformity on the expected role of a teacher in influencing student enrolments, and choosing methods, between administrators and the three instructor respondent groups.

There were two significant differences shown for the perceptions of SAIT administrators compared with SAIT Industrial Division instructors, one with the Business Division instructors, and four with the Technology Division instructors. The Technology Division instructors also showed more significant differences when the SAIT and NAIT respondent groups were compared

with each other than either the Business Division or Industrial Division instructor groups.

On the basis of the collected data for SAIT administrators and SAIT instructors, there were seven significant differences indicated out of thirty possible. It might be reasonable to conclude, therefore, that there are more similarities between the two groups' perceptions than there are differences. In answer to the question raised in the problem statement, there appears to be few significant differences in perception between SAIT administrators and SAIT instructors on each of the three designated roles of an Institute of Technology instructor.

#### NAIT Administrators' and Instructors' Perceptions of the Instructor's Role

Significant disparities exist between the NAIT administrators and Technology Division instructors on the "actual" role of an Institute instructor in "Participating in decision making", on the "expected" role in "Performing routine non-instructional tasks", and "Participating in decision making", and between NAIT administrators and Industrial Division instructors on the "expected" role of an Institute instructor in "Liaisoning with the community".

There are no significant differences shown for NAIT administrators and Business Division instructors.



When the ten activity groups for each of the three roles of an instructor were examined, the following relationships were observed; There was a high degree of agreement between administrators and instructors in all Divisions on the "directed" behavior of an instructor in "Choosing methods", "Acting as a member of a profession", "Developing curriculum", and "Influencing enrolments"; a high degree of agreement between administrators and instructors in all Divisions on the "actual" behavior of an instructor in "Acting as a member of a profession", and "Accepting regulations"; and a high degree of agreement between administrators and instructors in all Divisions on the "expected" behavior of an instructor in "Participating in extra-mural activities".

If it can be assumed that significant differences between administrators' and instructors' perceptions of an instructor's "actual" and "expected" behavior on the various activities could lead to role conflict on the part of the instructor, the data would suggest that no such potential for conflict exists, in view of the similarity of the two respondent groups' perceptions.

In no instance is there a significant difference indicated for the same activity in all three roles for the same Division of instruction. This would tend to suggest that the administrators and instructors perceive the "actual", "directed", and "expected" roles of an instructor, in somewhat similar perspective.

The indication by Industrial Division instructors that they do not perceive "Liaisoning with the community" as expected behavior of an instructor, might be accounted for by the unique character of the apprenticeship program whereby apprentices are referred to the Institute for training by the Apprenticeship Board. In the Industrial Division, therefore, the students are usually employed before attending the Institute, as compared to students in other Divisions who must seek employment after graduation. The Industrial Division instructors may not perceive a need to maintain industrial community contact for the benefit of keeping their students in touch with potential employers to the same extent as instructors in the other Divisions.

In the NAIT administrator-instructor data the Technology Division instructors again account for more significant differences between administrators' and instructors' perceptions than either the Business, or Industrial Division instructors, as was the case when SAIT administrators and SAIT instructors were compared.

In view of the four significant differences out of a possible thirty opportunities for differences to occur, it is concluded that NAIT administrators and NAIT instructors have more of the same perceptions of an instructor's "actual", "directed", and "expected" role than they have differences.

In answer to the third question raised in the

"Statement of the Problem", there are few significant differences between NAIT administrators' and NAIT instructors' perceptions of the roles of an Institute of Technology instructor. It is concluded, therefore, that their views are more likely to coincide on the instructor's roles than they are likely to diverge.

### CONCLUSIONS

Some caution is necessary in drawing conclusions from the data in this study in view of the limitations imposed by a low percentage of return (63.4%), and the relatively small size of some of the sample groups. The design of the questionnaire and the way in which respondents might have interpreted its items could have added additional unforeseen limitations.

Within these parameters, however, the study indicated that there were relatively few differences in perception between the various respondent groups of the instructor's roles.

