

The Relationship of Demographic Characteristics to
Teacher Attitudes Towards the Oral English of
Native Canadian and Aboriginal Australian Children

A Thesis

Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirements for the Degree of
Master of Education
in the College of Education
University of Saskatchewan

by

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May, 1985

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ABSTRACT

The purpose of this study was to investigate the relationship between selected demographic variables and the attitudes of teachers toward the oral English of their Indigenous students in Saskatchewan and Queensland.

Data were collected by administration of the Indigenous Students' Oral English Questionnaire to a total of 217 teachers from schools throughout northern and central Saskatchewan, Canada and Queensland, Australia. The independent variables in the study were: culture, language, teaching experience, education, age and sex. The dependent variable was the attitudes of the teachers toward the validity and acceptability of the Indigenous students' oral English.

Results of a factor analysis produced four attitudinal factors: Dialect Description, Difference/Deficit, Acceptability/Unacceptability, and Adequacy/Inadequacy. Seven hypotheses were analyzed by one-way analyses of variance to determine if any significant differences existed among the attitudinal factors on the basis of the demographic characteristics of the respondents.

The findings of this study must be considered in relation to the following limitations: the size and nature of the sample, the difficulty of measuring attitudes, and the existence of cultural bias.

The study concluded with the following findings;

1. The cultural background of the teachers did not relate to differences in attitudinal judgements toward the oral English of Indigenous students.

2. The language background related to differences in attitudes toward language variation. Teachers who either spoke or understood an Indigenous language or Indigenous English were more positive toward the speech of their Indigenous students.

3. The language and culture of the teachers in combination was found to relate to differing attitudes toward language variation. Those teachers who were both of Indigenous ancestry and either spoke or understood an Indigenous language or Indigenous English were more positive toward the speech of their Indigenous students.

4. The years of teaching experience of the teachers was related to attitudinal differences toward language variation. There was a general trend for teachers with less experience to be more positive toward the speech of their Indigenous students.

5. The post-secondary education of the teachers was related to their attitudes toward language variation. The teachers with three to four years of post-secondary education and more specialty courses in linguistics, Indigenous education/studies, ESL/ESD, sociology of education, cross-cultural education, cultural anthropology, and language teaching methodologies were more positive and accepting of the speech of their Indigenous students. Length of training was not related to differing attitudes among Canadian teachers.

6. The demographic characteristic of age was found to be related to differences in attitudes toward language variation. The younger teachers tended to have more positive attitudes toward the speech of Indigenous children. The variable of sex was important only for the Canadian group.

Further findings indicated that the attitudinal factors most likely to be related to demographic characteristics were Difference/Deficit and Adequate/Inadequate. The respondents who tended to be more positive toward the students language generally described it as Different but also Adequate for classroom use. It was concluded that the variables of language, teaching experience, education, age and sex related significantly to teacher attitudes towards the oral English of Indigenous students. It was also found that culture and language in combination related to differences in attitudinal judgements. It was further concluded that since these characteristics were found to be important, teacher education programs need to examine ,assess, and design preservice, and inservice programs for the teachers of Indigenous children.

ACKNOWLEDGEMENTS

I would like to convey my appreciation to the following for their assistance in carrying out and completing this research. Special thanks are given to Dr. Del Koenig for her advice, direction and inspiration in the area of Indigenous Education, Dr. Murray Scharf for his guidance, interest in the study and willingness to find consultation time when most needed. Gratitude is expressed to Dr. Joyce Booth for her support and to the external examiner Dr. Y. Mahadoo for his efforts.

I would like to extend sincere appreciation to the Queensland Department of Education as well as to the teachers in Queensland and Saskatchewan for their cooperation. I would like to thank the University of Saskatchewan, the Institute for Northern Studies, the Saskatchewan Teachers' Federation and the Saskatchewan School Trustees Association for their contributions to this research.

Finally I would like to express my gratitude to various friends and family members for their support and confidence in my ability to complete this study, and I would like to give recognition to Mervin and Andrea Fiddler for their many long hours of word processing and computer programming.

DEDICATION

I would like to dedicate this work to my family. I would like to thank my immediate family for their assistance and encouragement through the years. I would thank my paternal family, the Blairs, for the belief in the importance of education and the belief in academic excellence. I would like to thank my maternal family, the Plasters, for the development of a social conscience, and the recognition of the values of equality and human justice. I would like to thank my extended family for the understanding and time taken to assist me in learning the implications of cross-cultural education in a contemporary cross-cultural society.

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Chapter 1

INTRODUCTION

Language is an intimate, personal, and important component of human life. In modern western societies the excellence of language performance is considered a key to success. Schools reflect this emphasis on correctness and delineate certain expectations of students' language performance using specific criteria. Teachers interpret these criteria and make judgements concerning the quality and acceptability of students' oral and written language skills. The predominance of language performance underlies the entire school curriculum, hence a failure to meet the specific language quality expectations places the student in a position of failure, not only with regard to the language curriculum but with the entire syllabus and schooling experience.

There is evidence in the literature to indicate the lower success rate of Indigenous children all over the world in majority-culture schools. In two countries specifically, according to Bowd (1982), both Native Canadian and Aboriginal Australian school children have been labelled as "culturally disadvantaged" or "culturally deficient." According to these labels such children are thought to be culturally deprived or disadvantaged because of the lack of stimulation in their environment. It is considered that these children begin school with linguistic deficiencies as well as psychological and social disadvantages, and hence their academic achievement will be limited.

Research in the area of Indigenous education has raised many questions and concerns but few answers have been found to the questions regarding school success. Of the various features examined, one that has been brought to the forefront of the inquiry many times is the oral language of the student and the way in which it is regarded in schools.

The language situation for Indigenous children in Queensland, Australia and Saskatchewan, Canada is complex. The languages spoken are many and varied, and are, as all languages, in a continual state of change. They are not static; they are variable. Despite their systematic characteristics, languages undergo alterations. Contact and interactions between cultural and linguistic groups in these two areas have contributed to the evolutionary process that affects all languages. As well as the number of Indigenous languages spoken, there are varieties of English that have come into existence through an evolutionary process, and are spoken as a first language by many Indigenous children (Sandfur, 1981; Scollan & Scollan, 1979). These varieties of English language or dialects are found in regional groupings as well as in social groupings in both Saskatchewan and Queensland.

The argument as to whether "other-dialect" speakers are linguistically deficient or linguistically different has been a major dispute among educators concerned with the language abilities of "other-culture" children as discussed by Dwyer (1976) in Australia. Teachers coming from these two schools of thought have distinctly different outlooks toward language varieties. The "deficit" theory says that other dialects are insufficient and inadequate while the "different" theory suggests that these dialects are legitimate

instruments of human communication in their own setting. From these two opposing points of view, different assessments may be made and different approaches may be taken, by teachers, in working with dialect speakers. Contrasting attitudes of teachers toward spoken language are important when examining the consequences to the students' sense of self and self esteem.

That attitudinal judgements of teachers can be reflected in the behaviors has been demonstrated in the American educational system with Black children. In July 1979 (Freeman, 1982) a U.S. district court decision recognized the importance of teacher attitudes toward language. The claim of eleven Black parents was upheld, stating that the school system failed to take their children's spoken dialect into account and that it failed to teach them to read standard English. The judge further stated that the language barrier was not Black English itself but rather teacher attitudes which caused Black English speakers to feel inferior.

An examination of the literature and research concerning teacher attitudes toward student language has presented evidence that the language, culture, experience, education, sex and age of the teacher are crucial factors (Ford, 1984; Shuy & Williams, 1972; Taylor 1976). Considering the importance of teacher attitudes and expectations in the self-fulfilling prophecy (Rampaul, Singh & Didyk, 1984), teachers can be the key to successful education for other-culture children. Negative teacher attitudes toward a student's language may generate teacher behavior that leads to or sustains negative student attitudes and poor student achievement. The importance of attitudes toward the language of Indigenous children in Australia and Canada led the researcher to

examine teacher attitudes toward the oral English of Indigenous students in these countries. The study further assessed teacher characteristics of cultural background, language spoken, length and type of training and experience, sex and age, and their relationship to the formation of positive or negative attitudes towards student language.

Statement of the Problem

The purpose of this study was to identify and describe the attitudes of Native, Non-Native, Aboriginal and Non-Aboriginal teachers in Queensland, Australia and Saskatchewan, Canada towards the English spoken by Indigenous elementary students in their schools. The study also examined the effects of different training, experience, sex, age, and cultural and language backgrounds on these attitudes. Educational implications of teacher attitudes towards student English were also discussed.

The Subproblems

The following subproblems were investigated:

1. The first subproblem was to determine if the Native and Non-Native teachers differed significantly in their attitudinal judgements of the validity and acceptability of the oral English of Native children.
2. The second subproblem was to determine if the Aboriginal and Non-Aboriginal teachers differed significantly in their attitudinal judgements of the validity and acceptability of the oral English of Aboriginal children.

3. The third subproblem was to determine if the Native teachers differed significantly from the Aboriginal teachers in their attitudinal judgements of the validity and acceptability of the oral English of Native and Aboriginal children.

4. The fourth subproblem was to investigate the relationship between the number and types of languages spoken by the teachers and their attitudinal judgements of the oral English of their Native and Aboriginal students.

5. The fifth subproblem was to investigate the relationship between the length and type of teaching experience of teachers and their attitudinal judgements of the oral English of their Native and Aboriginal students.

6. The sixth subproblem was to investigate the relationship between the length and type of educational background of teachers and their attitudinal judgements of the oral English of their Native and Aboriginal students.

7. The seventh subproblem was to investigate the relationship between the age and sex of teachers and their attitudinal judgements of the oral English of their Native and Aboriginal students.

The Research Hypotheses

This study investigated the following research hypotheses:

Hypothesis 1: The first hypothesis stated that differences would be found between the attitudes of Native and Non-Native teachers toward the validity and acceptability of the oral English of Native children.

Hypothesis 2: The second research hypothesis was that differences

would be found between the attitudes of Aboriginal and Non-Aboriginal teachers toward the validity and acceptability of the oral English of Aboriginal children.

Hypothesis 3: It was hypothesized that differences would be found between the attitudes of Native and Aboriginal teachers toward the validity and acceptability of the oral English of Native and Aboriginal children.

Hypothesis 4: The fourth hypothesis stated that a relationship would be found between the language background of teachers and their attitudes toward the oral English of their Native and Aboriginal students.

Hypothesis 5: The researcher hypothesized that a relationship would be found between the length and type of teaching experience of the teachers and their attitudes toward the oral English of their Native and Aboriginal students.

Hypothesis 6: The sixth hypothesis was that a relationship would be found between the educational background of the teachers and their attitudes toward the oral English of their Native and Aboriginal students.

Hypothesis 7: The final research hypothesis stated that a relationship would be found between the age and sex of teachers and their attitudes toward the oral English of their Native and Aboriginal students.

Delimitations

The study was confined to 121 elementary school teachers in Saskatchewan, Canada and 96 elementary school teachers in Queensland, Australia in 1983. The teachers were on staff in 39 schools in Queensland and Saskatchewan. The study was confined to the attitudinal judgements that these teachers expressed concerning their Indigenous students' speech and did not include any other aspects of language nor the teachers' treatment of the students.

Limitations to the Study

The conclusions drawn from the findings in this study were limited by the following factors:

1. Due to selection for the study, the subjects may have responded as they thought the researcher would have liked.
2. The responses to the questionnaire designed for this study may not have represented the subjects' true feelings regarding student language.
3. Due to possible sampling errors, the sample may not have been representative of the population of Native and Aboriginal teachers in Saskatchewan and Queensland.
4. Due to the small sample size, selection procedures, and the statistical analysis, generalizations to the total population may have been limited.
5. Since there may have been a cultural bias as evidenced by the

need to change the questionnaire, the fact that the sample was taken from different cultures, and the fact that the researcher is a member of only one of these cultural groups, there may be limitations in performing bias-free cross-cultural research.

6. The instrument designed for this analysis may have contained weaknesses in its capacity to measure attitudes.

Assumptions

The following assumptions were made in designing and completing this study:

1. The first assumption was that attitudes can be measured by making inferences from what a person has said concerning other people, events, and ideas.

2. The second assumption was that the sample of teachers and students selected for this study was representative of the elementary teachers who taught Indigenous students in Saskatchewan and Queensland.

3. The third assumption was that teacher attitudes toward student English could be ascertained by analyzing responses to the Indigenous English questionnaire which was constructed for this study.

4. The fourth assumption was that the data gathering method and the statistical procedures used in this study were rigorous enough to make it possible to draw conclusions.

5. The fifth assumption was that other teacher characteristics such as IQ, which may have come into effect did not have a differential affect.

6. The final assumption made by the researcher was that variables

such as economic and social class level, reasons for teaching Indigenous children and teacher satisfaction would be randomly distributed among the teaching populations of Saskatchewan and Queensland and therefore would not bias the results of this study.

The Definitions of Terms

For the purpose of this study, certain terms were defined as follows:

Aboriginal: An Aboriginal person is a person of Aboriginal descent, identified and recognized as such by the Aboriginal community in Australia.

Non-Aboriginal: The term Non-Aboriginal refers to an Australian person, not descendant of the Indigenous people.

Native: A Native person is a descendant of the Indigenous people of North America and in this study includes status Indians, non-status Indians and Metis.

Non-Native: A Non-Native is a Canadian person, not descendant of the Indigenous people.

Indigenous: Indigenous as it refers to people means the original inhabitants of any particular region or country which in this case includes Australian Aboriginal and Canadian Native people.

Indigenous language: This term refers to the tribal languages which may be first languages for Indigenous students in Saskatchewan and Queensland.

Dialect: A variety of language with its own vocabulary, grammar, phonology and intonation patterns (Trudgill, 1975).

Indigenous English: Indigenous English refers to the dialects of English spoken by Indigenous students in Australia and Canada. In this study the term Aboriginal English is used to describe the Indigenous English spoken in Australia. In North America the term Indian English has been used to identify the English spoken by Indigenous people.

Oral English: Oral English refers to spoken English or speech.

First language: Refers to the first language acquired by a speaker and maintained as the dominant language.

Dominant language: That language with which the speaker is most at ease for the majority of language functions.

Standard English: Standard English is the version of a language with the grammatical, phonological, lexical and usage patterns most widely accepted and used in government, education and the media.

Non-Standard English: Non-Standard English is a version of English with its own grammatical, phonological, lexical and usage patterns. It differs in these characteristics from the standard version of that language.

Acceptable form of English: An acceptable form of English is one that is considered by the teachers to be appropriate for use in the school.

Valid form of English: When referring to oral English, this means that the speech is recognized by the teachers as a sound and complete form of communication.

Dialect Description: The teacher's assessment of the dialectal nature of the students' speech.

Difference/Deficit: The teacher's attitude toward the students' speech on the basis of it being different from standard English or being

a deficit language form.

Acceptability/Unacceptability: The teacher's attitudinal judgement of the acceptability or unacceptability of the students' speech in the classroom and the community.

Adequacy/Inadequacy: The teacher's attitudinal judgement of the students' speech on the basis of it being an adequate or inadequate linguistic system for use in the school and curriculum.

Attitude: A complex tendency of the person to respond consistently in a favorable or unfavorable way to social objects in his environment (Taft, Dawson & Beasley, 1970).

Australia: In this study the word Australia is used interchangeably with Queensland, the state in which the research was done.

Canada: In this study the word Canada is used interchangeably with Saskatchewan, the province in which the research was done.

Abbreviations

ESL: English as a second language.

ESD: English as a second dialect.

TESL: Teaching English as a second language.

TSESD: Teaching standard English as a second dialect .

Significance of the Study

Each cultural group throughout the world has developed a communication system that uniquely fulfills its needs. Successful

cross-cultural communication requires that both parties to the communication are aware of each other's system. It requires acceptance and understanding of the cultural style, patterns and meanings within the communication, in order that teaching and learning can occur effectively in cross-cultural classrooms.

In Canada and Australia there are Indigenous people who comprise a numerical, cultural, economic, and political minority in their homelands. The majority populations in these countries, mainly of European descent, exhibit linguistic, cultural, political, economic, historical and social compositions which tend to differ from comparable variables among the Indigenous peoples. In the preliminary phase of this study the researcher attempted to ascertain the degree to which Indigenous peoples of Canada and Australia shared similar historical, political, educational, and linguistic backgrounds. The researcher discussed these issues with educators and surveyed the literature from both countries.

In Canada and Australia a significant number of Indigenous people no longer speak their tribal language, but speak a form of English that differs somewhat from the standard English studied in schools. For the purpose of this study these varieties of English are referred to as Indigenous English. The attitudes of educators towards Indigenous English are crucial, as shown in research with Black English and Hispanic English in America (Shuy & Williams, 1976; Williams, Whitehead & Miller, 1971). The assessments which teachers make concerning the validity and acceptability of Indigenous English may affect the directions of English language programs in the schools. If educators followed the philosophy "from the known to the unknown," the students'

language on entry to school would be accepted and used as the starting point for further language learning. As the research has shown, teacher attitudes toward the students' language may have an effect on how the students feel about themselves. Trudgill (1975) in his discussion of the role of dialects in school suggests that language is an intimate and personal part of human life and if a person's language is rejected or considered inferior, the speaker may feel the reflection of that rejection on himself.

Do the teachers assess the oral English spoken by Native and Aboriginal children to be a valid dialect of English? Do they recognize and accept the various dialect components? Do the teachers accept these dialects in their classrooms? Do they express concerns about communication problems with their students? What are the cultural, linguistic, educational, experiential, age and sex backgrounds of these teachers and do these variables relate to their attitudes? These were the major questions examined in the present study.

Research with Black English speakers, Hispanic children, and Francophone Canadians speakers has shown how attitudes towards spoken language affect the judgements made about dialect speakers. There are many questions as to how teacher attitudes may be affecting classrooms of Indigenous children today. There is a lack of research in the area of language, teacher attitudes and self-concept of Indigenous children. What are the needs in the area of teacher training? What specific kinds of training should be provided to teachers both at the preservice level and at the inservice level that might eliminate detrimental attitudes? What criteria should be used in teacher selection? What is the impact of experience on teacher attitudes? The findings from this research may

provide useful information to school systems as they plan their language education and professional development programs, and to teacher training institutions as they strive to improve the quality of education for Native and Aboriginal children.

Chapter 2

THE REVIEW OF THE RELATED LITERATURE

This chapter contains a comparison between the educational situation of the Indigenous people in Queensland, Australia and Saskatchewan, Canada as it existed in 1983 and as it developed since colonization of each country by Europeans. The chapter focuses on the languages of Indigenous children and the attitudes of teachers toward the various oral languages used by "other dialect" and "other language" speakers. Research concerning attitudes toward language is discussed as well as the educational implications when teachers hold certain attitudes. The chapter ends with a summary of research as it relates to the present study.

An Historical Overview

Native Canadians and Aboriginal Australians share many common experiences and concerns in relation to their historical and educational development. The formal systems of education of Indigenous people in both of these countries reveals a record of low school achievement, and early and high attrition rates. In the first national survey of Indian education in Canada, Hawthorn (1967) found that 96% of these students were unsuccessful in completing a high school education. Seven years later Frideres (1974) documented that little if any improvement had occurred in the numbers of Canadian Native students who successfully

completed high school. Similarly in Australia, according to a 1971 publication of the New South Wales Teachers' Federation, a disproportionately small number of Aboriginal children were at advanced levels of study, while an abnormally high number were in slow learner classrooms or had dropped out of school at an early age.

Discrimination, racism, economic deprivation, degradation of belief and lifestyles have all been labelled by researchers as being contributors to the destruction of Native and Aboriginal societies in Canada and Australia. The attitudes of the early European settlers toward Indigenous peoples in all colonized areas have been described as being discriminatory (Anderson & Anderson, 1978; Cardinal, 1969; Dobbin, 1981; Rowley, 1970). Native and Aboriginal people were led to believe that their ways of living and belief systems were primitive. This opinion was in line with the view of Europeans in the mid 1800s concerning "primitive" societies. It was thought that primitive people were incapable of comprehending complex and abstract ideas and were in fact deficient in many cognitive areas. Theories such as those of Herbert Spencer (Cole & Scribner, 1974), one of the founders of western anthropological theory, supported the assumption that nineteenth-century Englishmen were of the highest mentality and lived in the most advanced society, representing a standard against which other people could be measured. In fact, according to such writers as Levy-Bruhl (1926) languages spoken by "primitive" people were thought to make it impossible for them to think abstractly. Consequently, the interactions and incompatibility of Europeans with people of Indigenous cultures in Canada and Australia followed similar patterns of unequal treatment. The policies and events involved in exploration, colonization,

resistance, segregation, and assimilation can be compared through the past two centuries in these countries.

The British North America Act (B.N.A. Act) signed in England in 1867 designated responsibility for the education of Canadian Indians to the federal government. It made no mention of those Canadian Native people who were not legally defined as Indians. The Indian Act of 1876 set out terms so that the federal government could enter into agreements with the provinces, public or separate school boards, and religious or charitable organizations for the education of Indian children. By virtue of exclusion from section 91:24 of the B.N.A. Act, the Native Canadians who did not have the legal status of the Indians or Inuit fell under the jurisdiction of the provincial governments who were given responsibility for public education in their jurisdictions.

Missionaries of Roman Catholic and various Protestant denominations had organized rudimentary schools for Indigenous children in pre-Confederation times. Following 1867, missions continued to administer schools with some financial assistance from the federal government for the education of status Indians but not generally for other Native people. A few schools were built on Indian reserves but the general move was toward residential schools. The purpose of residential mission schools was to remove the Indian children from the influences of their families so as to educate them toward the beliefs and understandings of European Christianity. They were taught homemaking, and agricultural and industrial skills, as well as basic academic skills in the English or French languages. The children were required to stay in residence except for brief holidays, and were prohibited from speaking their own languages. The government and clergy

combined efforts to eradicate the traditional ways and beliefs of the Indian people, including their languages, to the extent that clauses were inserted into the Indian Act banning participation in traditional Indian religious ceremonies and cultural events. Indian schools became one of the tools for assimilating the young Indian people into Euro-Canadian society.

In Australia, the Indigenous people were the subject of many Parliamentary Acts that determined policies of "protection through segregation." The concern for the welfare of non-Christians was directed at conversion and the need to save souls and acculturate the Indigenous people. The British House of Commons struck a committee in 1837 to examine and make recommendations concerning the situation of Australian Aboriginals. Rowley (1970), in his discussion of the destruction of Aboriginal society, described these recommendations as being paternalistic suggesting "missionaries for the natives, protectors for their defence, reservation of hunting lands, schooling for the young, and special codes of law to protect the Aboriginal until he learned to live within the frame work of British law" (p. 20).

As Aboriginal Australians were placed on reserves, mission schools were established on these reserves, and the responsibility for formal education was left to the various missions who were willing to go to the communities. These schooling situations were varied from community to community with few consistent education policies and practices.

In Western Canada, the group of Indigenous people identified as Metis, were in a different situation from the Indian people. As a people of mixed races, they had had more contact with the European culture and languages than did the Indian people. Many were bilingual

and trilingual speakers of tribal and European languages. Some had been schooled by their European fathers in the Red River Settlement and a few had gone to mission schools but the government had contributed little toward their schooling. The Metis were left to fend for themselves with little support from the provincial governments. When L'Association des Metis d'Alberta et des Territoires du Nord Ouest presented a brief to the 1932 Ewing Commission on behalf of the Metis of Alberta requesting educational assistance from the government, they were met by the following kinds of responses: "I don't think he (the Metis) should be given too much education. Too much is bad for some of them. He needs little to help...Yes, reading and writing but too much education is not a good thing for the Indian" (Dobbin, 1982, p.24).

Similarly to the Metis in Western Canada, those Indigenous people in Australia who are known as the Torres Strait Islanders had a different history from the Aboriginal Australians. This may have been due to the distance from the mainland, isolation, and affiliation with other south Pacific cultural nations. The missions were involved in schooling on the Islands and the education of the Island children was placed in the hands of the Queensland government through the Department of Aboriginal and Island Affairs.

When people of different cultures came into contact, the languages did as well. It was more common for the Indigenous people to learn English than it was for the Europeans to learn the Indigenous languages. Reynolds (1981) reported on the writings of an early Australian historian, Edward Curr, who in the year 1880 stated:

Aboriginals were accustomed from childhood to hear and often speak languages other than their own and consequently learned new ones

more rapidly than the average colonist. They were usually able to quickly pick up sufficient broken English to understand what is necessary to make themselves understood. (p. 40)

In both Australia and Canada there were, before contact with Europeans, many different Indigenous languages and dialects of these languages (Bowd, 1982; Foster, 1982). Foster went on to say that the effects of colonization on these languages were "linguistic genocide" as many of them have not been maintained. This may have been the result of more than a hundred years of cultural and linguistic assimilation in the education systems and policies of these two countries.

There have been many parallels in the past in the trends and directions of Indigenous education in Saskatchewan and Queensland. In later years both Saskatchewan and Queensland experienced a shift from mission schooling to government schooling. The introduction of compulsory schooling in both Saskatchewan and Queensland brought about many changes, including a change regarding the use of traditional languages by the Indigenous people.

Language change, according to Gordon (1964), is one of the major steps in cultural assimilation. He suggested that assimilation or absorption of minority groups into mainstream society requires the extermination of the minority languages. Assimilation is a unilateral process whereby the majority culture remains the same and the minority culture disappears. In order to foster assimilation, Indigenous children in both Australia and Canada were educated in schools modelled after the majority culture, employing both the language and lifestyle of the majority culture. The reaction of Indigenous people to the schooling process was documented by Roberts (1975) in a collection of

personal histories:

The missionaries took us into the dormitory at the age of three years old and there we had to learn to speak like our missionaries. We were not allowed to talk lingo (our language), because we might learn our legends and things like that you see. (p. 15)

There have been numerous changes in the administrative structures of the education systems for Canadian Native and Australian Aboriginal people over the past century. There was, however, little change that took place in the philosophical directions for education of Native Indigenous people until the past decade.

Present Education Situation

In Saskatchewan in the past 10 years significant changes have occurred in Indigenous education. The introduction of the federal government White Paper in 1969, which proposed integration of Indian people into the majority society, brought about considerable opposition from Native organizations to its proposed changes in Indian governance and education. The National Indian Brotherhood (NIB) published a rebuttal which produced further discussion and negotiation and led to acceptance as government policy of the document entitled Indian Control of Indian Education (NIB, 1972). This policy paper set out the philosophy, goals, and mechanisms by which Indian people were to assume control of their own education. Individual bands throughout Saskatchewan have attempted to make this policy a reality, with varying degrees of success. The Indian organizations have presented the

argument that in order to maintain cultural identity, the schools must become instruments that enable Indian people to participate in their own social, economic, and political advancement (NIB, 1972). This requires that the classroom content, techniques and processes reflect the socio-cultural realities of the Indian communities in which schools are situated. In order for that to happen, the schools must include the language, way of life, and understandings of that community (NIB, 1972).

During the past decade in Australia, Aboriginal people have begun to address such issues as self-determination, improvement of education at all levels, and evaluation of education programs in both the commonwealth and state systems. Following a long history of protective and restrictive legislation by the various state governments, the federal government held a national referendum on Aboriginal affairs in 1967. This referendum proposed that Aboriginal people would be considered as full citizens of Australia and that the commonwealth government, rather than the state governments, would be given authority over programs and policies regarding Aboriginal people. Subsequently, state governments retained the responsibility for elementary education programs, while the commonwealth government provided supplementary resources to improve or accelerate the educational opportunities available to Aboriginal people at all levels.

The emergence of an educational organization for the Aboriginal people at the federal level has been a significant advancement in the past 10 years. The Aboriginal Consultative Group to the Commonwealth Schools Commission made recommendations in its report, Education for Aborigines (1975), concerning the evaluation of existing programs and priorities for the future of Aboriginal education. The National

Aboriginal Education Committee (NAEC) established from the Consultative Group in 1977 has as its mandate that of advisory duties to the Commonwealth Minister for Education on matters pertaining to Aboriginal Education. The NAEC research report (Budby, Kelly, & Massey, 1980), *The Education in the 80's: The role of Aborigines and Torres Strait Islanders*, gave a review of Aboriginal teacher education and gave directions for the 1980s for the entire country. Each state Department of Education has set up an Aboriginal Consultative Group, such as the Queensland Aboriginal and Torres Strait Islander Consultative Committee (QATSICC), which consists of representatives from local Aboriginal Community Advisory Committees. QATSICC works at the state level, in an advisory position, as well as at the community level, in a liaison capacity.

In 1983 Native people were located throughout Saskatchewan. Sixty percent of the treaty Indians lived on reserves in less heavily populated areas of the province while 40% lived in urban centers. The non-status Indians and Metis people tended to live in settlements adjoining reserves, in Metis communities, and in urban centers. The Native children attended federally-administered or band-controlled schools on reserves, provincially-controlled rural or urban schools, and native-controlled residential schools.

Aboriginal and Torres Strait Island people in 1983 lived throughout Queensland. They lived in urban communities, in separate communities on the edges of towns and cities, on government reserves, in mining company communities, and on cattle stations. The Indigenous children attended state and church sponsored schools in both rural and urban communities. In the Indigenous communities of both Saskatchewan and Queensland, the

Indigenous children comprised the majority of the student population, but in the urban schools they were generally a minority.

There are several differences between the existing structures of the educational systems of Saskatchewan and Queensland. There exists in the Saskatchewan educational system a tradition of localized control that has been maintained although altered considerably from the one-room schools established by individual communities in the days of colonization. Local control manifests itself through a diverse and independent system of school divisions with varying levels of autonomy and decision-making power. The Queensland education system is more centralized than that of Saskatchewan and the Department of Education administers and determines policies and programs of all state schools. In Saskatchewan, the federal government is responsible for the education of treaty Indians from elementary through to post-secondary education while the provincial government is responsible for the Metis and non-status Indians. In Queensland, the state government is responsible for the education of Aboriginal and Island elementary students and the commonwealth government contributes to secondary and post-secondary education.

There are a number of similarities and differences between Saskatchewan and Queensland educational situations today. One of the differences is the way in which the groups of Indigenous people have chosen to address issues in order to affect change in the education systems. This difference manifests itself in the way each group has chosen to implement Indigenous control of Indigenous education. Watts (1982), in her national review of Aboriginal education described this by saying, "at this stage few Aboriginal people have initiated moves for

alternative schools" (p. 22). In contrast Canadian Native people have undertaken band-controlled schools on reserves, locally-controlled schools in Metis communities and Survival Schools in the urban settings.

Language

Linguists have found that all languages are equally complex and valid communication systems. All languages are capable of meeting the communication requirements within its speech community and will change if necessary. Trudgill (1975) went further to state that, "All the world's languages appear to have evolved to an equivalent stage of development. Languages spoken by isolated hill tribes in Papua are in every way as ordered and complex as English" (p.24). It must be pointed out, however, that some languages are more developed in one area than in another. For example, some languages have more extensive vocabularies on particular topics as the needs of that speech community require.

Language is an important exteriorization of the self. It is a highly personal activity that, if rejected by the teacher, may bring about serious negative effects on the child's sense of himself, his home, and his community (Cummins, 1979). The North West Territories Department of Education (1981) stressed that:

It is important that the minority child's self-confidence be supported, not eroded. If the validity of his language and culture are in doubt the child will interpret this as a negation of himself and his life. In an education system where the minority child may come to school with not only language differences but cultural and value differences, it is important that the school environment is

supportive and understanding. (p.56)

Indigenous children in Canada and Australia historically have been subjected to school programs that are offered in French or English even though they may have come to school knowing very little or none of either of these languages. In a few localities in both countries, support has developed for programs using the Indigenous languages for initial school years. In the Northern Territory in Australia there has been a move sanctioned by the Department of Education toward acceptance of the use of the child's first language during initial years in school. In Canada, school programs with the Indigenous languages as the language of instruction exist in a few band-controlled school systems, but these programs are not plentiful. The rationale for these programs (Cummins, 1978; Vorih & Rosler, 1978) suggests that a second language is learned more easily if the initial school years are taught in the child's first language.

Language Variation

Pidginization is a linguistic process that occurs when people who speak different languages come into contact. Pidgin is an auxiliary language which develops between people who do not share a common language and who have minor communication needs. A pidgin has limited vocabulary and grammatical distinctions and is usually restricted to a minimal number of situational contexts such as the two Australian examples : Chinese pidgin English stemming from trading necessities, and Kanaka pidgin English for plantation life in Queensland. Pidgin is considered to be a second language for those who use it and is not

thought to be a first language. Egelson, Kaldor and Ian (1982), in a study of language change in West Australia, pointed out that pidgin speakers are bilinguals. They are not limited in their linguistic abilities nor confined to a limited mode of language; rather, they speak one and a half languages. In the development of a pidgin, one of the languages will form the base and various components of the languages of the two speakers will be built on to it.

A pidgin may disappear if the two groups are no longer in contact or if one group learns the other's language. A pidgin may become so useful in a certain situation that it is expanded so that the vocabulary is increased and the syntax made more flexible. This process of expansion and restructuring is called creolization (Todd, 1974). Creole is structurally more complex than a pidgin and this complexity is comparable to other languages. A Creole may be adopted as the first language of a speech community, however a Creole is seldom used in the realms of education or technology and most Creoles have never been recorded. Creoles, like other languages, are not static; they are variable and are continually in a state of change, illustrating the human capacity to create languages.

Language variation can be described in terms of a continuum which has a vast range of language differences. Egelson, Kaldor and Malcolm (1982) described the change process by saying:

A Creole may become a firmly established language. On the other hand, particularly if there is close contact between the communities, some Creole speakers may start to move further towards the source language. This has happened with Australian Aborigines, so that we may find some who have acquired a control of a pidgin

along with their native language, others who speak a Creole, others who have moved from the Creole to a non-standard or a standard form of English. The situations can be very fluid. (p. 20)

The process of linguistic convergence was examined by Scollan and Scollan (1979) in the northern Alberta community of Fort Chipewyan. Their findings showed that four languages have co-existed there for more than a hundred years and they suggested that Cree, Chipewyan, French and English as they currently are spoken have converged significantly. This means that each of these languages has become more like each other.

The term "dialect" refers to differences between varieties of language which are differences of vocabulary and grammar, or pronunciation. Pronunciation is a combination of stress and intonation patterns, as well as a phonological system (Trudgill, 1975). A dialect is spoken by a community of people to communicate with each other. It is generally used in a consistent manner and has a regular format, but at the same time, a dialect may contain variables. As outlined by Eagleson, Kaldor and Malcolm (1982), "Speakers will not consistently follow the same pattern on all occasions, but may fluctuate. However, there is likely to be a preponderance in one direction and this will serve to mark the dialect boundary" (p. 15). Carrington and Borely (1978), in the preparation of a language syllabus for teachers in the West Indies, suggested that there are many factors which may affect how a person will speak. Speech may depend on who is being addressed, the feelings of superiority or inferiority of speaker to listener, and the topic or place of discussion.

Dialects of languages exist throughout the world and many children come to school speaking a different language variety than that of the

school. In Germany there are two major dialects, high German and low German. In Jamaica there are three dominant speech forms, Jamaican Creole, Jamaican dialect and standard Jamaican English (D'Costa, 1981). Richards (1970) described the New Zealand dialects of Maori English and Pakeha English. Dialects have distinctly different features but are mutually intelligible.

The term standard dialect (Trudgill, 1975) refers to that variety of language (in this case English) which is usually used in print, and which is normally taught in schools. It is this variety of a language that is spoken by the educated people in a society. An examination of various language dialects will assist us to recognize how the term "standard" is determined and interpreted. In France and Italy the word dialect suggests the spoken language of the uneducated or culturally isolated, and is looked down upon by the intellectuals. In Germany and Austria, a clear distinction is made between high German, which is considered "the standard", and low German which is seen as a rural form of speech. Similarly, standard English is the dialect which is most socially acceptable and is the language of the establishment. All varieties of languages contain regional or social distinctions. Saville-Troike (1973) outlined the major concerns in bilingual education and summarized this issue by saying, "the dialects of the upper class, educated speakers come to be judged 'standard' and used as the basis for written language, while dialects of less prestigious speakers come to be considered non-standard" (p. 22).

In Australia, Creoles and dialects of English are spoken fluently by thousands of Indigenous people. These varieties of Creole are called Aboriginal English or Kriol and have their own distinct features that

characterize them as different from standard Australian English. There are more speakers of Aboriginal English than there are of any of the tribal languages (Sommer, 1974). However, not every Indigenous child will be a speaker of Aboriginal English. Some Indigenous children will display all of the dialect features of Aboriginal English, some will display only certain ones, and some will display none of them. There are also Indigenous children who speak what is considered to be a standard form of English.

After extensive linguistic analysis in Queensland with Aboriginal children, Dwyer (1974) suggested that Aboriginal English differs from standard English in the following ways:

Phonologically, the rate of utterance and the intonation differ considerably from standard English, and the permitted sound sequences are more restricted than Standard English; grammatically, plural markers and some auxiliary verbs and verbal suffixes are rare; lexically, there appears to be a more restricted vocabulary of English origin, though this may be offset by words from the pre-existing Aboriginal languages. (p. 20)

Aboriginal English or Kriol words do not sound like English words because they are pronounced with the Kriol sound system, which comes from a combination of the sound systems of Aboriginal languages and English.

The grammatical system of Kriol is different from standard English, and was described by Sandefur (1981) as a unique and complex scheme. For example, Kriol uses one pronoun for "he," "she," and "it," but uses four pronouns for we (p. 56).

Kriol vocabulary includes words that have been borrowed from the Aboriginal languages, as well as from English. However, the words have become Kriol and are no longer strictly English nor Aboriginal language words. According to Sandefur (1981), these words now express Aboriginal concepts and world view, not European ones. Miscommunication often occurs because Europeans interpret Kriol words in terms of English meanings and Aboriginal people interpret English words in terms of Kriol meanings. Kriol is rich in idiomatic usage of words and although the words have been borrowed from English, they are often used in combinations that are not English.

Shnukal (1982) presented a paper concerning the dialects spoken by the Aboriginal Language Association of Australia and described the language spoken as a first or second language by more than 20,000 Torres Strait Islanders living on the Islands and scattered throughout Queensland. Shnukal recognized the speech as a complete linguistic system that has borrowed 80% of its vocabulary from the English language. Although these vocabulary items were originally English, they now have different pronunciation and meaning. Shnukal concluded that the fundamental structure of this language is not like English. The varieties of Aboriginal and Island English in Queensland, which both differ from standard English and also differ from each other, have different bases and different influences.

In Saskatchewan, and throughout North America, educators and linguists are faced with wide linguistic diversity among languages and dialects spoken by the Indigenous people. Indigenous English existed in the 1980s in many varieties throughout North America. Leap (1982) summarized the qualities of what he called Indian English in its various

forms:

1. Indian English retains the phonemic patterning and phonological constraints characteristic of the community's traditional Indian language.
2. Indian language grammatical rules may have priority over corresponding English language rules.
3. Word formation and marking conventions in the Indian language community affect corresponding conventions in English.
4. Constructions found in other non-standard variations of English (e.g. uninflected forms of "to be") are found in Indian English.
5. Sentence formation processes, the notions of what an utterance is and what it should accomplish, of the traditional Indian language communities are carried over into Indian English. (p. 104)

In an early study of Cree and English in Saskatchewan, Soveran (1964) explained the differences between Cree and English that provides some insight into the sound system of Indigenous English. She found, for example, some phonemes in Indigenous English that do not exist in standard English and phonemes in standard English that do not exist in Indigenous English. Intonation and stress patterns are different and, because of this, Native people are often identified as having an accent. Emphasis and stress are sometimes placed differently in phrases and sentences. The rising and falling patterns of standard English are not always followed. In addition, some grammatical differences exist between Indigenous English and standard English.

Darnell (1979) worked in the Cree community of Calling Lake, Alberta and proposed that four language variations existed in that

community. The researcher suggested that the adult community members are familiar with all four variations and hence the children are influenced as well. Language varieties found in Calling Lake included:

1. Standard English, which is rarely spoken by the native community but heard in many places, including the classroom.
2. Cree English is influenced by both the structure and cultural assumptions of Cree. Phonology tends toward Cree and some concepts belonging to Cree are carried over.
3. Anglicized Cree is more limited in fluency than traditional Cree. It remains the language of day-to-day communication but no longer has the capacity to communicate more traditional, cultural, and religious concepts or topics.
4. Traditional Cree is the form of Cree that has the subtlety and precision of expression to teach the traditional ways. It includes many elaborations and expressive capabilities. This version is not being passed on, it is being lost. (p. 160)

Difference/Deficit Debate

The issues relating to the failure of "other dialect" speakers to achieve success in the school system are complex and unclear. There is evidence to show the lack of success but theories as to the source and the solution are many and varied. Socio-linguist, Halliday (1979), presented the reasoning that:

If language is the key factor, the primary channel in socialization, and if the form taken by the socialization process is (in part) responsible for education failure, then

language is to blame; there must be something wrong about the language of the children who fail in school. So the reasoning goes. Either their language is deficient in some way, or, if not, then it is so different from the received language of the school (and, by implication, of the community) that it is as if it was deficient, it acts as a barrier to successful learning and teaching. So we find two main versions of the "language failure" theory, a "deficit" version and a "difference" version. (p.102)

The "deficit" theory suggests that the language of non-standard dialect speakers is deficient. This theory has evolved from Bernstein's (1973) thesis, which distinguished between a restricted code and an elaborated code of language. He suggested that the restricted code, mostly used by the lower social classes, relied on context and implicit meanings and the elaborated code, mostly used by the middle class, had a more explicit forms.