In answer to the three questions raised in the study it was concluded that:

1. There were few significant differences between NAIT and SAIT instructors in the way in which they perceived the behavioral, prescribed, and normative roles of an Institute of Technology instructor, with the exception of the NAIT and SAIT Technology Division instructors. They indicated eight significant

differences in perception for the three roles of an instructor.

2. There were seven significant differences in perception between SAIT administrators and SAIT instructors of the three roles of an Institute instructor.

3. There were four significant differences in perception between NAIT administrators and NAIT instructors of the three roles of an Institute instructor.

There was closer agreement between NAIT administrators and NAIT instructors on the roles of an Institute instructor than there was between SAIT administrators and SAIT instructors.

The activity groups that accounted for most of the significant differences were "Developing curriculum objectives and content", and "Participating in decision making".

#### IMPLICATIONS

The data collected for this study appear to have some implications for implementation and for future research.

Administrators might examine those activity group items in more detail where significant differences were indicated with a view to clarifying the respective responsibilities of the administrator and the instructor. Although the study identified few such differences, there is a potential for misunderstanding between the

role incumbents and the administrators in those activities that were identified. The potential for conflict and misunderstanding might be minimized if the incumbents' roles and functions were clearly enunciated and understood by all concerned.

Where significant differences in perceptions between one group of instructors and their counterparts in the other institution were identified, it might be useful for the administrators to attempt to rationalize these differences in order to determine if some sort of action on their part is necessary or warranted. The number of significant differences noted for the Technology Division instructors, in particular, might bear closer examination to determine the underlying reasons for these differences.

The fact that relatively few differences were identified in the study might be interpreted as an indication that Institute and inter-Institute communications are apparently operating with some degree of efficiency.

The study has helped to confirm the assumption made by some administrators that the instructional staffs of both Institutes tend to have similar views of the instructor's roles, with the possible exception of instructors in the Technology Divisions. This could be useful information were changes to be introduced in the Institute methods and procedures for directing any

of the various activities noted.

The perceptions of activities such as "Performing routine non-instructional tasks" could be taken into account by administrators were they to consider relieving the instructors of certain of these functions so that the instructor could devote more of his attention to the instructional process.

The role theory framework in which this study was devised may have some application for future research in the area of instructor-administrator interactions and relationships. It could, for example, be applied to determine the degree to which an instructor's actual behavior coincided with expected behavior. Other counter-role groups could be selected other than administrators if the instructor's role was under study. It could have useful application as a method whereby areas of potential conflict could be identified in inter-departmental or administrator-instructor relationships.

#### Recommendations for Further Study

Several recommendations for additional study have become apparent as a result of this study.

It would be useful for it to be replicated for the Technology Divisions in an attempt to identify why disparities in perceptions exist, and to compare the Technology Division instructors' perceptions of an instructor's role with those of their colleagues in

other Divisions of instruction. It is recommended that were such a study to be undertaken that it include a survey and analysis of the respondents' attributes and qualifications as possible influencers of their perceptions.

Another extension of this study might be an investigation into the potential that exists for instructor role conflict as a result of the individual's varying perceptions of an instructor's behavioral, prescribed, and normative role, and as a result of differing perceptions of his role by significant others.

A need exists to define the normative expectations held for an instructor and an administrator as a means of improving both instruction and administration. A mutual appreciation and knowledge of their respective roles might help to facilitate the interaction that must take place as a normal consequence of their specific duties and functions. Such information would be of value to those who are responsible for structuring and administering orientation and in-service programs for new staff, or for those who are involved in working with a faculty who have a wide variety of background experience and professional qualifications.

The conceptual framework of this study was inspired by reported research that provided some experience to indicate that the concept of role could be operationalized and analyzed in such a manner as to

produce meaningful results that could be translated into action.