Some educators have extrapolated from this theory to label non-standard dialect speakers as deficient and many confusions have arisen as non-standard dialects were equated to the restricted code and hence those who spoke non-standard dialect were labelled deficient. The "deficit" theory is linked to the concept of verbal deprivation and is reflected in the belief that children who speak non-standard dialects receive little verbal stimulation and hear very little well-formed language in their homes. Labov (1972), quoting Bereiter who also supported this hypothesis, said "the language of culturally deprived children...is not merely an underdeveloped version of standard English, but is a basically non-logical mode of expressive behavior" (p. 199).

In a summary of language research, Dwyer (1976) discussed those

authors who supported this "deficit" viewpoint and those who said that the child's background and community consisted of; "noisy, unstable, unstimulating homes; inadequate mothering, especially in terms of language models, language stimulation, and corrective feedback; low levels of motivation and ambition" (p.8). The linguistic "deficit" theory (Bereiter & Englemann, 1966; Eckerman & Kerr, 1979) provides support to those educators who believe that the failure of these children in the education system is due to inadequacies in themselves and in their homes. Followers would favor early intervention and compensatory remedial programs.

Followers of the "different" theory, among them researchers such as Dwyer, 1976 and Labov, 1970, suggest that there may be differences in the use of language between different dialects but there is no intellectual difference. They support the premise that all dialects of a language, like all languages, are fully adequate vehicles for communication. All dialects are seen as systematic vocal representations that allow the people who have learned that system to communicate. No dialects are substandard, inferior, or primitive; they are functional as languages.

As early as 1969 Labov put forth an argument against the "deficit" theory and supported the "difference" theory. He compiled linguistic and sociolinguistic data and demonstrated that non-standard speakers can and do express the same logical relationship with language as non-standard speakers. Eagelson, Kaldor and Ian (1982) have produced evidence from the speech of Aboriginal children in West Australia to support Labov's thesis. Effectiveness and complexity of dialects are discussed in the research as well.

Hall and Freedle (1973) directed a research project to examine the effectiveness of non-standard English for giving and receiving messages. They measured the incidence of various grammatical forms and the comprehension of messages received in the two dialects. The respondents were five to 10 year old boys from both Black and White lower and middle class families. The results indicated that Black and White listeners did equally well in comprehension regardless of dialect used. Their conclusion suggested that Black and White children produce and comprehend messages at equivalent complexity, requiring equivalent cognitive functions. The question of conceptual complexity among speakers of different dialects had been argued by Baratz (1969) who proposed that even though some concepts and vocabulary may not be used in one dialect, the meaning or equivalent understanding will exist.

The Queensland State Department of Education (Van Leer Foundation Project, 1982) supports the "different" theory and has recognized the significance and validity of Aboriginal English. The Van Leer Language Project analyzed the structure of Aboriginal English, compared it to standard English, and developed a language program that teaches standard English without degrading Aboriginal English (Dwyer, 1976). This program acknowledges that the child should maintain her/his first dialect and suggests that teachers should use the students' speech as a resource for learning standard English. Teachers should "no longer aim to 'stamp out' the child's language or to 'overcome' the influence of the home, but instead have as their goal the extension and broadening of the child's already existing language abilities" (p. 43). The guidelines for teachers point out the importance for educators to recognize a non-standard dialect as a first language that contains much

of the child's cultural and life experiences. These dialects work effectively in all the communicative situations of the speaker and the goal of the teacher should be to teach proficiency in both dialects as well as an awareness of the situational appropriateness.

Cazden, John and Hymes (1972), editors of a collection of essays concerning the use of language in the classroom, rejected the notion of linguistic deficiency and summarized the argument by suggesting that the deprivation lies not with the child's competence, but in the hands of the school if "the contexts that elicit or permit use of that competence are absent in the schools; if the purpose to which they put language, and the ways they do so, are absent or prohibited in the schools" (p. xx). Language repression has happened often to Indigenous children in Canada and Australia who were punished physically if the language of their parents was heard in the classroom in earlier years of schooling. Today many children in classrooms are punished if they bring the accent, grammatical characteristics or speech style of their normal community into the school. The punishment may only be disapproval, but that disapproval over many years may be critical.

Attitudes Toward Dialects and Dialect Speakers

Attitude was defined by Taff, Dawson and Beasley (1970) as "a complex tendency of the person to respond consistently in a favorable or unfavorable way to social objects in his environment" (p.7). These researchers gave an explicit description of the components and complexities of attitudes in order to clarify their attitude survey research toward Italian, English, Dutch, and Aboriginal people. They

described the results of their research and found in West Australia that:

The common element in all attitudes is that they imply an evaluation of some object. This evaluation may be embodied in one or more aspects of psychological functioning: cognition, perception of the object and beliefs about the characteristics of the objects; affection, emotions in response to the object, such as warmth, fear, hostility, contempt, pity, etc.; action opinions, opinions about the action that should be taken concerning the object or the treatment which the object of the attitude should receive; personal behavior, how the person holding the attitude behaves toward the object, for example avoids, punishes, helps, befriends, etc. (p.7)

Attitudes are difficult concepts to measure and existing research makes inferences about attitudes through an examination and analysis of behaviors and/or statements of belief. Racial and social discrimination are particularly difficult attitudes to measure as informants may tell the researcher what they think he wants to hear, or they may behave in an entirely different way than that which they profess. In spite of these limitations of attitude measures, the pursuit of attitude analysis and explanation can provide educators with useful information or feedback concerning society, school and themselves.

Lippman (1973) explicated the process of learning attitudes and gave suggestions as to attitude formation:

Through social interaction, certain attitudes will be adopted to obtain personal acceptance and satisfaction of needs. They will depend to a considerable extent on the

attitudes and norms of the group to which the individual belongs, though they will be modified by his own personality. (p. 72)

Dwyer (1974) suggested that attitudes are important as they play a crucial role in the formation and maintenance of prejudice which exists when there are unfavorable attitudes and prejudgements. The stereotyping that may follow such prejudice may have considerable effect in the classroom and on the minority child.

Dwyer (1974) completed an attitudinal survey among Queensland teachers. It was designed on a Taff scale format and assessed the teachers' perceptions of the personal characteristics of Aboriginal people. Of this sample, 20.7% agreed that Aboriginal people are less intelligent than White people and 11.5% were undecided. The combination of these groups indicated that 32.1% of the teachers in these schools "have at least some doubt about the intellectual endowment of the children" (p.35). The analyzed findings indicated that teachers perceived Aboriginal people to be irresponsible, superstitious, and lacking in ambition and reliability but they considered them to be friendly and interesting.

Much of the recent research concerning language attitudes discusses the hearer's evaluation and ranking of the speakers on the basis of speech. The determination of these attitudes are important, considering the effect they will have on the way the hearer relates to the speaker. This is a particularly important concern in education as many children come to school speaking dialects other than standard English. Shuy and Williams (1976) expressed this concern, indicating that:

A person's reaction to a dialect may not only reflect his attitudes

about the social situations of that dialect but may also include clusters of attitudes related to apparent qualities of the dialects or of the people who speak that dialect... Such attitudes, if they be defined, may begin to reveal the affective dimensions of dialect stereotyping. (p.85)

Trudgill (1975) assessed attitudes toward dialects and lent some insight into the situation. His thesis affirmed Labov's earlier research that "judgements which appear to be about language are in fact judgements based on social and cultural values and have much more to do with the social structure of our community than with language" (p. 28).

In contemporary societies some groups have more prestigious social status than others, and hence their speech is looked upon more favorably and is evaluated more positively. Researchers bring regional and class distinctions to the discussions in the examination of attitudes toward language varieties. Kaldor (1982), when referring to regional dialects in contemporary Australian society such as Scottish, Irish or outback Australian, indicated that these dialect speakers are reasonably tolerated and do not elicit the negative attitudes brought out by various social dialects.

Anglejan and Tucker (1976) surveyed 120 French Canadian high school students, from both working and lower middle class backgrounds, and teachers and factory workers in three Quebec locations and analysed the socio-linguistic correlates of speech styles. There were two methodological components. The first was a questionnaire to ascertain the awareness of speech style differences, the importance attributed to language, and awareness of government language policies. The second part consisted of the respondents' evaluation of the speech styles of

lower-class French Canadian, upper-class French Canadian and European French males, with an indication of probable occupational status. The results of the study showed that the teachers in each of rural Quebec, Montreal, and Quebec City were more aware of language variation than were the students or factory workers in the same locales. When classifying occupational groups according to speech style, all of the respondents categorized lawyers, professors and radio announcers together but separated them from bus drivers, mailmen, and janitors.

The speech style rating component in the Anglejan and Tucker study required the informants to make subjective value judgements about each speaker, as well as a suggestion as to the occupational status of the speakers. The analysis showed that all respondents voted European French speakers higher on the occupational scale than either upper-class French Canadians or lower-class French Canadians. The workers rated all speakers lower than did either students or teachers. The subjects indicated that they considered standard European French to be more prestigious than French-Canadian French, with particular reference to the phonological and lexical systems. The research report suggested that the dissatisfaction displayed corresponded to a desire for correctness in the use of language.

Shuy and Williams (1976) suggested that Blacks generally evaluated Negro speech more favorably than did Whites. Frazer (1978) replicated a Tucker and Lambert (1969) study with 50 White and Black male and female students at the Harvard Graduate School of Education. They evaluated the speech of six American-English dialects: White radio announcers, college educated White southerners, college educated Black southerners, college educated Black southerners presently at northern Universities,

southern Black students from all-Black small southern colleges, and college educated Black southerners living in New York City. The respondents rated these speakers in terms of the following personal characteristics: intelligence, friendliness, educated speech, trustworthiness, ambition, talent, determination and honesty. The overall ranking of these groups corresponded with Tucker and Lambert's (1969) findings except for that the college-educated White southerners and the college-educated Blacks from the south attending a northern University. The ranking was as follows: a) White radio announcers, b) college educated Black southerners, c) college educated Black southerners attending northern Universities, d) college educated White southerners, e) college educated Black southerners living in New York City, and f) southern Black students from small Black southern colleges. Respondents all preferred the speaking style of the White radio announcers but the Negro informants rated the educated White southern speakers lowest while White informants rated the southern Black students from small Black colleges as least favorable. The researcher suggested that these differences mirror "basic comparisons in affectively-toned attitudes that representatives of America's major ethnic groups hold toward one another" (p. 468).

There is no indication from the research that one dialect is simpler than another. Baratz (1969) tested the proficiency of non-standard dialect speaking Black children and standard dialect speaking middle-class White children in the United States when asked to repeat sentences in each others' dialects. Baratz found that neither the White nor the Black children could correctly repeat utterances in the dialect of the other, thus suggesting that neither group was

inherently bi-dialectal.

Shuy and Williams (1976) used the respondents from one of their earlier studies (Shuy et al. 1969; cited in Shuy & Fasold, 1976), and analysed the evaluation of tape recorded speech samples of: a) Detroit speech, b) White southern speech, c) British speech, d) Negro speech, and e) standard American speech. The sample included both Negro and White informants from upper-middle, lower-middle, upper-working, lower-working class groups and male and female respondents from the age groups 10 to 12 years, 16 to 18 years and 21 years and over. The study found that standard American speech, British speech, and Detroit speech were all rated of more value than Negro speech; British speech was rated as more complex than standard American speech, which was rated as slightly more complex than Southern and Negro speech. Detroit speech, British speech, and standard American speech were all rated as the most potent of the speech types and, by contrast, Negro speech was judged as less potent, with Southern speech rated as significantly less potent than Negro speech. British speech was judged to be the most active of the speech types, followed by standard American speech and Detroit speech, and then Southern speech. The results showed that Blacks evaluated Black speech style more positively than did the Whites on the categories of value, complexity, potency and activity. There were, however, no differences between the male and female respondents and their overall attitudes.

Williams, Whitehead and Miller (1971) examined teacher evaluations of Mexican American and Anglo American students' speech and found that Anglo and Black teachers rated the Mexican children more "ethnic-non-standard" than Anglo children but Mexican teachers did not

rate the two groups any differently. Ford (1984) studied teacher evaluations of equivalent written work by students who spoke either Spanish English or standard English. The 20 teachers in one group had more than six years of teaching experience while the other group of 20 had less than three years of experience. The teachers were matched for ethnicity, Hispanic and Anglo, and for first language. Grade 3 and 4 writing passages were equated and matched with Spanish-English and standard-English speech samples. The teachers were told that the written and spoken samples had been produced by the same student and were asked to record their impressions of each child on a series of seven-point, semantic-differential scales.

The results of this study showed that regardless of the matched writing performance, the Spanish-English speakers were rated lower than were the standard-English speakers on intelligence, effectiveness of communication, confidence, ambition, pleasantness, and quality as students. Ford outlined the finding that a teacher's perception of a student's writing skills can be influenced by the student's speech style. In other words, a teacher may associate certain stereotypes with a Spanish-influenced speaker that may be so strong that any evidence regarding the student's academic writing performance will be overlooked.

There were, however, no statistical differences found between the groups of teachers on the basis of years of experience or between those who identified themselves as Hispanics and those who did not. On the social status rating, Ford (1984) found that the speakers of Spanish as a first language favored the non-Spanish influenced speakers of standard English in their mean ratings of the two speech groups. The corresponding difference in ratings for the two groups of children as

assigned by the teachers who did not speak Spanish as a first language was much higher, also in favor of the non-Spanish influenced children. The difference in the ratings for social status assigned by the teachers divided by first language was found to be significant. The report suggested that ethnicity alone does not alter ratings, but in combination with first language, it does.

Taylor (1976) developed and administered a Language Attitude Scale (L.A.S) to 422 teachers throughout the United States to ascertain their attitudes toward non-standard Black English and its use in the classroom. The items were grouped according to: the structure of non-standard English, the consequences of using and accepting non-standard English, the philosophies concerning use and acceptance of non-standard English, and the cognitive and intellectual abilities of Black English speakers. The responses were analysed as a function of geographical location, sex, race, fields of college degree, years of experience, grade assignment, racial composition of school, and parents' education. This survey demonstrated that Black teachers tended to hold more positive than negative attitudes in relation to the structure of non-standard English, but the difference was not statistically significant. Teachers from predominantly Black schools and teachers with three to five years of experience had significantly more positive than negative responses toward the structure of the dialect.

In contrast, teachers from predominantly White schools and new teachers or those with 10 years and more of experience gave significantly more negative responses toward the structure of the language. The teachers with three to five years teaching experience were more willing to accept their students' speech than were the more

experienced teachers. The teachers from integrated schools were more accepting than teachers from White schools. Concerning the use of non-standard English, the study found that the teachers from integrated and Black schools had more positive attitudes than teachers from White schools. Teachers with three to five years of teaching experience were more positive toward the student's cognitive and intellectual abilities than teachers with more than 10 years experience. The study concluded that teachers did not have only one attitude toward dialects but that they held differing ones depending on the dialectal aspect under discussion. The report suggested that the teaching population with three to five years experience would be the most receptive to testing out new methodologies, programs and innovations in language teaching.

Implications of Attitudes Toward Language Variation

Children whose dominant language is a non-standard dialect experience a break in language learning when they enter a classroom where standard English is the only medium of communication. Some of the difficulties experienced by dialect-speaking children were discussed by Eagelson, Kaldor and Ian (1982). They suggested that the child who speaks a non-standard dialect may not understand the monolingual standard English being spoken and the teacher may not understand the child. Communication problems will be compounded if the child hears "comments expressing unfavorable opinions about her/his mother tongue" (p.64). The expression of such unfavorable opinions takes several forms and likely comes from several sources. The teacher as the key classroom facilitator plays an important role in the acceptance or rejection of

the student's language. There are many questions concerning how teachers transmit their attitudes and expectations.

Giles theory of interpersonal accommodation (Giles & Powesland, 1975) proposed that individuals alter their speech style toward or away from the speech style of others, in order to indicate approval or disapproval. Dwyer (1977) described a shift in speech style toward that of another as convergence, while a shift away from the other style of speech represents divergence. In the classroom this is a very complex interaction with divergent and convergent behaviors occurring in different situations and at different levels. This theory, if examined as a vehicle by which teacher attitudes are communicated to children, has many implications for the cross-cultural classroom.

Dwyer suggested that if the teacher's attitudes toward his pupils are negative, he will make few attempts to converge, signalling not only that he does not desire their social approval, but also that he has little approval of them. In such a case, "while a 'non-shift' interaction may indicate a neutrality of attitude, diverging strategies both overt and covert, may signal his negative attitudes and expectations" (p. 103).

There are other teacher behaviors that are suggested in the literature as means of transmitting attitudes (Dwyer, 1977; Giles & Powesland, 1975). One example given by Bernstein (1973) is the continual use of a phrase such as "say it again darling, I didn't understand you" (p.149). An expression such as this may produce withdrawal or silence from the dialect-speaking child. This is an example of how the problems in a non-standard classroom may not rise solely from the dialect, but from the attitude of teachers toward

allowing other dialects in the classroom (Dwyer, 1976; Erickson, 1969; Labov, 1969; Shuy, 1972).

Such research leads to questions about whether teacher attitudes toward dialects and dialect speakers have significant effects on students' academic performance. Discussions in education often refer to the suggestion that the teacher's attitude toward the child plays an important role in how that child views herself/himself and how successful she/he is in school (Rosenthal, 1968). Rosenthal's "self fulfilling prophecy" indicates that the progress of a child can be dramatically affected by how she/he is labelled in the education system. The process through which teachers transmit their expectations was studied by Cooper (1971) and he found there were differences in the teachers' behaviors towards those students whom they expected to perform well and those who were expected to perform poorly.

A person's language is important to him and if the language used by the child is considered by the teacher to be inadequate and invalid, the child will receive that message and likely will interpret that to be a criticism not only of his language but of himself as well. If a student receives information from the teacher that his language is viewed as deficient or wrong, there are many negative experiences that could result. The child may start to feel ashamed of his speech community, his friends and his family for their manner of speaking. The child may become antagonistic toward the school and teacher. As Trudgill (1975) said, "In any case, strongly felt or not, teachers' attitudes to children's language can be very influential in shaping relationships between the child and the school, and in affecting a child's attitude to education generally" (p.61).

Brumby and Vaszolyi (1977) edited a collection of essays concerning language and Aboriginal education, summed up the importance of teachers' recognition of dialect differences and made the following statement for the Australian setting:

It is essential that teachers avoid making value judgements in terms of `right` and `wrong` in relation to the two dialects. Each should be treated as different but equal parts of the English language. Any reduction of the `shame` factor among Aboriginal children in relation to their language is a step in the right direction. (p. 203)

Dwyer (1976), Labov (1969), and Trudgill (1975) agreed that educators need to be made more aware of the two-way communication difficulties that can arise between the teacher and the children in cross-cultural and bidialectal classrooms. Teachers must also become more careful in the interpretation and use of oral language test results, particularly if the test results are to be compared to the standard English speaking form.

If attitudes are formed over time and are slow to change, and if, as Trudgill (1975) suggested, negative attitudes toward dialects are due to lack of information about language variation, then it is crucial that educators receive more information about languages and their variation. There is a need to increase the level of awareness concerning the concerns and problems that may arise due to teacher attitudes toward student language. Educators not only need to learn about their own language dispositions, but they must develop and extend positive attitudes to the children. They must teach effective language classes, in which children will learn the skills and values of being bidialectal.

Summary

The Indigenous people in Queensland and Saskatchewan have had similar experiences through contact with European societies. The researcher found many parallels through an examination of the historical developments of formal education. At present, the Indigenous people in Queensland live throughout the state in urban and rural areas and the children attend both state and church schools. Similarly, the Indigenous people in Saskatchewan live in both the northern and southern areas and the children attend schools administered by the federal, provincial and Indian band governments.

Indigenous people in these places have a wide variety of language backgrounds. There are some who are fluent speakers of the tribal languages, some who are bilingual English and Indigenous language speakers, some who speak a non-standard dialect of English, and some who are standard English speakers. In many cases, the language variety of the children as they first come to school is different from the language of the school. The dialects of English described by Dwyer (1976), Leap (1982), Sandefur (1981) and Shnukal (1982) differ from standard English in some or all of the following: vocabulary, grammar, phonology and intonation.

Research evidence shows a lack of success of other-dialect speakers in the schooling process. However, the theories as to the reasons, for the low success rate as well as solutions to the situation are inconclusive. The two most prominent theories are known as the "deficit" and "different" theories. The deficit theory suggests that

the language of the non-standard dialect speakers is deficient. The followers of this theory (Bereitor and Engleman, 1966; Bernstein, 1973) support programs that focus on early intervention and remediation in order to bring the child to what they would call a more advanced level of language, that which is known as the standard dialect.

The "different" theory suggests that each dialect is a complete communication system which, like other languages, is capable of all of the operations required by its speakers. Followers of the "different" theory (Cazden, John, & Hymes, 1972; Dwyer, 1976; & Labov, 1969) stated that each dialect allows the speakers to perform all of the cognitive operations of other languages. Dialects may differ in structure and function but are equal in their capabilities.

It has been suggested by Dwyer (1976), Erickson (1969), Labov (1969) and Shuy (1972) that many of the problems of the non-standard classroom do not arise from the dialect itself but from the attitude of the teachers toward allowing the language experiences of other dialects into the classroom.

With these concerns in mind it is important to identify the demographic characteristics of teachers who hold various attitudes toward language variation. In attitude research (Fraser, 1976 ; Shuy & Williams, 1976; Tucker & Lambert, 1969; and Williams, Whitehead, & Miller, 1971) the findings indicated that the cultural background of teachers related to their attitudinal judgements. In contrast, Ford (1984) indicated that the cultural background alone did not make a difference in attitudinal judgement, but in conjunction with language it was a significant indicator.

The kind of teaching experience and the number of years of teaching

have appeared to be significantly correlated to attitudinal judgements in some studies. Taylor (1976) found that teachers with three to five years of teaching had significantly more positive attitudes toward dialects than either new teachers or those with more than ten years of teaching. In support of this result, Ford (1984) found that there were no statistically significant differences between the group of teachers with zero to three years of teaching and the group with six to twenty five years. The experience a teacher has had with dialect speakers has been shown to be an indicator of attitude toward that language variation. Taylor (1976) found that teachers who had worked in Black and integrated schools hold more positive attitudes toward language variety than teachers who had worked predominantly in White schools.

The research of Anglejan and Tucker (1970) indicated that the amount of education that the respondents had had correlated with their attitudinal judgements and those with more education had significantly more positive attitudes toward dialect speakers than those with less education. The research literature gave no indication that the sex or age of teachers was a significant factor in attitudinal judgements.

The literature suggested that there are many similarities between the language situation for Aboriginal Australian children and Native Canadian children. The examination of teacher attitudes and teacher characteristics, as well as the comparison between them in these two countries, should provide useful information about teacher preparation and selection in these particular cross-cultural education situations. Further research in attitudes toward language variation is needed in order to improve the quality of language education for other dialect speakers who are of Indigenous background.

Overall, the literature indicates that there are characteristics of teachers that may relate to the attitudes they hold towards the oral English of Indigenous students. It was against the theoretical framework and research findings reported in this chapter that the present study was formulated.

Chapter 3

PROCEDURES OF THE STUDY

The following section describes the research methodology, the data collection instrument designed for this study, the sample and sampling procedures, as well as the procedures followed in analyzing the data.

The Research Methodology

The researcher used a descriptive survey methodology in this study. The data were gathered by the administration of the Indigenous Students' Oral English Questionnaire to 217 teachers of Indigenous children in Queensland, Australia and Saskatchewan, Canada during 1983.

The Data Collection Instrument

The Construction of the Questionnaire

In order to measure the variables relating to the attitudes of the teachers toward the speech of their Indigenous students, the Indigenous Students' Oral English Questionnaire was developed. A review of the literature and a search of existing instruments yielded no appropriate instrument, however; Koenigs' (1972) instrument with modification was found to be appropriate to measure some of the independent variables. In order to measure the background variables - sex, age, years of

teaching experience, years of experience teaching Indigenous children - items 1-6 in Section I were adapted from Koenig's instrument. Items 7-38 were developed by the researcher in order to measure language, ethnic origin, academic and professional training, inservice, and the language situation in the schools of the Saskatchewan group. This development consisted of structuring alternative responses to the variable stem. These alternative responses were verified by a panel of experts who were familiar with the field. They inspected the items to see if they matched the construct and to attest to the face validity. The same pattern was followed for construction of Section I of the Australian Questionnaire.

The attitudinal variables required the development of Section II. Attitudes toward the following six components - vocabulary, grammar, intonation, phonology, classroom acceptability, and validity of the linguistic system - needed to be measured. The researcher developed items to measure each of these components. In the vocabulary category the items were addressing the extent of vocabulary and the variety of vocabulary items that were not a part of standard English. In the grammar category the items examined the similarities and differences from standard English as well as the predictability of these structures. In the intonation category the differences from standard English were explored as well as the correctness. In the phonology category the items examined the consistency of the student's phonological system, the acceptability of this phonological system and the need for replacement by standard English. In the category of classroom acceptability the items referred to the adequacy and acceptability of the students' speech for various classroom activities and requirements. The validity of the

linguistic system category included items that attempted to determine the cause of the variation and items that questioned the validity of this speech as a complete linguistic system. There were 38 items in the total scale and the researcher chose a Likert format with a scale of five alternatives for Section II. This portion of the questionnaire was also given to the panel of experts who examined it for construct and face validity. These items were then modified and revised for the pilot study.

The Saskatchewan Pilot Study

In order to determine clarity and appropriateness of the items as well as to determine the administrative ease of the instrument, the Indigenous Students' Oral English Questionnaire was administered to eight Indigenous and Non-Indigenous teachers who have taught Indigenous children in Saskatchewan. These teachers did not participate in the major study. Each respondent answered the questions and was requested to comment and offer suggestions concerning any of the items.

In the development of the instrument, in order to determine discrimination between high and low scores and correlation with the total score, an item analysis was performed. The responses on the questionnaire were scored: strongly agree, agree, undecided, disagree, or strongly disagree, as indicated by the numbers 5, 4, 3, 2, 1, respectively. Negatively worded items were scored in reverse. Items that had low correlation and low discrimination were re-examined, some were rewritten and others discarded. In this re-examination the aforementioned criticisms of the respondents were taken into consideration.

In order to determine internal consistency of the instrument a Cronbach program for a reliability analysis (Specht & Bubolz, 1981) was conducted. This procedure yielded a reliability coefficient of .93 which indicated that it had internal consistency.

The Australian Pilot Study

Prior to the pilot study in Queensland, Australia, the researcher examined the terminology of the instrument for appropriateness in the Australian setting. A teacher trainer employed by the Department of Education in an Indigenous teacher training program reviewed the instrument and made revision recommendations concerning Australian English usage. Several phrases and terms that were contained in the Canadian instrument were unfamiliar and inappropriate to the Australian teachers and they were changed. The researcher piloted this instrument with eight Indigenous and Non-Indigenous teachers who have taught Indigenous children. Procedures similar to those utilized in the Saskatchewan pilot were followed. The responses to the attitudinal judgement items were entered into a Cronbach program for a reliability analysis and the reliability coefficient was .96, indicating internal consistency. A Spearman Brown reliability analysis was done and the resulting reliability coefficient was .71.

The Final Questionnaire

The researcher organized the final questionnaire in the following manner: Section I contained items representing the demographic characteristics of the teaching population and a question to determine the language spoken in the classroom and in the community. Section II

consisted of two portions. The first portion contained four items to ascertain the frequency of the dialect features, and the second portion consisted of the remaining 28 attitudinal judgement items listed in random order. Section III consisted of a series of questions, which asked the teachers to make suggestions in order of importance, as to the needs in Indigenous education. They were asked to rank them on a scale of one to five.

Factorial Validity

In order to establish the factorial validity of the Indigenous Oral English Questionnaire, the responses of the total sample of 217 teachers on the items were subject to a Principal Component Factor Analysis with a Varimax rotation. The criteria for the acceptance of the factor solutions were: (1) the eigenvalues for each factor were greater than 1.0; (2) the factor accounted for greater than 5% of the total variance; (3) at least three, but preferably five or more items, had their primary loadings on each factor; and (4) the factor was meaningful. Items with over 10% of their variance accounted for by a factor were retained.

The results of the factor analyses have been presented in Table 1. A four-factor solution was adopted. Inspection of the following items with their primary loadings on each factor yielded the following definitions:

Table 1

Results of Factor Analysis

Item	Factor 1	Factor 2	Factor 3	Factor 4
1	<u>0.72160</u>	0.16470	-0.17711	0.07585
2	<u>0.13216</u>	<u>0.47092</u>	0.13405	0.20871
3	<u>0.35562</u>	<u>0.02706</u>	-0.08052	-0.00427
4	<u>0.20199</u>	<u>0.46338</u>	0.07902	0.06284
5	0.15842	<u>0.36069</u>	-0.05558	0.05401
6	<u>0.36178</u>	<u>0.29878</u>	-0.35609	-0.06515
7	-0.31988	<u>0.40254</u>	0.21882	0.25148
8	<u>0.76914</u>	-0.09880	-0.07831	0.19615
9	<u>0.70361</u>	0.06460	-0.12439	0.13123
10	<u>0.64075</u>	0.04156	-0.04156	0.06341
11	-0.47060	0.12564	0.26917	0.16169
12	-0.19377	0.08529	<u>0.56279</u>	0.13047
13	-0.03708	<u>0.53789</u>	-0.04540	0.13906
14	-0.06549	<u>0.41314</u>	0.26681	<u>0.46497</u>
15	<u>0.61306</u>	0.18520	-0.16347	-0.20422
16	<u>0.19577</u>	<u>0.59645</u>	0.06820	0.07155
17	-0.43965	-0.05961	<u>0.44057</u>	0.24293
18	-0.36683	0.11212	<u>0.51299</u>	0.33896
19	-0.36056	0.00601	<u>0.61319</u>	0.18734
20	-0.15025	0.34658	<u>0.37370</u>	0.15178
21	0.00265	0.20237	<u>0.49019</u>	0.02176
22	0.17168	0.10406	<u>0.01858</u>	0.29453
23	0.10213	0.23002	0.01133	<u>0.51886</u>
24	-0.35447	<u>0.35824</u>	0.17918	<u>0.26902</u>
25	0.03625	<u>0.46887</u>	0.07859	0.39165
26	0.07507	<u>0.02631</u>	<u>0.71943</u>	-0.12819
27	-0.21261	0.32780	<u>0.09231</u>	<u>0.61542</u>
28	-0.14908	<u>0.54705</u>	0.18501	<u>0.19883</u>
h	5.36233	3.70831	1.13328	0.73988

Note. Item primary loadings are underlined.

Factor 1 - Dialect Description: The teachers' assessment of the dialectal nature of the students' speech.

1. There are grammatical features of my students' oral English that I can identify as different from formal English (positive loading).

3. There is a predictable pattern in the grammatical structures of the oral English of my students (positive loading).

6. My students' speech reflects all of the grammatical rules of formal oral English (positive loading).

8. My students' speech has its own linguistic system (positive loading).

9. My students consistently replace some sounds in the formal English sound system with other sounds (positive loading).

10. The oral English of my students includes many words that are not included in formal English (positive loading).

11. The intonation patterns of my students are often incorrect (negative loading).

15. The oral English that my students speak has different intonation patterns than formal English (positive loading).

Factor 2 - Difference/Deficit: The teachers' attitudinal judgement of the students' speech as to whether it is different from standard English or whether it is a deficient language form.

2. New vocabulary items that students bring from home to the language class should not be accepted in the classroom (positive loading).

4. The speech of my students indicates their cognitive abilities (positive loading).

5. Any differences between sounds of my students' oral English and

formal English are because these students have different vocal cords (positive loading).

7. My students' vocabulary is very limited (positive loading).

13. These students should be taught to reproduce exactly in their speech the sound system of formal English (positive loading).

16. Any differences between sounds in my students' oral English and formal English is the result of careless habits (positive loading).

24. Outside of school my students hear little well-formed language (positive loading).

25. Formal English is more correct than my students' oral English (positive loading).

28. The speech patterns of my students are due to lack of stimulation to talk or read at home (positive loading).

Factor 3 - Acceptability/Unacceptability: The teachers' attitudinal judgement of the acceptability or unacceptability of the students' speech in the classroom and community.

12. For their grade placement, my students can articulate ideas and feelings adequately (positive loading).

17. My students' oral English causes communication difficulties and misunderstandings (positive loading).

18. My students' oral English is detrimental to their overall learning in this classroom (positive loading).

19. My students' speech patterns are detrimental to their learning to read formal English (positive loading).

20. The students' oral English limits their ability to communicate in the community (positive loading).

21. The oral English of my students is acceptable to me for most

learning activities (positive loading).

26. The oral English of my students is adequate for dealing with all concepts and modes of thinking in the classroom (positive loading).

Factor 4 - Linguistic Adequacy/Inadequacy: The teachers' attitudinal judgement of the students' language as an adequate or inadequate linguistic system for use in the school curriculum.

14. The oral English of my students is a poorer quality communication system than formal English (positive loading).

23. The speech patterns of my students should not be included in the language arts curriculum (positive loading).

27. Standards of literacy and articulateness will drop if these students are allowed to use their speech forms in the school (positive loading).

Since 10% of the variance on item 22 was not accounted for by any of the factors, this item was dropped from any further analysis. The individual's score on a factor was obtained by adding the weighted responses to the items with their primary loadings on that factor. The scores on items and factors constituted the attitudinal data analyzed in this study.

The Sample and Sampling Procedures

There were major difficulties in obtaining a representative sample since data on Indigenous children in schools and Indigenous teachers were not kept because of existing human rights legislation. The researcher, therefore, could not ascertain the population of either teachers or students from which to sample. Due to the above

restrictions the researcher adopted the following procedure: contacted Directors of Education in high-density Native population districts and asked them to identify schools they believed to have at least a 10% Indigenous student population. The researcher then sampled from those schools recommended.

In Saskatchewan the researcher wrote to 20 boards in central and northern Saskatchewan to ask for permission to survey their teachers. Fourteen school boards agreed to participate. Schools were selected that met the following criteria: 1) represented the following types of school systems: band control, federal and provincial and 2) employed both Indigenous and Non-Indigenous teachers wherever possible. The second criteria was the more difficult to meet and the researcher had to actively search out schools that met this criteria. Hence the randomization of the sample may have been altered in order to select schools with Indigenous teachers. Due to the lack of time and travel funds, as well as the refusal of some school districts to participate, other schools were not surveyed.

The Queensland school system is organized in a slightly different fashion than in Saskatchewan, but taking the similarities and differences into consideration the sampling was done in a comparable manner. The researcher corresponded with the Department of Education in Queensland to get permission to undertake the survey with their teachers and then inquired as to the Indigenous student population as well as the Indigenous teacher population in the various schools. The researcher received permission from the Department of Education in Brisbane to visit the schools, and advice as to which schools would have at least 10% Indigenous students. Schools were selected that met the following

criteria: represented community schools on reserves and integrated schools, and employed both Indigenous and non-Indigenous teachers if possible. Similarly to Saskatchewan, the limited number of Indigenous teachers affected the selection of schools, and due to the limitations of time and travel funds, schools with Indigenous teachers were given priority and selected first.

Data Collection Procedures

The researcher visited and introduced the questionnaire to 13 of the schools in the Australian sample, three schools were visited by the Aboriginal Education Consultant from the Department of Education who administered the questionnaire on a regular visit to these isolated schools, and the questionnaires were sent to one school through the mail, administered by the principal, and returned to the researcher by mail.

The researcher visited and introduced the questionnaire to 22 of the schools in the Saskatchewan sample. Three schools were requested to return them by mail and the rest were collected by the researcher. The term Indian English was used in the Saskatchewan questionnaire. The researcher did not think that this term had been used or was understood in Saskatchewan and felt that there was a need to define the term. The following verbal explanation was given to the teachers.

I have used the term Indian English in this questionnaire, which you may or may not be familiar with. I am suggesting that in some schools in this province some Indian/Metis children are using a version of English that differs from

the formal English studied in schools. Whether that is so in this school or not, I would ask you to assess.

Statistical Hypotheses

In order to test the research hypotheses cited in Chapter One, the following statistical hypotheses were tested:

Hypothesis One: There would be no significant differences between the mean scores of Canadian Native teachers and Non-Native teachers on the attitudinal factors of the Indigenous Students' Oral English Questionnaire.

Hypothesis Two: There would be no significant differences between the mean scores of Australian Aboriginal and Non-Aboriginal teachers on the attitudinal factors of the Indigenous Students' Oral English Questionnaire.

Hypothesis Three: There would be no significant differences between the mean scores of Australian Aboriginal and Canadian Native teachers on the attitudinal factors of the Indigenous Students' Oral English Questionnaire.

Hypothesis Four: There would be no significant differences between the mean scores of the teachers with different language backgrounds on the attitudinal factors of the Indigenous Students' Oral English Questionnaire.

Hypothesis Five: There would be no significant differences between the mean scores of the teachers with varying amounts and types of teaching experience on the attitudinal factors of the Indigenous Students' Oral English Questionnaire.

Hypothesis Six: There would be no significant differences between the mean scores of the teachers with varying education background on the attitudinal factors of the Indigenous Students' Oral English Questionnaire.

Hypothesis Seven: There would be no significant differences between the mean scores of the teachers with different sexes and ages on the attitudinal factors of the Indigenous Students' Oral English Questionnaire.

When the findings from of the statistical analysis resulted in the acceptance of the statistical hypothesis, the corresponding research hypothesis was rejected. Conversely when the findings from the statistical hypothesis resulted in the rejection of the statistical hypothesis, the corresponding research hypothesis was accepted.

Data Analysis Procedures

For the purpose of analyzing the data, the dependent variables measured by the responses to attitudinal items and to the attitudinal factors were assumed to be measured at the interval scale of measure. The independent variables - sex, language, culture, and type of educational training - were assumed to be at the nominal level and the variables age, experience, and amount of educational training were assumed to be at the interval level.

In order to describe the independent variables, the researcher used descriptive statistical procedures and frequencies were obtained. In order to test the statistical hypotheses that there were significant differences between two subsamples or groups within the samples where

the independent variable was at the nominal or ordinal scale of measure one-way analyses of variance were performed accompanied by Newman-Keuls Comparisons of ordered means. For the purposes of statistical decision making, the .05 level of significance was adopted.

Chapter 4

DATA ANALYSIS AND RESULTS

In this chapter the results of the data collection procedures and the findings from the analyses of the data regarding each hypothesis are presented. This chapter includes descriptions of the sample, the independent variables, and the items that comprise the dependent variables. Reports of the hypotheses testing and a discussion of the outcomes are included. The chapter ends with a summary of the results as described and discussed.

Description of the Sample

For the Total sample the questionnaire was completed by 217 or 66.16% of the 328 teachers, to whom it was administered (see Table 2). For the Australian sample the questionnaire was administered to 130 teachers and 96 responded for a return of 73.85%. For the Canadian sample the questionnaire was administered to 198 teachers and 121 responded for a return of 61.11%.

For the Total sample Table 2 shows that the staff sizes of the sample schools ranged from 3 to 20 teachers with an average of 8.41 teachers. The percentage of returns from all schools ranged from 100% from 10 schools to no returns from one school in Saskatchewan. The average return from the questionnaire per school was 5.56.