## BIBLIOGRAPHY

### A. BOOKS

- Biddle, Bruce J. 1964. "Roles, Goals, and Value Structures in Organizations," New Perspectives in Organization Research, eds. W. W. Cooper, H. J. Leavitt, M. W. Shelly II, New York: John Wiley & Sons, Inc., p. 160.
- Gross, Neal, Ward S. Mason, and Alexander W. McEachern. 1966. Explorations in Role Analysis. New York: John Wiley & Sons, Inc., p. 14.
- McGrath, J. 1964. Social Psychology. New York: Holt, Rinehart and Winston.
- Newcomb, Theodore M. 1951. Social Psychology. New York: The Dryden Press, p. 280.
- Parsons, T. and E. A. Shils. 1951. Toward a Theory of Action. Cambridge: Harvard University Press, p. 191-192.
- Sarbin, Theodore R. 1954. "Role Theory," Handbook of Social Psychology. ed. Gardner Lindzey. Reading, Mass: Anderson Wesley Publishing.
- Sargent, Stansfield. 1951. "Concepts of Role and Ego in Contemporary Psychology," Social Psychology at the Crossroads. eds. John H. Rohrer and Muzafer Sherif. New York: Harper Brothers, p. 360.
- Weaver, Gilbert and Louis Cenci. 1960. Applied Teaching Techniques. Toronto: Pitman Publishing Corporation.

## B. PERIODICALS

- Bailey, Zeno F. 1956. "Administrators Evaluate Their Teachers," Agriculture Education Magazine, 29:17, July.
- Basinger, Lorain A. 1955. "Superintendents Evaluate Their Teachers," Agriculture Education Magazine, 27:247, May.
- Bible, B. L. and E. J. Brown. 1963. "Role Consensus and Satisfaction of Extension Advisory Committee Member," Rural Sociology, 28:31-90.
- Bible, B. L. and J. D. McComas. 1963. "Role Consensus and Teacher Effectiveness," Social Forces, 45:225-233, December.
- Bidwell, Charles E. 1955. "The Administrative Role and Satisfaction in Teaching," Journal of Education Sociology, 29:41, September.
- Boy, Angelo V. and Gerald J. Pine. 1963. "Needed for Teachers: A Role Description," The Clearing House, 38:7-12.
- Boyan, Norman J. 1967. "Emergent Role of Teacher and Authority Structure of School," Journal of Secondary Education, 42:291-301.
- Bush, Robert. 1968. "Redefining the Role of the Teacher," Theory Into Practice, 6:246.
- Calhoun, John and Clifford Watson. 1953. "What Vocational-Agriculture Students Like and Dislike About Their Teacher," Agriculture Education Magazine, 28:56, September.

- Fishburn, E. E. 1966. "Learning the Role of the Teacher," Journal of Teacher Education, 17:329-331.
- Getzels, J. W. and E. G. Guba. 1957. "Social Behavior and the Administrative Process," School Review, 65:429.
- Ivey, Allen E. and Stanley S. Robin. 1966. "Role Theory, Role Conflict, and Counseling: A Conceptual Framework," Journal of Counseling Psychology, 13(1):29.
- Lamberth, Edwin E. 1959. "Why Teachers of Vocational Agriculture Leave the Profession," Agriculture Education Magazine, 31:174, February.
- Soles, Stanley. 1964. "Teacher Role Expectations and the Internal Organization of Secondary Schools," The Journal of Educational Research, 57(5), January.
- Sorenson, A. Garth, T. R. Husek, and Constance Yu. 1963. "Divergent Concepts of Teacher Role: An Approach to the Measurement of Teacher Effectiveness," Journal of Educational Psychology, 54(6)287-294.
- Wang, K. A. 1932. "Suggested Criteria for Writing Attitude Statements," Journal of Social Psychology, 3:367-373.
- Westwood, L. J. 1967. "The Role of the Teacher," Educational Research, 9(2):123-133.

#### C. OTHER SOURCES

- Butker, Solomon et al. 1967. "An Exploratory Analysis of the Roles and Role Conflicts of Vocational Teachers in Oklahoma," Final Report. Stillwater: Oklahoma State University.

Department of Education. 1963. Fifty-seventh Annual Report of the Department of Education of the Province of Alberta 1962. Edmonton: Queen's Printer.