Table 2

Distribution of Sample Schools by Staff and Returns

Schools	Total Staff	Questionnaires Completed	Percentage
Australia			
1	8	7	87.5
2	13	11	84.6
3	15	5	33.3
4	4	4	100.0
5	4	4	100.0
6	5	5	100.0
7	5	4	80.0
8	4	1	25.0
9	4	2	50.0
10	15	13	86.7
11	12	6	50.0
12	5	4	80.0
13	8	8	100.0
14	9	5	55.6
15	6	4	66.7
16	7	7	100.0
17	6	6	100.0
Australian Average	130 7.65	96 5.65	73.85
Canada			
1	7	5	71.4
2	9	6	66.7
3	13	13	100.0
4	12	9	75.0
5	8	3	37.5
6	17	16	94.1
7	5	5	100.0
8	8	5	62.5
9	19	8	42.1
10	5	4	80.0
11	5	4	80.0
12	20	20	100.0
13	7	3	42.9
14	5	4	80.0
15	5	2	40.0
16	6	5	83.3
17	10	9	90.0
18	5	4	80.0
19	7	1	14.2
20	3	3	100.0
21	8	2	25.0
22	14	0	0.0
Canadian Average	198 9.00	121 5.50	61.11
Total Average	328 8.41	217 5.56	66.16

The schools represented in the Australian sample included 10 schools in Aboriginal communities and seven integrated state schools in Queensland. In the Australian sample 40.4% of the teachers were from community schools on Aboriginal reserves, and 58.8% were from integrated schools. There was no indication as to the type of school for .8% of the Australian teachers. The 17 Australian schools had an average of 7.65 teachers.

In Canada the following school systems were represented in the sample: seven band controlled schools, four federal schools on reserves, three northern provincial schools in Metis communities and eight provincial integrated schools in Saskatchewan. The Canadian sample consisted of 50.4% of teachers from integrated provincial schools, 38% from band controlled and federal schools on reserves, and 11.6% from provincial schools in northern Metis communities. The 22 Canadian schools had an average of 9 teachers.

Description of Independent Variables

In Table 3 the cultural and linguistic backgrounds of the teachers have been outlined. In terms of cultural background 15% of the teachers in Canada were of Indigenous origin in comparison to 13.5% of the Australian teachers. In terms of language background, 55.1% of all of the teachers spoke and understood English only, 10.6% spoke or understood an Indigenous language, 19% spoke or understood Indigenous English and 15.3% spoke English and another language. When comparing the two subsamples, considerably more Australian teachers, 35.4%, than Canadian teachers, 5.8%, said they either understood or spoke Indigenous

English. Comparable numbers of the Australian teachers (99.4%), and the Canadian teachers (11.7%) said that they either spoke or understood an Indigenous language. Since the analyses of variance procedures to be used in testing the hypothesis required five or more respondents per cell and since, the sample of Torres Strait Island teachers was too small the researcher regrouped the Aboriginal and Island teachers into one group called Australian Indigenous teachers. Similarly the Indian and Metis teachers were regrouped as Canadian Indigenous teachers.

In Table 4, the distribution of the Total, Canadian and Australian teachers by their years of teaching experience and their years of experience with Indigenous children have been displayed. In the Total sample 40 or 18.4% of the teachers had one to two years of teaching experience, 25.8% had three to five years, 20.3% had six to 10 years and 35.5% had more than 11 years of experience. In terms of teaching experience, 35.5% of the Canadian teachers had less than five years experience and, 42.1% had more than 11 years. In the Australian sample, 55.2% had less than five years of teaching experience and 27.1% had more than 11 years.

In terms of experience teaching Indigenous children, 44.6% of the Canadian teachers had less than five years and 23.2% had more than 11 years. In the Australian sample, 66.7% of the teachers had five years or less of experience teaching Indigenous children and 13.5% of the teachers had more than 11 years. The Australian teachers generally had less experience than was true of their Canadian counterparts, as indicated by the cumulative frequencies, but the Canadian teachers were more experienced at teaching Indigenous children.

Table 3

Canadian and Australian Teachers by Cultural and LanguageBackground

	Total			Canadian			Australian		
	freq.	%	adj. cum.	freq.	%	adj. cum.	freq.	%	adj. cum.
<u>Culture</u>									
Indian	9	4.2	4.2	9	7.5	7.5	0	0.0	0.0
Metis	9	4.2	8.4	9	7.5	15.0	0	0.0	0.0
Other Canadian	102	47.2	55.6	102	85.0	100.0	0	0.0	0.0
Aboriginal	9	4.2	59.7	0	0.0	0.0	9	9.4	9.4
Islander	4	1.9	61.6	0	0.0	0.0	4	4.2	13.5
other Australian	83	38.4	100.0	0	0.0	0.0	83	86.5	100.0
Total	216	100.0		120	100.0		96	100.0	
No response	1			1			0		

	Total			Canadian			Australian		
	freq.	%	adj. cum.	freq.	%	adj. cum.	freq.	%	adj. cum.
<u>Language</u>									
Eng. only	119	55.1	55.1	73	60.8	60.8	46	47.9	47.9
Eng. +Ind. lang.	23	10.6	65.7	14	11.7	72.5	9	9.4	57.3
Eng. +Ind. Eng.	41	19.0	84.7	7	5.8	78.3	34	35.4	92.7
Eng. +other	33	15.3	100.0	26	21.7	100.0	7	7.3	100.0
Total	216	100.0		120	100.0		96	100.0	
No response	1			1			0		

Note. Herein and hereafter the following terms will be abbreviated as: Eng. = English; Ind. lang. = Indigenous language; and Ind. Eng. = Indigenous English.

Table 4

Canadian and Australian Teachers by Years of Teaching Experienceand Years of Experience with Indigenous Children

	Total			Canadian			Australian		
	freq.	%	adj. cum.	freq.	%	adj. cum.	freq.	%	adj. cum.
<u>Number of Years</u>									
1-2	40	18.4	18.4	19	15.7	15.7	21	21.9	21.9
3-5	56	25.8	44.2	24	19.8	35.5	32	33.3	55.2
6-10	44	20.3	64.5	27	22.3	57.9	17	17.7	72.9
11+	77	35.5	100.0	51	42.1	100.0	26	27.1	100.0
Total	217	100.0		121	100.0		96	100.0	
<u>Years of Experience with Indigenous Children</u>									
1-2	65	30.0	30.0	24	19.8	19.8	41	42.7	42.7
3-5	53	24.4	54.4	30	24.8	44.6	23	24.0	66.7
6-10	47	21.7	76.0	28	23.1	67.8	19	19.8	86.5
11+	52	24.0	100.0	39	32.2	100.0	13	13.5	100.0
Total	217	100.0		121	100.0		96	100.0	

In Table 5 the number of years that the teachers had spent in post-secondary training and the number of specialty courses taken have been displayed. In terms of post secondary education, 13.4% of all of the teachers had two years or less of training and 65% had three or four years of training. This may have been indicative of a university degree.

A higher proportion of Australians, (77.1%) than Canadians (55.4%) had three to four years of training. A greater proportion of Canadians (28.9%) than Australians (12.5%) had five years or more of post-secondary education. This would probably indicate that they may have taken two degrees or some post-graduate studies.

In terms of the specialty courses taken by all of the the participants 70.5% had taken four courses or fewer in the following areas: linguistics, cultural anthropology, sociology of education, Indigenous studies/education, Indigenous language, English as a second language/dialect, cross-cultural education, and language teaching methodologies. Of the Total sample 17.5% of the Total sample had taken more than seven courses. Inspection of Table 4 showed that 28.1% of the Australian sample and 16.5% of the Canadian sample had not taken any of the listed specialty courses. The teachers who had taken five or six specialty courses in Canada comprised 18.2% of the sample, while in Australia only 4.2% of the sample had taken five or six such courses of study.

The age of the teachers have been presented in Table 6. Inspection of this table showed that the Australian sample was younger than the Canadian sample with 57.3% of the Australian teachers being 29 years old or less, compared to only 28.7% of the Canadian teachers at this age.

Table 5

Canadian and Australian Teachers by Years of Training and Numbers
of Specialty Courses

	Total			Canadian			Australian		
	freq.	%	%	freq.	%	%	freq.	%	%
	adj. cum.			adj. cum.			adj. cum.		
Years of Training									
1-2	29	13.4	13.4	19	15.7	15.7	10	10.4	10.4
3-4	141	65.0	78.3	67	55.4	71.1	74	77.1	87.5
5+	47	21.7	100.0	35	28.9	100.0	12	19.5	100.0
Total	217	100.0		121	100.0		96	100.0	
Number of Specialty Courses									
0	47	21.7	21.7	20	16.5	16.5	27	28.1	28.1
1-2	50	23.0	44.7	27	22.3	38.8	23	24.0	52.1
3-4	56	25.8	70.5	28	23.1	62.0	28	29.2	81.3
5-6	26	12.0	82.5	22	18.2	80.2	4	4.2	85.4
7+	38	17.5	100.0	24	19.8	100.0	14	14.6	100.0
Total	217	100.0		121	100.0		96	100.0	

Table 6

Canadian and Australian Teachers by Age

	Total			Canadian			Australian		
	freq.	%	%	freq.	%	%	freq.	%	%
	adj. cum.			adj. cum.			adj. cum.		
Age Groups									
20-24 yrs	41	19.4	19.4	5	4.3	4.3	36	37.5	37.5
25-29 yrs	47	22.3	41.7	28	24.3	28.7	19	19.8	57.3
30-34 yrs	51	24.2	65.9	32	27.8	56.5	19	19.8	77.1
35-44 yrs	34	16.1	82.0	24	20.9	77.4	10	10.4	87.1
45+yrs	38	18.0	100.0	26	22.6	100.0	12	12.5	100.0
Total	211	100.0		115	100.0		96	100.0	
No response	6			6			0		

Similarly 37.5% of the Australian teachers were 20 to 24 years old compared to only 4.3% of the Canadian sample. A further examination of the table showed that 20.9% of the Canadian teachers were in the 35 to 44 years group and 22.6% were 45 years or over. When the proportion of Canadian teachers that were over 35 years of age was compared to the proportion of Australian teachers over the age of 35, the percentages of 43.5% and 22.9% resulted.

The gender of the teachers in the study have been presented in Table 7. Inspection of this table showed that nearly two thirds or 60.9% of the total group were female. In the Canadian sample 67% of the teachers were female, compared to 53.8% in the Australian sample.

Table 7

Canadian and Australian Teachers by Gender

	Total			Canadian			Australian		
	freq.	%	%	freq.	%	%	freq.	%	%
		adj.	cum.		adj.	cum.		adj.	cum.
	Gender Groups								
Female	123	60.9	60.9	73	67.0	67.0	50	53.8	53.8
Male	79	39.1	100.0	36	33.0	100.0	43	46.2	100.0
Total	217	100.0	100.0	121	100.0	100.0	96	100.0	100.0
No response	15			12			3		

The group means for age, teaching experience, experience teaching Indigenous children, years of post-secondary education and number of specialty courses that relate to language and cross-cultural education for the teachers have been presented in Table 8. Inspection of this table showed that the Canadian teachers were six years older on the average than the Australian teachers; the Canadians also had an average

of three more years of teaching experience; and three more years of experience with Indigenous children. The Canadian teachers had an average of 3.94 years of post-secondary education compared to the Australian teachers whose average was 3.30. The Canadian teachers had had more specialty courses as indicated by the mean of 4.22 as compared to the mean of 2.95 for the Australian sample.

Table 8

Summary Table of Independent Variables

	X Age	X Exp.	X Exp.(Ind.)	X Ed.	X Sp. Courses
Total	33.60	9.81	6.98	3.66	3.65
Canadian	36.00	11.20	8.26	3.94	4.22
Australian	30.65	8.05	5.37	3.30	2.95

Note. The variables were abbreviated as follows: Experience = Exp.; Experience with Indigenous children = Exp.(Ind.); Education = Ed.; and Specialty Courses = Sp. Courses.

Description of the Responses on the Dependant Variables

For the Total, Australian, and Canadian samples, respectively, Tables 9, 10 and 11 present the total response, the percentage of responses at each rating, and the mean response for each item. The response range of one to five indicates the level of response to each item. Those items that were negatively worded on the questionnaire were reversed for the purpose of this table. The Total sample as shown in Table 9, gave a range of responses to all items showing a

Table 9

Frequencies and Means of Item Responses for Total Sample

Item	N	Adjusted Frequencies					\bar{X}
		1	2	3	4	5	
1	211	2.8	6.5	7.9	45.8	37.0	4.08
2	211	4.3	9.5	18.0	36.0	32.2	3.83
3	214	2.8	8.9	23.8	49.1	15.4	3.65
4	211	4.3	17.1	19.0	31.3	28.4	3.63
5	214	1.4	.9	15.4	20.6	61.7	4.40
6	214	3.7	11.2	11.2	48.1	25.7	3.81
7	217	13.4	28.6	9.7	31.3	17.1	3.10
8	211	6.2	14.7	26.5	33.6	19.0	3.45
9	214	7.9	19.6	11.2	45.3	15.9	3.42
10	216	7.4	35.2	8.2	35.2	13.9	3.13
11	214	6.1	28.3	20.1	28.0	7.5	2.93
12	217	11.1	33.6	6.5	38.2	10.6	3.04
13	214	6.5	22.0	24.8	32.7	14.0	3.26
14	213	6.1	20.2	23.0	31.9	18.8	3.37
15	215	5.1	14.0	17.2	52.6	11.2	3.51
16	214	6.5	13.6	15.0	37.4	27.6	3.66
17	212	6.6	32.1	11.8	36.8	12.7	3.17
18	215	6.0	21.9	13.0	43.7	15.3	3.41
19	215	9.3	32.1	16.7	30.7	11.2	3.02
20	214	3.3	9.8	11.7	43.5	31.8	3.91
21	215	1.4	14.4	4.7	64.2	15.3	3.78
22	213	17.4	31.5	22.5	20.7	8.0	2.70
23	213	2.3	17.8	34.3	32.9	12.7	3.36
24	212	13.7	35.8	22.2	19.8	8.5	2.74
25	211	6.6	30.8	25.6	24.2	12.8	3.06
26	214	5.1	27.6	20.6	38.8	7.9	3.17
27	213	4.7	21.6	26.3	37.1	10.3	3.27
28	214	15.4	29.4	24.3	20.1	10.7	2.81

differentiation among respondents. The mean responses ranged from a low of 2.70 on item 22 to a high of 4.40 on item 5. Item 22 was the only item that did not load on the Factor Analysis. For 18 of the items the mean score fell in the response category of "undecided." For ten of the items, the mean response fell in the response category of "agree." None of the mean responses fell within either the "strongly agree" or "strongly disagree" categories.

An inspection of the items responses showed that for item 7 there appeared to be a bimodal distribution wherein 42% of the respondents indicated that the students had a vocabulary deficiency while, 48.4% disagreed and indicated that in their assessment, there was not a deficiency. Only 9.7% were undecided. Similarly for item 12, 44.7% of the respondents indicated that their students were limited in their ability to articulate ideas and feelings, and 48.8% opposed this idea indicating that their students were not limited. Only 6.5% were undecided. For item 17, 38.7% of the respondents indicated that their students' speech caused communication difficulties and misunderstandings while 49.5% opposed, this indicating that student speech did not cause any communication problems. Only 11.8% were undecided.

There were 18 items on which the responses fell frequently into the response alternative of "undecided." The following items had the most frequent "undecided" response: 23, 8, 27, 25, 13 and 28. On each of these items, one out of four respondents was undecided. For item 23, 34.3% of the teachers were undecided whether the speech patterns of their students should or should not be included in the language arts curriculum. For item 8, 26.5% of the respondents were unsure if the students' speech had its own linguistic system. For item 27, 26.3% of

the teachers were undecided whether the use of the students' speech in the school would affect standards of literacy and articulateness. For item 25, 25.6% of the respondents could not decide if the students' oral English was less correct or equally as correct as standard English. On item 13, 24.8% of the respondents were not sure if reproduction of the phonological system of standard English should be a goal for their students. On item 28, 24.3% of the teachers were undecided whether their students' speech was a result of lack of language stimulation at home.

A further inspection of the table showed that "agree" responses are prevalent in the case of the nine items. For item 1, 82.8% of the respondents agreed that there were different grammatical features in the students' speech. For item 6, 73.8% indicated that the students' speech had different grammatical rules. For item 3, 64.5% of the teachers agreed that there was a predictable pattern in the students' grammar. For item 15, 63.8% of the teachers stated that there were different intonation patterns and for item 21, 79.5% of the respondents agreed that the students' speech was acceptable for classroom activities. For item 2, 68.2% of the respondents indicated that new vocabulary items should be accepted into the classroom. For item 5, 82.3% of the teachers agreed that the speech was not due to different vocal cords. For item 16, 65% of the teachers said that the differences are not due to careless habits. For item 20, 75.3% of the respondents indicated that the students' speech was not limiting for communication in the community.

The Canadian sample, as shown on Table 10, had the full range of responses to all items. The mean responses ranged from a low of 2.48 on

Table 10

Frequencies and Means of Item Responses of Canadian Teachers

Item	N	Adjusted Frequencies					\bar{X}
		1	2	3	4	5	
1	120	3.3	10.0	13.3	54.2	19.2	3.76
2	117	5.1	12.8	21.4	29.9	30.8	3.68
3	119	.8	10.1	28.6	50.4	10.1	3.59
4	118	5.1	24.6	22.0	29.7	18.6	3.32
5	118	.8	1.7	16.9	19.5	61.0	4.38
6	118	4.2	14.4	15.3	50.8	15.3	3.59
7	121	10.7	32.2	10.7	34.7	11.6	3.04
8	118	9.3	21.2	33.9	28.8	6.8	3.03
9	119	10.9	24.4	14.3	44.5	5.9	3.01
10	120	9.2	50.8	12.5	23.3	4.2	2.63
11	119	4.2	41.2	16.0	31.9	6.7	2.96
12	121	9.1	33.1	3.3	43.8	10.7	3.14
13	121	5.0	20.7	30.6	32.2	11.6	3.25
14	120	4.2	27.5	29.2	30.0	9.2	3.13
15	120	5.0	20.0	21.7	45.8	7.5	3.31
16	120	5.8	19.2	18.3	38.3	18.3	3.44
17	118	2.5	25.4	9.3	44.9	17.8	3.50
18	119	1.7	24.4	13.4	43.7	16.8	3.50
19	119	2.5	30.3	14.3	37.8	15.1	3.33
20	118	1.7	10.2	9.3	50.0	28.8	3.94
21	119	.8	16.0	4.2	64.7	14.3	3.76
22	118	18.6	39.0	22.9	15.3	4.2	2.48
23	119	2.5	19.3	36.1	31.9	10.0	3.28
24	117	9.4	34.2	26.5	23.1	6.8	2.84
25	116	8.6	38.8	20.7	25.0	6.9	2.83
26	118	2.5	23.7	23.7	42.4	7.6	3.29
27	118	3.4	22.9	28.0	36.4	9.3	3.25
28	118	16.9	23.7	32.2	19.5	7.6	2.77

Table 11

Frequencies and Means of Item Responses of Australian Teachers

Item	N	Adjusted Frequencies					\bar{X}
		1	2	3	4	5	
1	96	2.1	2.1	1.0	35.4	59.4	4.48
2	94	3.2	5.3	13.8	43.6	34.0	4.00
3	95	5.3	7.4	17.9	47.4	22.1	3.74
4	93	3.2	7.5	15.1	33.3	40.9	4.01
5	96	2.1	0.0	13.5	21.9	62.5	4.43
6	96	3.1	7.3	6.3	44.8	38.5	4.08
7	96	16.7	24.0	8.3	27.1	24.0	3.18
8	93	2.2	6.5	17.2	39.8	34.4	3.98
9	95	4.2	13.7	7.4	46.3	28.4	3.81
10	96	5.2	15.6	3.1	50.0	26.0	3.76
11	95	8.3	34.4	25.0	22.9	8.3	2.88
12	96	13.5	34.4	10.4	31.3	10.4	2.91
13	93	8.6	23.7	17.2	33.3	17.2	3.27
14	93	8.6	10.8	15.1	34.4	31.2	3.69
15	95	5.3	6.3	11.6	61.1	15.8	3.76
16	94	7.4	6.4	10.6	36.2	39.4	3.94
17	94	11.7	40.4	14.9	26.6	6.4	2.76
18	96	11.5	18.8	12.5	43.8	13.5	3.29
19	96	17.7	34.4	19.8	21.9	6.3	2.65
20	96	5.2	9.4	14.6	35.4	35.4	3.87
21	96	2.1	12.5	5.2	63.5	16.7	3.80
22	95	15.8	22.1	22.1	27.4	12.6	2.99
23	94	2.1	16.0	31.9	34.0	16.0	3.46
24	95	18.9	37.9	16.8	15.8	10.5	2.61
25	95	4.2	21.1	31.6	23.2	20.0	3.34
26	96	8.3	32.3	16.7	34.4	8.3	3.02
27	95	6.3	20.0	24.2	37.9	11.6	3.28
28	96	13.5	36.5	14.6	20.8	14.6	2.87

item 22 to a high of 4.38 on item 5. An inspection of the items showed that for items 7, 9, 11 and 12 there appeared to be a bimodal distribution. For item 7, 42.9% of the teachers indicated that the students had a vocabulary deficiency while 46.3 disagreed. Only 10.7 were undecided. For item 9, 35.3% of the respondents said that the speech was not a different linguistic system while 50.4% said that it was. Only 14.3% were undecided. For item 11, 45.6% of the respondents indicated that the students' intonation patterns were incorrect and 38.6% disagreed, suggesting that these intonation patterns were correct. There were 16.0% of the teachers who were undecided on this item. For item 12, 42.2% of the respondents indicated that their students could not articulate their feelings and ideas adequately and 54.5% indicated that their students could articulate adequately. Only 3.3% of the teachers were undecided about this item.

For the Canadian teachers, there were eight items on which the responses fell into the undecided category: 3, 8, 13, 14, 23, 25, 27 and 28. On each of these items one out of four respondents was undecided.

The Australian sample, as shown on Table 11, gave a range of responses to the items. The mean responses ranged from a low of 2.61 to item 24 to a high of 4.48 to item 1. Item 1 refers to the existence of distinctive grammatical features in the students' speech that are different from standard English. An inspection of the items showed that for items 7, 12 and 26 there appeared to be a bimodal distribution. For item 7, 40.7% of the respondents indicated that students could not articulate ideas and feelings while 41.7% said their students could articulate adequately. There were 10.4% of the teachers who were

undecided about this item. For item 26, 40.6% of the respondents indicated that their students' speech was not adequate for dealing with all concepts and modes of thinking, whereas 42.7% of the teachers said that the language was adequate. There were 16.7% of the teachers who were undecided.

For the Australian teachers, there were four items on which the responses fell frequently into the "undecided" category: 12, 23, 25 and 27. For each of these items one out of four respondents was undecided.

Inspection of Tables 10 and 11 showed that there were a higher proportion of undecided responses among the Canadian sample than the Australian sample. The Australian sample appears to have had more decided opinions than the Canadian sample. The mean responses to the items that referred to the description of the dialect were higher for the Australian sample than the Canadian sample, which may have reflected the difference in the strength of the dialectal features. The Indigenous English in Australia had more obvious differences from standard English than the Indigenous English in Canada. The Australian teachers' mean response was higher than that of the Canadian teachers' to 21 of the 28 items. The exceptions to this were items 12, 17, 18, 19, 20, 24, and 26, to which the Australian teachers' mean response was lower. For these items the Australian teachers indicated that their students' speech was not acceptable in the classroom, that it was a detriment to learning and that the students heard little well formed language outside of the classroom.

Description of Scores on Factors

The description of mean scores and standard deviations for each factor for the Total, Canadian and Australian samples are presented in Table 12. The mean factor score on Factor 1 (Dialect Description) for the Total sample was 27.66, for the Canadian sample it was 25.30, and for the Australian sample the score was 30.42. The factor score on Factor 2 (Difference/Deficit) for the Total sample was 30.10, for the Canadian sample it was 29.20 and for the Australian sample the score was 31.16. The mean factor score on Factor 3 (Acceptability/Unacceptability) for the Total sample was 23.44, for the Canadian sample it was 24.46, and for the Australian sample the score was 22.25. The mean factor score on Factor 4 (Adequacy/Inadequacy) for the Total sample was 9.94, for the Canadian sample it was 9.68, and for the Australian sample the score was 10.25.

A further inspection of Table 12 showed that if the mean factor scores were divided by the number of items in the factor, the resulting mean responses to the items on each factor would be as follows: On Factor 1 for the Canadian sample, the mean response was in the "undecided" category (3.1) while the Australian mean response fell into the "agree" category (3.5). For Factor 2 and Factor 4, the Australian mean response was in the "agree" category, whereas the Canadian teachers mean response was in the "undecided" category. However, on Factor 3, the mean response for the Canadian teachers were in the "agree" category, while the Australian teachers were "undecided".

The standard deviations for the two samples shown in Table 12

indicated that on Factor 1 (Dialect Description), Factor 2 (Difference/Deficit), and Factor 3 (Acceptability/Unacceptability) the Canadian teachers varied more in their responses than did the Australian teachers, and hence had larger standard deviation scores on these three factors. However, on Factor 4 (Adequacy/Inadequacy) the Australian teachers had more range in their responses and had larger standard deviations than the Canadian teachers.

Table 12

Means and Standard Deviations of Scores on Factors

Items	Total		Canadian		Australian		
	X	S.D	X	S.D	X	S.D	
Factor 1	8	27.66	6.12	25.30	5.68	30.42	5.44
Factor 2	9	30.10	6.17	29.20	5.71	31.16	6.55
Factor 3	7	23.44	5.43	24.46	5.77	22.25	4.76
Factor 4	3	9.94	2.58	9.68	2.40	10.25	2.77

Hypotheses Testing

The purpose of this section is to report the results of the analytical procedures used to test each statistical hypothesis cited in Chapter Three. A brief discussion of the results of each analysis is included. For the purpose of these analyses, the items that were negatively worded on the Indigenous Students' Oral English Questionnaire were scored in reverse. For the purpose of reporting the results, only when significant differences were found among factor scores, have

differences among the item scores been reported.

Hypothesis Number One

The first hypothesis stated that there would be no significant differences between the mean scores of Canadian Native teachers and Non-Native teachers on the attitudinal factors of the Indigenous Students' Oral English Questionnaire.

In order to test this hypothesis, one-way analyses of variance of attitudinal factor scores were conducted for the Canadian teachers, classified on the basis of their Native or Non-Native cultural group. A summary of the results of these analyses has been presented on Table 13. Inspection of this table showed that the resultant F values of 1.09, 2.08, 3.15 and 3.06 from the analysis of variance scores on the attitudinal factors, Dialect Description (Factor 1), Difference/Deficit (Factor 2), Acceptability/Unacceptability (Factor 3), and Linguistic Adequacy/Inadequacy (Factor 4) were not significant at the .05 level. Since, there were no significant differences found between the mean factor scores when classified on the basis of the teachers' cultural groups, the statistical hypothesis of no differences was accepted. Therefore, the research hypothesis of differences between the attitudes of Native and Non-Native teachers toward the validity and acceptability of the oral English of Native children was rejected.

The results of the analyses using scores on the attitudinal items have been presented in the Appendix, Table A-1.

Discussion. One possible explanation for these results, as suggested in the literature, is that other dialect speakers have

Table 13

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Cultural Groups of Canadian
Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	1=24.39	1.09	.299	2 1
	2=25.92			
2	1=30.78	2.08	.152	1 2
	2=28.64			
3	1=26.22	3.15	.079	1 2
	2=23.54			
4	1=10.44	3.06	.083	1 2
	2= 9.34			

Note. Groups: 1 = Native; 2 = Non-Native.

* $\underline{p} < .05$.

Note. Herein and hereafter groups underlined by a common segment of a line do not differ but differ significantly at the .05 level from groups underlined by other segments of that line.

Table 14

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Cultural Groups of Australian
Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	1=29.00	1.09	.298	2 1
	2=30.67			
2	1=34.08	3.08	.082	1 2
	2=30.72			
3	1=24.23	2.78	.099	1 2
	2=21.92			
4	1=11.23	2.12	.149	1 2
	2=10.05			

Note. Groups: 1 = Aboriginal; 2 = Non-Aboriginal.

* $\underline{p} < .05$.

sometimes been conditioned over their own school years to believe that their language is inadequate, and if that indeed were true with these Native teachers, then their own linguistic insecurity may have influenced them to respond in the way that they did.

Another possible explanation could be that many teachers have not yet formulated an opinion or judgemental attitude about the questions asked of them in this study as indicated by a large percentage of "undecided" responses. The Native teachers as a minority group in these schools may have been socialized along with the majority group on these language questions, rather than having developed their own opinions.

Hypothesis Number Two

The second hypothesis stated that there would be no significant differences between the mean scores of Australian Aboriginal teachers and Non-Aboriginal teachers on the attitudinal factors of the Indigenous Students' Oral English Questionnaire.

In order to test this hypothesis, one-way analyses of variance of attitudinal factor scores were executed. The summary of the results of the analysis of variance of the scores on the attitudinal factors as classified according to the Australian Aboriginal and Non-Aboriginal cultural groups is displayed in Table 14. Inspection of this table showed that the resultant F values of 1.09, 3.08, 2.78, and 2.12, on the attitudinal factors: Dialect Description (Factor 1), Difference/Deficit (Factor 2), Acceptability/Inacceptability (Factor 3), and Adequacy/Inadequacy (Factor 4), were not significant at the .05

level. Therefore there were no significant differences found between the mean factor scores when classified on the basis of the teachers' cultural groups. The statistical hypothesis of no difference was therefore accepted, and the research hypothesis of differences between the attitudes of Aboriginal and Non-Aboriginal teachers toward the validity and acceptability the oral language of Aboriginal children was rejected.

The results of the analyses using scores on the attitudinal items have been displayed in the Appendix, Table A-2 for further reference.

Discussion. The results of this analysis could have been attributed to feelings of language inadequacy among Aboriginal teachers as discussed earlier and mentioned in the literature, such that the teacher attitudes experienced in earlier years of schooling may have affected many dialect speakers and their own linguistic insecurity may have influenced their reactions toward their Indigenous students' speech.

Hypothesis Number Three

The third hypothesis stated that there would be no significant differences between the mean scores of Canadian Native teachers and the mean scores of Australian Aboriginal teachers on the attitudinal factors of the Indigenous Students' Oral English Questionnaire

In order to test this hypothesis one-way analyses of variance of attitudinal factor scores were executed for the Indigenous teachers classified on the basis of their cultural groups. A summary of the

results is displayed in Table 15. Inspection of this table showed that the resultant F values of 2.64, 1.61, and 1.10 for the analyses on Factor 2 (Difference/Deficit), Factor 3 (Acceptability/Unacceptability) and Factor 4 (Adequacy/Inadequacy) respectively, were not significant.

Therefore the statistical hypothesis of no differences was accepted for Factor 2 (Difference/Deficit), for Factor 3 (Acceptability/Unacceptability) and for Factor 4 (Linguistic Adequacy/Inadequacy). The research hypothesis that differences would be found on the attitudinal dimensions of Difference/Deficit, Acceptability/Unacceptability and Adequacy/Inadequacy for the Canadian Native and Australian Aboriginal teachers was not supported.

However, the resultant F value of 6.67 for the analyses of variance of scores on Factor 1 (Dialect Description) was significant at the .05 level, indicating that the mean score of 29.00 for the Aboriginal teachers was significantly higher than the mean score of 24.39 for the Native teachers.

The analyses of variance of the scores on the attitudinal items classified on the basis of Indigenous cultural groups are displayed in the Appendix, Table A-3. The items from Factor 1 (Dialect Description) on which Aboriginal and Native teachers differed significantly identified that the Aboriginal group thought the vocabulary and grammatical features of the students' language were different from formal English. The Aboriginal teachers had significantly higher mean scores on these items than did the Native teachers.

Because significant differences were found, the statistical hypothesis of no difference was rejected for Factor 1 (Dialect/Description), and the research hypothesis that differences

Table 15

Results of Analyses of Variance of the Scores on the Attitudinal Factors Classified on the Basis of Cultural Groups of Indigenous Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	1=24.39	6.67	.015*	2 1
	2=29.00			
2	1=30.78	2.64	.115	2 1
	2=34.08			
3	1=26.22	1.61	.215	1 2
	2=24.23			
4	1=10.45	1.10	.302	2 1
	2=11.23			

Note. Groups: 1 = Native; 2 = Aboriginal.

* $p < .05$.

Table 16

Results of Analyses of Variance of the Scores on the Attitudinal Factors Classified on the Basis of Language Groups with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	1=27.02	1.72	.181	2 3 1
	2=29.67			
	3=27.71			
2	1=29.24	4.22	.016*	<u>2 1 3</u>
	2=32.86			
	3=28.46			
3	1=23.10	.34	.716	2 3 1
	2=24.19			
	3=23.31			
4	1= 9.66	3.36	.037*	<u>2 1 3</u>
	2=11.14			
	3= 9.58			

Note. Groups: 1 = English only; 2 = English and Indigenous language /dialect; 3 = English and Non-Indigenous language.

* $p < .05$.

would be found on the attitudinal dimension of Dialect Description was accepted.

In conclusion, it was found that the Australian Aboriginal and Canadian Native teachers differed in some aspects of their attitudes toward the oral English spoken by Aboriginal and Native children. The Aboriginal teachers described the dialects of English spoken by the Aboriginal students as more distinctly different from standard English than did the Native teachers of the Native children's English.

Discussion. One possible explanation for the differences of mean scores between Aboriginal teachers and Native teachers on the Dialect Description factor could have been that the English spoken by Aboriginal children in fact was more distinctly different from standard English than that spoken by Native children.

Hypothesis Number Four

The fourth hypothesis stated that there would be no significant differences found between the mean scores of the teachers with different language backgrounds on the attitudinal factors of the Indigenous Students' Oral English Questionnaire.

Language All teachers in the sample were classified into three groups on the basis of their language background. Group 1 consisted of teachers who spoke and understood only English. Group 2 spoke English and spoke or understood either an Indigenous language or Indigenous English. Group 3 spoke English and one other Non-Indigenous language.

In order to test this hypothesis one-way analyses of variance of attitudinal factor scores classified on the basis of language groups

were executed. Inspection of Table 16 showed that for all teachers in the study the resultant F value of 1.72 for Factor 1 (Dialect Description) and .34 for Factor 3 (Acceptability/ Unacceptability) indicated that there were no significant differences between the mean scores. Therefore the statistical hypothesis of no difference was accepted for Factor 1 (Dialect Description) and for Factor 3 (Acceptability/ Unacceptability), and the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description and Acceptability/ Unacceptability was rejected for the Total sample.

Further inspection of Table 16 showed that the resultant F values of 4.22 for Factor 2 (Difference/Deficit) and 3.36 for Factor 4 (Adequacy/Inadequacy) were significant at the .05 level. The results of the Newman-Keuls comparisons of ordered means, 2 1 3, for both factors showed that the teachers who spoke an Indigenous language or Indigenous English scored significantly higher than the teachers with English only, and those with English and a Non-Indigenous language. No statistically significant differences were found on the mean factor scores between the teachers who spoke only English, and those who spoke English and another Non-Indigenous language.

The results of the analyses of variance of the scores on the attitudinal items classified on the basis of the teachers language background are displayed in the Appendix, Table A-4. For Factor 2, (Difference/Deficit), items 4, 7 and 25 had F values of 4.38, 3.07, and 4.68 which indicated significant differences between the mean scores. Item 4 suggested that the students' speech was indicative of their cognitive abilities. The Newman-Keuls comparisons between ordered means

showed that the teachers who spoke an Indigenous language or dialect (2) and the teachers who spoke English only (1) scored higher on this item than did the teachers who spoke English and another Non-Indigenous language (3). Item 7 and 25 referred to limitations of vocabulary and suggested that formal English was more correct than the Indigenous student's speech. The Newman-Keuls comparison between ordered means showed that the teachers who spoke an Indigenous language or dialect (2) differed significantly from the other groups (1 and 3) and that they were less likely to state that the student's speech was less correct than formal English. Although when combined, the items in Factor 4 indicated a significant difference, as shown in Table 16, independently, the attitudinal items that composed Factor 4, showed no significant differences.

In summary the statistical hypothesis was rejected for Factor 2 (Difference/Deficit) and for Factor 4 (Adequacy/Inadequacy). Therefore, the research hypothesis that differences would be found on the attitudinal dimensions of Difference/Deficit and Adequacy/Inadequacy was accepted for the Total sample.

A summary of the results of the analyses of variance of attitudinal factor scores for the Australian and Canadian teachers classified on the basis of their language groups has been presented in Table 17 and Table 18 respectively. Inspection of these tables showed that the resultant F values were not significant at the .05 level for either of these subsamples and the Newman-Keuls comparisons of ordered means showed no significant differences between mean factor scores when classified on the basis of language. Therefore, the statistical hypothesis of no difference was accepted for the Canadian and Australian samples and the

Table 17

Results of Analyses of Variance of the Scores on Attitudinal
Factors Classified on the Basis of Language Groups of Australian
Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	1=30.09	.85	.430	3 2 1
	2=30.63			
	3=32.31			
2	1=28.96	2.41	.097	2 3 1
	2=32.69			
	3=31.08			
3	1=21.24	.80	.454	2 3 1
	2=22.81			
	3=22.46			
4	1= 9.87	1.23	.298	2 3 1
	2=11.06			
	3=10.23			

Note. Groups: 1 = English only; 2 = English and Indigenous language /dialect; 3 = English and Non-Indigenous language.
 * $p < .05$.

Table 18

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Language Groups of Canadian
Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	1=25.08	.41	.665	2 3 1
	2=26.60			
	3=26.00			
2	1=29.42	2.85	.062	2 1 3
	2=33.40			
	3=27.49			
3	1=24.27	1.55	.216	2 1 3
	2=28.60			
	3=23.63			
4	1= 9.52	1.54	.219	2 1 3
	2=11.40			
	3= 9.34			

Note. Groups: 1 = English only; 2 = English and Indigenous language /dialect; 3 = English and Non-Indigenous language.
 * $p < .05$.

research hypothesis that differences would be found among the attitudes of these groups of teachers from different language backgrounds toward the validity and acceptability of the speech of Indigenous children was rejected.

The results of the analyses using scores on the attitudinal items have been displayed in the Appendix, Table A-5 and A-6 for further reference.

In conclusion the teachers that spoke an Indigenous language or dialect were found to be more positive toward their students' speech on the Difference/Deficit and Adequate/Inadequate attitudinal judgements than were the teachers who spoke only English or English and another Non-Indigenous language. The teachers who spoke an Indigenous language or dialect said that the English of their students was different rather than deficit and that it was on adequate form of communication rather than of inadequate.

Language and Culture As the literature suggests, (Ford, 1984), the two variables, language and culture, work together to influence attitudes toward language, and since differences were found on the mean factor scores when teachers were classified by language and culture separately for the Total sample it was postulated that perhaps the culture and language background variables in combination may have had an effect on teacher attitudes. Therefore in order to test an alternate research hypothesis that there would be significant differences among the mean attitudinal factor scores of the teachers when classified on a language and cultural basis, the researcher did the following regrouping and then did further analyses. The combined groups were as follows: Group 1 was composed of Indigenous teachers who spoke and understood

only English, group 2 was made of Indigenous teachers who spoke and/or understood an Indigenous language or Indigenous English, group 3 consisted of Indigenous teachers who spoke English and another Non-Indigenous language, group 4 was the group of Non-Indigenous teachers who spoke only English, group 5 consisted of Non-Indigenous teachers who spoke and/or understood an Indigenous language or Indigenous English, and group 6 included the Non-Indigenous teachers who spoke English and another Non-Indigenous language.

In order to test the alternate statistical hypothesis, one-way analyses of variance of the attitudinal factor scores classified on the basis of teachers' cultural and language groups were executed. Inspection of Table 19 showed that the resultant F values of 1.87 for Factor 1 (Dialect Description) and 1.28 for Factor 3 (Acceptability/Unacceptability) were not significant at the .05 level. Therefore the statistical hypothesis of no differences was accepted for these factors and the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description and Acceptability/Unacceptability was rejected.

However as indicated in Table 19, the resultant F values of 2.38 for Factor 2 (Difference/Deficit) and 2.63 for Factor 4 (Adequacy/Inadequacy) were significant at the .05 level. The results of the Newman-Keuls comparison between ordered means, 2 5 1 3 4 6, for Factor 2 (Difference /Deficit) showed that the Indigenous teachers who spoke an Indigenous language or Indigenous English (2) scored significantly higher than the Non-Indigenous teachers who spoke English and another language (6). The results of the Newman-Keuls comparison between ordered means for Factor 4 (Adequacy/Inadequacy),

2 1 5 3 4 6, indicated that Indigenous teachers who spoke an Indigenous language or Indigenous English (2) scored significantly higher than Indigenous teachers who spoke English and another Non-Indigenous language (3). They also scored significantly higher than the Non-Indigenous English speakers (4) and the Non-Indigenous teachers who spoke English and another language (6).