Nix, H. L. 1960. "A Sociological Analysis of the Roles and Value Orientations of an Occupation: Vocational Agriculture Teaching," Unpublished Doctoral dissertation, Louisiana State University.

Tod, James Alexander. 1969. "Staff Characteristics in Post Secondary Institutions in Alberta," Master thesis, University of Alberta, Edmonton.

Wingen, Ernest W. 1957. "A Survey of the Attitude of Parents Toward Vocational Agriculture in South Dakota," Unpublished Master's thesis, South Dakota State College.

Wroot, R. E. 1970. "A Study of the Need for Pedagogical Training as Perceived by the Staff of the Alberta Institutes of Technology," Unpublished Master's thesis, University of Alberta, Edmonton.

A P P E N D I X

Instructors' Job Activity Rating Scale

This rating scale is to be used by a respondent to indicate the degree to which he thinks Institute of Technology instructors ACTUALLY DO the activities listed.

Instructions

The extent to which instructors ACTUALLY DO that which is described may be indicated by selecting the best answer from among the five following statements:

- A1 Always
- B2 Very Often
- C3 Often
- D4 Occasionally
- E5 Never

and then marking that answer in pencil on the attached questionnaire sheet opposite the appropriate item number. An unmarked item will be interpreted as "No Opinion".

Example:Institute of Technology Instructors Actually Do:

1. Keep a record of attendance of students.

If the response is "Often", the blank under C3 is marked in heavy black pencil on the questionnaire sheet so that it would appear as below.

1.     A1    B2    C3    D4    E5

Use only one mark for each item to show which of the five responses most nearly represents your opinion of what Institute of Technology instructors ACTUALLY DO in the situation or circumstance described.

Institute of Technology instructors ACTUALLY DO:

1. Obtain student opinions before initiating changes in subject matter content.
2. Participate in high school career days to promote enrolment in their program.
3. Obtain permission to borrow tools or equipment for personal use from shops or laboratories for which they are responsible.
4. Make use of technical services provided to them for developing and reproducing instructional material, i.e. overhead transparencies, work sheets, printing, etc.
5. Provide potential employers with an assessment of a student's class performance and record.

A1 Always      B2 Very Often      C3 Often      D4 Occasionally      E5 Never

6. Take field trips during regularly scheduled class hours.
7. Improve their professional qualifications without financial assistance.
8. Become members of an educational - professional organization.
9. Obtain approval from their division director before making changes in subject matter content.
10. Perform clerical work.
11. Spend more time in the preparation of their lessons than do secondary school teachers.
12. Give equal emphasis to non-trade or non-technical subjects.
13. Set pre-requisite subjects for the courses they teach.
14. Accept lower salaries than high school or college teachers of non-trade or non-technical subjects.
15. Follow established procedures in referring unresolved problems to the Deputy Minister or Minister of Education.
16. Participate in making instructional decisions.
17. Influence decisions made by the President concerning the Institute's operation.
18. Use a variety of teaching methods.
19. Provide formal reports on professional workshops or seminars which they attend.
20. Keep their social life independent of their instructional responsibilities.
21. Emphasize the latest technical advancements in subject matter content.
22. Maintain rapport with prospective employers of students.
23. Control admission of students to their courses.
24. Develop their own course outlines.
25. Use Audio-Visual media for instruction.
26. Consider lesson preparation time as part of work load hours.

3.

A1 Always      B2 Very Often      C3 Often      D4 Occasionally      E5 Never

27. Negotiate with Public Service Commissioner on instructional work loads.
28. Report problems regarding their placement on the salary grid to the Deputy Minister.
29. Emphasize technical skills rather than technical knowledge.
30. Prepare laboratory or shop demonstrations.
31. Adapt their subject matter content to meet provincial needs over national needs.
32. Prepare and follow a teaching plan for each lesson presented.
33. Work to promote the professional image of technical instructors in the community.
34. Use curriculum guidelines when provided by the Institute.
35. Rely on the Institute to provide special updating technical courses for instructors.
36. Enrol in university education courses leading to a degree.
37. Provide additional instruction outside of regular class hours to students requesting help.
38. Exert some influence on decisions relating to the planning of new buildings and instructional equipment selection.
39. Prepare written and/or practical examinations.
40. Maintain membership in the trade unions or professional associations in which they were associated before becoming Institute instructors.
41. Provide students with counselling information on how to apply and interview for a job after graduation.
42. Use the same system for determining grades as do teachers of non-technical subjects.
43. Inform the general public about Institute courses when opportunities are presented.
44. Accept classroom schedules and timetables provided by the scheduling department.
45. Keep the subject matter content of their courses current.
46. Remain available to students at all times during regular working hours if not conducting classes.



4.

A1 Always      B2 Very Often      C3 Often      D4 Occasionally      E5 Never

- 47. Refrain from accepting second jobs other than teaching.
- 48. Discourage the use of shop or laboratory equipment for other than regularly scheduled day classes.
- 49. Accept the staff/student ratio established by the administration.
- 50. Make personal use of the Institute library facilities, for professional development.

Instructors' Job Prescription Rating Scale

This rating scale is to be used by a respondent to indicate the degree to which he thinks Institute of Technology instructors are DIRECTED TO perform the activities listed.

Instructions

The extent to which instructors are DIRECTED TO DO that which is described may be indicated by selecting the best answer from among the five following statements:

- A1 Always
- B2 Very Often
- C3 Often
- D4 Occasionally
- E5 Never

and then marking that answer in pencil on the attached questionnaire sheet opposite the appropriate item number. An unmarked item will be interpreted as "No Opinion".

Example:

Institute of Technology Instructors are DIRECTED TO:

1. Keep a record of attendance of students.

If the response is "Often", the blank under C3 is marked in heavy black pencil on the questionnaire sheet so that it would appear as below.

1.     A1     B2     C3     D4     E5

Use only one mark for each item to show which of the five responses most nearly represents your opinion of what an Institute of Technology instructor is DIRECTED TO DO in the situation or circumstances described.

---

Institute of Technology instructors are DIRECTED TO:

1. Obtain student opinions before initiating changes in subject matter content.
2. Participate in high school career days to promote enrolment in their program.
3. Obtain permission to borrow tools or equipment for personal use from shops or laboratories for which they are responsible.
4. Make use of technical services provided to them for developing and reproducing instructional material, i.e. overhead transparencies, work sheets, printing, etc.
5. Provide potential employers with an assessment of a student's class performance and record.

Instructors' Job Expectations Rating Scale

This rating scale is to be used by a respondent to indicate the degree to which he thinks Institute of Technology instructors are EXPECTED by administration to perform the activities listed.

Instructions

The extent to which instructors are EXPECTED TO DO that which is described may be indicated by selecting the best answer from among the five following statements:

- A1 Always
- B2 Very Often
- C3 Often
- D4 Occasionally
- E5 Never

and then marking that answer in pencil on the attached questionnaire sheet opposite the appropriate item number. An unmarked item will be interpreted as "No Opinion".

Example:

Institute of Technology Instructors are EXPECTED TO:

1. Keep a record of attendance of students.

If the response is "Often", the blank under C3 is marked in heavy black pencil on the questionnaire sheet so that it would appear as below.

1.    A1    B2    C3    D4    E5

Use only one mark for each item to show which of the five responses most nearly represents your opinion of what Institute of Technology instructors are EXPECTED TO DO in the situation or circumstance described.

---

Institute of Technology instructors are EXPECTED TO:

1. Obtain student opinions before initiating changes in subject matter content.
2. Participate in high school career days to promote enrolment in their program.
3. Obtain permission to borrow tools or equipment for personal use from shops or laboratories for which they are responsible.
4. Make use of technical services provided to them for developing and reproducing instructional material, i.e. overhead transparencies, work sheets, printing, etc.
5. Provide potential employers with an assessment of a student's class performance and record.

**END OF  
REEL**