Table 19

Results of Analyses of Variance of the Scores on the Attitudinal Factors Classified on the Basis of Cultural and Language Groups of all Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group X	Fo	P	Newman-Keuls
1	1=28.17 4=26.96	1.87	.102	5 6 1 4 2 3
	2=26.80 5=30.56			
	3=25.07 6=28.91			
2	1=30.00 4=29.20	2.38	.040*	<u>2</u> 5 1 3 4 <u>6</u>
	2=36.60 5=31.69			
	3=29.53 6=27.97			
3	1=26.83 4=22.90	1.28	.275	2 1 3 5 6 4
	2=27.60 5=23.13			
	3=24.13 6=22.94			
4	1=11.00 4= 9.58	2.63	.025*	<u>2</u> 1 5 <u>3</u> 4 <u>6</u>
	2=13.20 5=10.50			
	3= 9.67 6= 9.35			

Note. Groups: 1 = Indigenous, English; 2 = Indigenous, Indigenous language/dialect; 3 = Indigenous, Non-Indigenous language; 4 = Non-Indigenous, English; 5 = Non-Indigenous, Indigenous language/dialect; 6 = Non-Indigenous, Non-Indigenous language.

* $p < .05$.

The results of the analyses of variance of the scores on the attitudinal items as classified by the cultural and language groups for all of the teachers in the study are displayed in Appendix, Table A-7. Inspection of this table showed that the item on which the mean scores

of the groups differed significantly for Factor 2 (Difference/Deficit) was item 25, which suggested that formal English was more correct than the oral English of the students in the study. The resultant F value of 2.99, and the Newman-Keuls comparisons between ordered means of 2 5 3 1 4 6, showed that the Indigenous teachers who spoke an Indigenous language or Indigenous English (2) scored significantly higher on this item which, referred to the correctness of student speech, than did the Non-Indigenous teachers who spoke only English (4) and the teachers who spoke another Non-Indigenous language (6).

The item on which the mean scores of the groups differed significantly for Factor 4 was item 27, as indicated by the F value of 2.63. This item suggested that standards of literacy and articulateness would drop if these students were allowed to use their speech forms in school. An examination of the results of the Newman-Keuls comparison of ordered means, 2 1 5 4 6 3, showed that the Indigenous teachers who spoke an Indigenous language or Indigenous English (2) scored significantly higher on this item than all the other groups except for the Indigenous teachers who spoke only English (1).

Since significant differences were found the statistical hypothesis of no significant difference was rejected for Factor 2 and for Factor 4 and the research hypothesis that there were differences on the attitudinal dimensions of Difference/Deficit (Factor 2) and Adequacy/Inadequacy (Factor 4) was accepted for the Total sample.

The summary of the results of the analyses of variance of the scores on the attitudinal factors classified on the basis of the cultural and language groups for the Australian and Canadian samples, are displayed in Table 20 and 21 respectively. Inspection of Table 20

Table 20

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Cultural and Language Groups
of Australian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}		Fo	P	Newman-Keuls
1	1=31.00	4=30.07	.55	.739	6 3 5 1 4 2
	2=28.00	5=31.23			
	3=31.25	6=32.78			
2	1=34.00	4=28.84	1.73	.139	2 1 6 5 4 3
	2=36.00	5=31.92			
	3=27.50	6=32.67			
3	1=23.00	4=21.20	.77	.578	2 1 6 5 3 4
	2=26.33	5=22.00			
	3=21.75	6=22.78			
4	1=12.00	4= 9.82	1.68	.152	2 1 6 5 4 3
	2=13.67	5=10.46			
	3= 9.00	6=10.78			

Note. Groups: 1 = Indigenous, English; 2 = Indigenous, Indigenous language/dialect; 3 = Indigenous, Non-Indigenous language; 4 = Non-Indigenous, English; 5 = Non-Indigenous, Indigenous language/dialect; 6 = Non-Indigenous, Non-Indigenous language.

* $p < .05$.

Table 21

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Cultural and Language Groups
of Canadian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}		Fo	P	Newman-Keuls
1	1=27.60	4=24.90	1.45	.213	5 1 6 2 4 3
	2=25.00	5=27.67			
	3=22.82	6=27.46			
2	1=29.20	4=29.44	2.27	.053	2 5 3 4 1 6
	2=37.50	5=30.67			
	3=30.27	6=26.21			
3	1=27.60	4=24.03	1.15	.340	2 5 1 3 4 6
	2=29.50	5=28.00			
	3=25.00	6=23.00			
4	1=10.80	4= 9.43	1.21	.311	2 1 5 3 4 6
	2=12.50	5=10.67			
	3= 9.91	6= 9.08			

Note. Groups: 1 = Indigenous, English; 2 = Indigenous, Indigenous language/dialect; 3 = Indigenous, Non-Indigenous language; 4 = Non-Indigenous, English; 5 = Non-Indigenous, Indigenous language/dialect; 6 = Non-Indigenous, Non-Indigenous language.

* $p < .05$.

showed that the F values of .55, 1.73, .77 and 1.68 on the attitudinal factors Dialect Description, Difference/Deficit, Acceptability/Unacceptability and Adequacy/Inadequacy were not significant for the Australian sample. Inspection of Table 21 showed that the F values of 1.45, 2.27, 1.15 and 1.21 on the attitudinal factors Dialect Description, Difference/Deficit, Acceptability/ Unacceptability and Adequacy/Inadequacy were not significant for the Canadian sample. For further reference the results of the analyses of variance of the scores on the attitudinal items have been displayed in the Appendix, Table A-8 and Table A-9. Therefore there were no significant differences found among the mean factor scores when classified on the basis of teachers' cultural and language groups for the Canadian and Australian samples. The statistical hypothesis of no difference was accepted, and the research hypothesis of differences between the attitudes of teachers with different culture and language backgrounds toward the validity and acceptability of the oral English of Indigenous children was rejected.

Hypothesis Number Five

The fifth hypothesis stated that there would be no significant differences between the mean scores of the teachers with varying amounts and types of teaching experience on the attitudinal factors of the Indigenous Students' Oral English Questionnaire.

In order to test this hypothesis the variable was examined in several ways. First, analyses of variance of the attitudinal factor scores for the teachers classified according to the number of years of

teaching experience were executed, and second, an analyses of variance was done on the scores of attitudinal factors classified according to the number of years teaching Indigenous children. All teachers in the sample were grouped into the following categories on the basis of their teaching experience: Group 1 = teachers who had taught for one to two years, group 2 = three to five years, group 3 = six to ten years, and group 4 = 11 or more years.

Total Teaching Experience. A summary of the results of the one-way analyses of variance of the scores on the attitudinal factors classified on the basis of total teaching experience for all teachers in the study is displayed in Table 22. Examination of this table showed that the resultant F values of 1.35 for Factor 1 (Dialect Description) and 1.04 for Factor 3 (Acceptability/ Unacceptability) were not significant at the .05 level. There were no significant differences between the mean scores for Factor 1 and Factor 3. Therefore the statistical hypothesis of no difference was accepted for Factor 1 (Dialect Description) and Factor 3 (Acceptability/ Unacceptability). Thus, the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description .pa

Further inspection of Table 22 showed that the resultant F values of 14.25 for Factor 2 (Difference/Deficit) and 5.99 for Factor 4 (Adequacy/Inadequacy) were significant at the .05 level. On Factor 2, the least experienced teachers (1) scored significantly higher than those teachers who had taught for 2 to ten years (2 and 3), who also differed significantly from those teachers with ten or more years of experience (4). This was shown by the Newman-Keuls comparison of ordered means, 1 2 3 4. Inspection of this table showed that on

Factor 4 (Adequacy/Inadequacy), those teachers with five years or less experience (1 and 2) scored significantly higher than those teachers with more than 10 years of teaching experience (4). This was shown in the Newman-Keuls comparisons of ordered means as 1 2 3 4.

Table 22

Results of Analyses of Variance of the Scores on the Attitudinal Factors Classified on the Basis of Teaching Experience of all Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group X		Fo	P	Newman-Keuls
1	1=28.65	3=27.93	1.35	.258	1 2 3 4
	2=28.46	4=26.69			
2	1=33.85	3=31.14	14.25	.000*	<u>1 2 3 4</u>
	2=30.03	4=26.94			
3	1=24.58	3=23.16	1.04	.387	1 3 4 2
	2=22.73	4=22.91			
4	1=10.90	3= 9.80	5.99	.000*	<u>1 2 3 4</u>
	2=10.23	4= 8.95			

Note. Groups: 1 = 1-2 yrs; 2 = 3-5 yrs; 3 = 6-10 yrs; 4 = 11+ yrs.

* $p < .05$.

The results of the analyses of variance using the scores on the attitudinal items classified on the basis of total teaching experience have been displayed in Appendix, Table A-10. Items 2, 4, 7, 16, 24, 25, and 28 from Factor 2 (Difference/Deficit) had F values of 3.48, 8.85, 7.39, 3.59, 2.74, 4.44, and 3.12, respectively, all of which were significant at the .05 level. These items referred to the students' speech and reflected the following attitudes: the vocabulary was unacceptable in the classroom, it was indicative of cognitive ability, the vocabulary was limited, differences from formal English were due to

careless habits, students did not hear well-formed language in the home and the community, formal English was more correct than the students' speech, and the children did not receive language stimulation in the home. The Newman-Keuls comparison between ordered means for these items showed the differences between groups as follows: 1 2 3 4, 1 2 3 4, 1 2 3 4, 1 2 3 4, and 1 2 3 4. In each of these comparisons the least experienced teachers (1) had significantly higher mean scores on these items than the most experienced teachers (4).

Since significant differences were found, the statistical hypothesis of no difference was rejected for Factor 2 (Difference/Deficit) and Factor 4 (Adequacy/Inadequacy) and the research hypothesis that differences would be found on the attitudinal dimensions of Difference/Deficit and Adequacy/Inadequacy was supported for the Total sample.

A summary of the results of the analyses of variance of the scores on the attitudinal factors classified on the basis of the Australian teachers' experience is displayed in Table 23. The resultant F values of .97 for Factor 1 (Dialect Description) and .83 for Factor 3 (Acceptability/ Unacceptability) indicated no significant difference in the mean scores. Therefore the statistical hypothesis of no difference was accepted for Factor 1 and Factor 3 and the research hypotheses that differences would be found on the attitudinal dimensions of Dialect Description and Acceptability/ Unacceptability was rejected for the Australian sample.

The resultant F values of 7.22 for Factor 2 (Difference/Deficit) and 3.26 for Factor 4 (Adequacy/Inadequacy) indicated there were

significant differences between the mean attitudinal factor scores. The results of Newman-Keuls comparisons of ordered means, 1 2 3 4 and 1 2 3 4, respectively, demonstrated that teachers with less experience scored significantly higher than the teaching group with more than 10 years experience (4).

The results of the analyses of variance of the scores on the attitudinal items classified on the basis of teaching experience for the Australian teachers are displayed in the Appendix, Table A-11. An examination of this table showed that on Factor 2 the F values of 5.03, 2.89, and 3.07 respectively were significant for items 7, 25 and 28. These items reflected the following attitudinal judgements: the students' vocabulary was limited, their language was not as correct as formal English, and they received little language stimulation in the home. The results of the Newman-Keuls comparisons, 1 2 3 4, 1 2 3 4 and 1 2 3 4, showed that the less experienced Australian teachers (1 and 2) scored higher than the teachers with more than 10 years of experience (4).

Since significant differences were found, the statistical hypothesis of no difference was rejected for Factor 2 (Difference/Deficit) and Factor 4 (Adequacy/Inadequacy) and the research hypothesis that differences would be found on the attitudinal dimensions of Difference/Deficit and Adequacy/Inadequacy was supported for the Australian sample.

A summary of the results of the analyses of variance of the attitudinal factor scores classified on the basis of the Canadian teachers' experience is displayed on Table 24. An inspection of this table showed that the resultant F values of .73 for both Factor 1

Table 23

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Australian Teachers'

Experience with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}		Fo	P	Newman-Keuls
1	1=30.19	3=30.88	.97	.410	2 3 1 4
	2=31.47	4=29.12			
2	1=34.24	3=31.71	7.22	.000*	<u>1 2 3 4</u>
	2=32.47	4=26.77			
3	1=23.48	3=21.76	.83	.480	1 2 3 4
	2=22.34	4=21.38			
4	1=10.95	3=10.12	3.36	.022*	<u>1 2 3 4</u>
	2=10.84	4= 8.88			

Note. Groups: 1 = 1-2 yrs; 2 = 3-5 yrs; 3 = 6-10 yrs;
 4 = 11+ yrs.

* $p < .05$.

Table 24

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Canadian Teachers' Experience

with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}		Fo	P	Newman-Keuls
1	1=26.95	3=26.07	.73	.539	1 3 4 2
	2=24.46	4=25.45			
2	1=33.42	3=29.00	6.44	.000*	<u>1 2 3 4</u>
	2=29.38	4=25.45			
3	1=25.79	3=24.04	.73	.535	1 3 4 2
	2=23.25	4=23.69			
4	1=10.84	3= 9.59	2.74	.046*	<u>1 3 2 4</u>
	2= 9.42	4= 8.98			

Note. Groups: 1 = 1-2 yrs; 2 = 3-5 yrs; 3 = 6-10 yrs;
 4 = 11+ yrs.

* $p < .05$.

(Dialect Description) and Factor 3 (Acceptability/ Unacceptability) did not differ at the .05 level. Therefore the statistical hypothesis of no difference was accepted for Factor 1 and Factor 3 and the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description and Acceptability/ Unacceptability was rejected for the Canadian sample.

Further inspection of Table 24 showed that the resultant F values of 6.44 for Factor 2 (Difference/Deficit) and 2.74 for Factor 4 (Adequacy/Inadequacy) respectively, indicated that there were significant differences at the .05 level. The results of the Newman-Keuls comparisons of ordered means for Factor 2 (Difference/Deficit) and Factor 4 (Adequacy/Inadequacy) were 1 2 3 4 and 1 3 2 4, which demonstrated that teachers with less experience (1) scored significantly higher than the teaching group with more than 10 years of experience (4).

The results of the analyses of variance using scores on the attitudinal items are displayed in Appendix, Table A-12. For Factor 2 the items 4 and 7 had F values of 5.02 and 2.89, which reflected the following attitudinal judgements: the students' speech was indicative of their cognitive abilities and their vocabulary was very limited. The results of the Newman-Keuls comparisons 1 2 3 4 and 1 2 3 4 showed that the less experienced teachers (1) scored significantly higher on these items than the teachers with more than 10 years experience (4).

Therefore the statistical hypothesis of no difference was rejected for Factor 2 (Difference/Deficit) and Factor 4 (Adequacy/Inadequacy) and the research hypothesis that differences would be found on the

attitudinal dimensions of Difference/Deficit and Adequacy/Inadequacy was accepted for the Canadian sample.

In conclusion, for the Total sample the teachers with the least experience were more positive and said their students' speech was not deficit as compared to those teachers who had taught for more years. The teachers with five years or less experience were more supportive of the Adequacy model than the teachers with more than 10 years experience. For the Australian sample the experienced teachers had the least positive attitudes toward the students' speech and considered it to be Deficit and Inadequate. Likewise for the Canadian teachers, the more experienced teachers were less positive than the teachers with less experience.

Indigenous Teaching Experience. The number of years of teaching experience with Indigenous children was divided into the following categories: group 1 = one to two years, group 2 = three to five years, group 3 = six to ten years and group 4 = 11 or more years. In order to test the hypothesis, one-way analyses of the variance of the attitudinal factor scores classified by experience were executed. A summary of the results of the analyses for the Total, Australian and Canadian samples is shown in Tables 25, 26, and 27, respectively. Inspection of Table 25 showed that the resultant F values of 2.11 for Factor 1 (Dialect Description) and .68 for Factor 3 (Acceptability/ Unacceptability) were not significant at the .05 level. Therefore the statistical hypothesis of no difference was accepted for Factor 1 and Factor 3 and the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description and Acceptability/ Unacceptability was rejected

for the Total sample.

Further inspection of Table 25 showed that the resultant F values of 11.29 for Factor 2 (Difference/Deficit) and 5.66 for Factor 4 (Adequacy/Inadequacy) were significant at the .05 level. The results of the Newman-keuls comparisons of ordered means for both factors was 1 2 3 4, which indicated that the teachers with two years or less experience with Indigenous children (1) scored significantly higher than the other three groups (2, 3 and 4) on these two factors.

The results of the analyses of variance using the scores on the attitudinal items classified on the basis of experience teaching Indigenous children have been displayed in the Appendix, Table A-3. From Factor 2 (Difference/Deficit), items 2, 4, 7, 13, 16 and 25 were significantly different at the .05 level of significance, as shown by the F values of 5.04, 4.92, 5.91, 3.60, 4.12, and 4.62, respectively. These items reflected the following attitudes: students' vocabulary was too limited and inappropriate for the classroom, their language indicated cognitive abilities, the students should exactly reproduce the phonology of formal English as it is more correct than their speech, and any differences in the phonological systems was the result of carelessness on the students' part. The Newman-Keuls comparisons showed that the less experienced teachers scored significantly higher than the more experienced teachers on these items.

From Factor 4 (Adequacy/Inadequacy), item 14 was significantly different as indicated by the F value of 4.82. This item described the students' speech as a poorer quality communication system than formal English. The Newman-Keuls comparisons, 1 3 2 4, indicated that the teachers with one or two years of experience with Indigenous children

Table 25

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Experience of all Teachers
with Indigenous Children with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}		Fo	P	Newman-Keuls
1	1=29.00	3=28.00	2.11	.101	1 3 2 4
	2=27.55	4=26.21			
2	1=33.32	3=28.70	11.29	.000*	<u>1 2 3 4</u>
	2=29.15	4=27.58			
3	1=23.92	3=23.17	.68	.566	1 3 4 2
	2=22.47	4=23.15			
4	1=10.86	3= 9.47	5.66	.001*	<u>1 2 3 4</u>
	2= 9.55	4= 9.08			

Note. Groups: 1 = 1-2 yrs; 2 = 3-5 yrs; 3 = 6-10 yrs;
 4 = 11+ yrs.
 * $p < .05$.

Table 26

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Australian Teachers'
Experience with Indigenous Children with Newman-Keuls
Comparisons

Attitudinal Factor	Group \bar{X}		Fo	P	Newman-Keuls
1	1=30.83	3=31.95	2.37	.076	3 1 2 4
	2=30.44	4=27.08			
2	1=34.20	3=28.05	6.54	.000*	<u>1 2 4 3</u>
	2=30.04	4=28.23			
3	1=23.27	3=20.11	2.31	.081	1 4 2 3
	2=21.65	4=23.08			
4	1=11.20	3= 8.95	3.78	.013*	<u>1 2 4 3</u>
	2= 9.83	4= 9.62			

Note. Groups: 1 = 1-2 yrs; 2 = 3-5 yrs; 3 = 6-10 yrs;
 4 = 11+ yrs.
 * $p < .05$.

(1) had significant higher mean scores than the teachers with more experience.

In summary the statistical hypothesis of no differences on Factor 2 (Difference/Deficit) and Factor 4 (Adequacy/Inadequacy) was rejected and the research hypothesis that differences would be found on the attitudinal dimensions of Difference/Deficit and Adequacy/Inadequacy was supported.

The results of the analyses of variance of the attitudinal factor scores for the Australian teachers classified according to their experience with Indigenous children are displayed in Table 26. Inspection of this table showed that the resultant F value of 2.37 for Factor 1 (Dialect Description) and 2.31 for Factor 3 (Acceptability/Unacceptability) were not significant at the .05 level. Therefore the statistical hypothesis of no difference was accepted for Factor 1 (Dialect Description) and Factor 3 (Acceptability/ Unacceptability) and the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description and Acceptability/Unacceptability was rejected for the Total sample.

Further inspection of Table 26 showed that resultant F values of 6.54 for Factor 2 (Difference/Deficit) and 3.78 for Factor 4 (Adequacy/Inadequacy) were significant at the .05 level. An examination of the mean scores on Factor 2 (Difference/Deficit), showed that the teachers with two years or less experience in Indigenous education (1) scored significantly higher than the more experienced teachers (2, 3 and 4). The group of teachers who had one to two years experience with Indigenous children (1) had significantly higher scores on Factor 4 (Adequacy/Inadequacy) than the group of teachers with six to ten years

of experience (3), as indicated by the Newman-Keuls comparison of ordered means, 1 2 4 3.

The items that represented Factor 2 (Difference/Deficit) and Factor 4 (Adequacy/Inadequacy) are displayed in Appendix, Table A-14. Inspection of this table showed that the F values of 3.15, 3.38, 4.06, 3.24, and 2.75 on items 5, 7, 13, 25 and 28 from Factor 2 respectively showed significant differences at the .05 level. Item 5 suggested that the differences in phonological systems was the result of differences in vocal cords, and the comparison between means, 1 3 2 4, indicated that the teachers with 11 or more years of experience with Indigenous children (4) had significantly lower mean scores than the other three groups of teachers. Item 7 said that the students' vocabulary was very limited and the Newman-Keuls comparisons between ordered means, 1 4 2 3, indicated that the teachers with six to ten years of experience with Indigenous children (3) had significantly lower mean scores than those with two years or less of similar experience (1). Item 13 stipulated that Indigenous children should replicate the phonological system of formal English, and the comparison between ordered means, 1 2 3 4, showed that teachers with six or more years of experience with Indigenous children (3 and 4) had significantly lower mean scores than teachers with two years or less of similar experience (1). Item 25 judged formal English to be more correct than Indigenous English and the comparison between means, 1 2 4 3, showed that teachers with six to ten years of experience with Indigenous children (3) had significantly lower mean scores than the teachers with two years or less of similar experience (1). Item 28 suggested that there was a lack of language stimulation in the students' home and although there were significant

differences among the groups as indicated by a F value of 2.75, the Newman-Keuls failed to yield differences between the groups.

Therefore the statistical hypothesis of no difference was rejected for Factor 2 (Difference/Deficit) and Factor 4 (Adequacy/Inadequacy) and the research hypothesis that differences would be found on the attitudinal dimensions of Difference/Deficit and Adequacy/Inadequacy was accepted for the Australian sample.

The results of the analyses of variance of the scores on the attitudinal factor scores for the Canadian teachers, classified on the basis of their experience with Indigenous children, are displayed on Table 27. An inspection of this table showed that the resultant F values of .09, 1.12 and 1.83 on Factor 1 (Dialect Description), Factor 3 (Acceptability/ Unacceptability), and Factor 4 (Adequacy/Inadequacy) respectively were not significant at the .05 level. Therefore the statistical hypothesis of no difference was accepted for Factor 1 (Dialect Description), Factor 3 (Acceptability/ Unacceptability) and Factor 4 (Adequacy/Inadequacy). The research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description, Acceptability/ Unacceptability, and Adequacy/Inadequacy was rejected for the Canadian sample.

Further inspection of Table 27 showed that the resultant F value of 3.19 on Factor 2 (Difference/Deficit) indicated a significant difference at the .05 level. The results of the Newman-Keuls comparison, 1 3 2 4, showed that Canadian teachers with two years experience or less with Indigenous children (1) had significantly higher mean scores on this factor than the teachers with more than 10 years of experience in Indigenous education (4).

Table 27

Results of Analyses of Variance of the Scores on the Attitudinal Factors Classified on the Basis of Canadian Teachers' Experience with Indigenous Children with Newman-Keuls Comparisons

Attitudinal Factor	Group X		Fo	P	Newman-Keuls
1	1=25.88 2=25.33	3=25.32 4=25.92	.09	.961	4 1 2 3
2	1=31.83 2=28.47	3=29.14 4=27.36	3.19	.026*	<u>1</u> 3 <u>2</u> <u>4</u>
3	1=25.04 2=23.10	3=25.25 4=23.18	1.12	.343	3 1 4 2
4	1=10.29 2= 9.33	3= 9.82 4= 8.90	1.83	.146	1 3 2 4

Note. Groups: 1 = 1-2 yrs; 2 = 3-5 yrs; 3 = 6-10 yrs;
4 = 11+ yrs.

* $p < .05$.

The items that represented these factors are displayed in Appendix, Table A-15 and the single item that showed a significant difference on Factor 2 (Difference/Deficit) was item 7. This item said that there were limitations to the Indigenous students' vocabulary, and suggested it was not as satisfactory as an equivalent standard English speaker's vocabulary. The Newman-Keuls comparison, 1 3 2 4, indicated that the group of Canadian teachers with two years or less experience (1) had significantly higher mean scores on this item than the teachers with three to five years (2) or the group with more than 10 years experience with Indigenous students (4).

Since significant differences were found, the statistical hypothesis of no difference was rejected for Factor 2 (Difference/Deficit) and the research hypothesis that differences would

be found on the attitudinal dimension of Difference/Deficit was accepted for the Canadian sample.

In summary, for the Total sample and the Australian sample significant differences were found on the attitudinal dimensions of (Difference/Deficit) and Adequacy/Inadequacy between teachers with varying types of teaching, or experience with Indigenous children. The Canadian teachers did not differ from other groups on those factors but differed significantly on the attitudinal dimension of Difference/Deficit.

In conclusion, for the Total sample and Australian sample, the teachers with two years or less experience with Indigenous children were more positive on the attitude dimensions of Difference/Deficit and Adequacy/Inadequacy than were the more experienced teachers. The less experienced teachers said that their students' speech was a comparable communication system to that of standard English. For the Canadian teachers those with two years or less experience with Indigenous children were more positive on the attitudinal dimension of Difference/Deficit than the teachers with more than 10 years experience.

Hypothesis Number Six

The sixth hypothesis stated that there would be no significant differences between the mean scores of the teachers with varying educational backgrounds on the attitudinal factors of the Indigenous Students' Oral English Questionnaire.

In order to test this hypothesis the variable was examined in several ways. Analyses of variance of the scores on the attitudinal

factors classified according to the number of years of post-secondary education were executed, analyses of variance of attitudinal factor scores classified according to the total number of specialty courses taken by the teachers were performed, and a third analysis was done on scores classified according to the number of each specialty course taken by teachers.

Number of Years of Post-secondary Education. Teachers in the sample were grouped into the following categories on the basis of the number of years of post-secondary education: group 1 = one to two years, group 2 = three to four years, and group 3 = five years or more.

The results of the analyses of variance of the scores on the attitudinal factors classified on the basis of years of education for the Total sample are displayed in Table 28. Inspection of Table 28 showed that the resultant F values of 1.36, .16 and 1.59 for Factor 1 (Dialect/Description), Factor 3 (Acceptability/Unacceptability) and Factor 4 (Adequacy/Inadequacy) indicated there were no significant differences among the mean scores. Therefore, the statistical hypothesis of no difference was accepted for Factor 1, Factor 3 and Factor 4 and the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description, Acceptability/Unacceptability and Adequacy/Inadequacy was rejected for the Total sample.

Further inspection of Table 28 showed that the F value of 8.36 on Factor 2 (Difference/Deficit) indicated significant differences between the mean scores at the .05 level and the Newman-Keuls comparisons of ordered mean, 2 3 1, demonstrated that teachers with three or more years of post-secondary education (groups 2 and 3) had significantly

Table 28

Results of analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Years of Education of all
Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	1=26.35	1.36	.260	2 3 1
	2=28.22			
	3=27.26			
2	1=26.17	8.36	.000*	<u>2 3 1</u>
	2=30.98			
	3=29.06			
3	1=22.69	.16	.855	2 3 1
	2=23.32			
	3=23.26			
4	1= 9.76	1.59	.207	2 1 3
	2=10.01			
	3= 9.23			

Note. Groups: 1 = 1-2 yrs; 2 = 3-4 yrs; 3 = 5+ yrs.

* $p < .05$.

Table 29

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Years of Education of
Australian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	1=29.20	.68	.509	2 3 1
	2=30.80			
	3=29.33			
2	1=22.00	15.29	.000*	<u>2 3 1</u>
	2=32.54			
	3=30.42			
3	1=20.00	1.92	.153	2 3 1
	2=22.72			
	3=21.08			
4	1= 9.00	3.66	.030*	2 1 3
	2=10.61			
	3= 8.75			

Note. Groups: 1 = 1-2 yrs; 2 = 3-4 yrs; 3 = 5+ yrs.

* $p < .05$.

higher scores than those teachers with two or less years of post-secondary education (1).

The results of the analyses of variance using the scores on the attitudinal items that represented these factors are displayed in Appendix, Table A-16. The mean scores on items 2, 4, 16 and 28 from Factor 2 (Difference/Deficit) differed significantly as shown by the F values of 5.08, 8.96, 6.11 and 4.75, respectively. Item 2 stated that new vocabulary items from home should not be accepted in the classroom and the Newman-Keuls comparisons of ordered means, 2 3 1, indicated that teachers with three to four years of post secondary education (2) had significantly higher mean scores than teachers with two years or less post-secondary education (1). Item 4 stated that the students' speech was indicative of cognition and the Newman-Keuls comparisons between the mean scores, 2 3 1, indicated that teachers with three or more of post-secondary education had significantly higher mean scores than teachers with two years or less (1). Item 16 suggested that differences the students may have exhibited from the phonological system of standard English were due to careless habits, and the comparison between the mean scores, 2 3 1, indicated that teachers with three to four years of post-secondary education (2) had significantly higher mean scores on this item than teachers with two years or less post-secondary education (1). Item 28 emphasized that there was a lack of language stimulation in the children's homes and the Newman-Keuls comparisons, 2 1 3, indicated that the teachers with three to four years of post-secondary education (2) had significantly higher mean scores on this attitudinal item than teachers with five years or more of post-secondary education (3).

Since significant differences were found, the statistical hypothesis that there would be no differences among groups based on the number of years of training was rejected for Factor 2 (Difference/Deficit) and the research hypothesis that differences would be found on the attitudinal dimension of Difference/Deficit, was accepted for the Total sample.

A summary of the results of the analyses of variance of the attitudinal factor scores classified on the basis of years of education of the Australian teachers are shown in Table 29. Inspection of this table showed that the resultant F values of .68 for Factor 1 and 1.92 for Factor 3 were not significant at the .05 level. Therefore the statistical hypothesis of no difference was accepted for Factor 1 (Dialect Description) and for Factor 3 (Acceptability/Unacceptability). The research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description and Acceptability/Unacceptability was rejected for the Australian sample.

Further inspection of Table 29 showed that the resultant F value of 15.29 on Factor 2 (Difference/Deficit) combined with the Newman-Keuls comparisons between ordered means, 2 3 1, demonstrated that, the teachers with three or more years of post-secondary education (groups 2 and 3) had significantly higher mean scores on this factor than those teachers with two years or less post-secondary education (1). The F value of 3.66 on Factor 4 (Adequacy/Inadequacy) indicated a significant difference among the mean scores for the groups of teachers but the Newman-Keuls failed to indicate a difference between them.

The results of the analyses of variance using the scores on the attitudinal items classified on the basis of post-secondary education

for Australian teachers are displayed in Appendix Table A-17. From Factor 2 (Difference/Deficit), items 2, 4, 13, 16, and 28 showed significant differences as indicated by F values of 10.19, 9.59, 6.04, 6.85, 5.89, and 6.68, respectively. Item 2 referred to the unacceptability of home vocabulary in the classroom, item 4 stated that the students' speech was indicative of lesser cognitive capacity, item 13 said that students must replicate the sound system of formal English, and item 16 said that any differences from standard English in the students' phonological system were the result of careless habits. The Newman-Keuls comparison between ordered means for each of these items was 2 3 1, which indicated that teachers with two years or less post-secondary education (1) had significantly lower mean scores on these items than did teachers with three or more years of post-secondary education (2 and 3). Item 25 judged formal English to be more correct than the students' speech and the comparison between mean scores of the groups, 2 3 1, indicated that teachers with two years or less post-secondary education (1) had significantly lower mean scores than teachers with three to four years of post-secondary education (2). Item 28 suggested that there was a lack of language stimulation in the children's homes and the Newman-Keuls comparisons between ordered means, 2 3 1, indicated that teachers with three to four years post-secondary education (2) had significantly higher mean scores on this item than both other groups of teachers (3 and 1).

A further examination of Table A-17 showed that two items on Factor 4 (Adequacy/Inadequacy) had significantly different mean scores as indicated by F values of 4.92 and 3.57. Item 14 described Indigenous English as a poorer quality communication system than formal English and

the comparisons between ordered means, 2 3 1, revealed that teachers with two years or less post-secondary education (1) had significantly lower mean scores than those teachers with three to four years of post-secondary education (2). Item 23 said that the students' speech patterns should be excluded from the language arts curriculum. The F value of 3.57 indicated that there was a significant difference among the mean scores for the groups, but the Newman-Keuls comparisons failed to yield a difference between them.

Since significant differences were found, the statistical hypothesis that there would be no difference was rejected for Factor 2 (Difference/Deficit) and the research hypothesis that differences would be found on the attitudinal dimension of Difference/Deficit was accepted for the Australian sample.

A summary of the results of the analyses of variance of the scores on the attitudinal factors classified on the basis of years of post-secondary education for the Canadian teachers is shown in Table 30. An inspection of this table showed that there were no significant differences between the mean scores of the groups of Canadian teachers on any of the factors. The results of the analyses of variance of the attitudinal item scores for the Canadian sample are displayed in the Appendix, Table A-18 for further reference.

Since significant differences were not found, the statistical hypothesis that there would be no difference was accepted for all of the four factors of the Canadian group. The research hypothesis was rejected that there would be differences between the attitudes of Canadian teachers with varying number of years of education toward the validity and acceptability of the speech of Canadian Native children.

Table 30

Results of Analyses of Variance of the Scores on the Attitudinal Factors Classified on the Basis of Years of Education of Canadian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group X	Fo	P	Newman-Keuls
1	1=24.84	.68	.509	3 2 1
	2=25.37			
	3=26.54			
2	1=28.37	.26	.775	2 3 1
	2=29.27			
	3=28.60			
3	1=24.11	.00	.997	1 3 2
	2=23.98			
	3=24.00			
4	1=10.16	.81	.449	1 3 2
	2= 9.36			
	3= 9.40			

Note. Groups: 1 = 1-2 yrs; 2 = 3-4 yrs; 3 = 5+ yrs.
* $p < .05$.

The Total Number of Specialty Courses As a further test of Hypothesis Six, one-way analyses of variance of the attitudinal factor scores classified according to the number of specialty courses taken was executed. Specialty courses used for these analyses included: linguistics, cultural anthropology, sociology of education, Indigenous education/studies, Indigenous languages, English as a second language/dialect, cross-cultural education and language teaching methodologies. The number of specialty courses were categorized as: 0 = no courses, 1 = one to two courses, 2 = three to four courses, 3 = five to six courses and 4 = seven or more courses.

A summary of the results of the analyses of variance of the attitudinal factor scores classified by the number of specialty courses taken is displayed in Table 31. An inspection of this table showed that for Factor 2 (Difference/Deficit) the F value of 8.10 indicated a significant difference among the means. The Newman-Keuls comparisons, 4 3 2 1 0, showed that teachers with seven or more courses in these specialty areas had significantly higher mean scores on this factor than teachers with fewer specialty courses. Therefore the statistical hypothesis that there would be no difference was rejected for Factor 2 (Difference/Deficit) and the research hypothesis that differences would be found on the attitudinal dimension of Difference/Deficit was accepted for the Total sample.

A summary of the results of the analyses of variance of the scores on the attitudinal factors classified by number of courses taken for the Australian teachers is displayed on Table 32. The F value of 7.19 on Factor 2 (Difference/Deficit) combined with the Newman-Keuls comparison, 4 3 2 1 0, showed that the Australian teachers with seven specialty courses or more (4) had significantly higher scores than those teachers with four specialty courses or less (2, 1, and 0). Therefore the statistical hypothesis that there would be no difference was rejected for Factor 2 (Difference/Deficit) and the research hypothesis that differences would be found on the attitudinal dimension of Difference/Deficit was accepted for the Australian sample.

A summary of the results of the analyses of variance of the scores on the attitudinal factors classified by numbers of specialty courses taken for the Canadian teachers is displayed on Table 33. The F value of 3.92, and the Newman-Keuls comparisons between mean scores of

Table 31

Results of Analyses of Variance of Scores on the Attitudinal
Factors Classified on the Basis of Specialty Courses Taken by
all Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}		Fo	P	Newman-Keuls
1	0=27.27	3=26.12	1.54	.191	4 2 0 1 3
	1=27.08	4=29.32			
	2=28.48				
2	0=28.00	3=30.81	8.10	.000*	<u>4 3 2 1 0</u>
	1=28.06	4=34.32			
	2=29.82				
3	0=23.04	3=24.19	1.03	.393	3 4 0 2 1
	1=21.96	4=23.95			
	2=23.30				
4	0= 9.36	3=10.77	3.15	.015*	3 4 2 0 1
	1= 9.22	4=10.71			
	2= 9.66				

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses; 3 = 5-6 courses; 4 = 7+ courses.

* $p < .05$.

Table 32

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Specialty Courses Taken by
Australian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}		Fo	P	Newman-Keuls
1	0=29.15	3=29.00	.88	.479	2 4 1 0 3
	1=30.35	4=31.07			
	2=31.68				
2	0=28.22	3=33.50	7.19	.000*	<u>4 3 2 1 0</u>
	1=31.61	4=37.92			
	2=31.61				
3	0=22.37	3=21.75	.39	.814	4 0 2 3 1
	1=21.39	4=37.92			
	2=22.89				
4	0= 9.33	3=11.75	2.24	.071	3 4 2 1 0
	1= 9.83	4=11.64			
	2=10.43				

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses; 3 = 5-6 courses; 4 = 7+ courses.

* $p < .05$.

4 3 2 0 1 showed that the Canadian teachers with seven courses or more (4) in these specialty areas had significantly higher mean scores on Factor 2 than the Canadian teachers with four courses or less (2, 1, and 0).

Table 33

Results of Analyses of Variance of the Scores on the Attitudinal Factors Classified on the Basis of Specialty Courses Taken by Canadian Teachers with a Newman-Keuls Comparisons

Attitudinal Factor	Group X		Fo	P	Newman-Keuls
1	0=24.75	3=25.59	1.83	.128	4 3 2 0 1
	1=24.30	4=28.29			
	2=25.29				
2	0=27.70	3=30.32	3.92	.005*	<u>4 3 2 0 1</u>
	1=26.74	4=32.21			
	2=28.04				
3	0=24.65	3=24.64	.61	.662	0 3 2 4 1
	1=22.44	4=24.29			
	2=24.32				
4	0= 9.40	3=10.59	2.78	.030*	3 4 0 2 1
	1= 8.70	4=10.17			
	2= 8.89				

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses; 3 = 5-6 courses; 4 = 7+ courses.

* $p < .05$.

Further inspection of this table showed that the F value of 2.78 on Factor 4 (Adequacy/Inadequacy) indicated a significant difference among the mean scores of the groups, however, the Newman-Keuls comparisons between ordered means failed to yield a difference between the groups. Since significant differences were found the statistical hypothesis that there would be no difference was rejected for Factor 2

(Difference/Deficit) and Factor 4 (Adequacy/Inadequacy) and the research hypothesis that differences would be found on the attitudinal dimension of Difference/Deficit was accepted for the Canadian sample.

In conclusion, the teachers with seven or more courses in these specialty areas were less supportive of the deficit attitudes than the teachers with fewer specialty courses in all three samples

Type of Specialty Courses. The type and number of each specialty course taken was examined to complete this hypothesis testing. The numbers of each specialty course taken were categorized in the following way: 0 = no courses, 1 = one to two courses, 2 = three to four courses, 3 = five to six courses and 4 = seven or more courses. Analyses of variance of the scores on the attitudinal factors classified on the basis of the number of each of the specialty courses were executed. The specialty courses were: linguistics, cultural anthropology, sociology of education, Indigenous education/studies, Indigenous languages, English as a second language/dialect, cross-cultural education, and language teaching methodologies.

The results of the analyses of variance of the attitudinal factor scores for the linguistics courses taken are displayed on Tables 34, 35, and 36 representing the Total, Australian, and Canadian samples. An inspection of Table 34, showed that the F value of 4.64 on Factor 2 (Difference/Deficit) indicated that there was a significant difference among the mean scores of the groups but the Newman-Keuls comparison did not yield a difference between the groups. Similarly in Table 35, the F value of 5.03 for Factor 2 (Difference/Deficit) and 3.40 for Factor 4 (Adequacy/Inadequacy) indicated a significant difference among the mean scores of the Australian groups but again the Newman Keuls comparisons

Table 34

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Linguistic Courses Taken by
all Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=27.27	1.77	.172	2 1 0
	1=28.83			
	2=30.25			
2	0=29.12	4.64	.011*	2 1 0
	1=31.73			
	2=33.50			
3	0=23.32	1.20	.303	0 1 2
	1=23.25			
	2=19.00			
4	0= 9.64	1.44	.239	2 1 0
	1=10.15			
	2=11.25			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.
* $p < .05$.

Table 35

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Linguistic Courses Taken by
Australian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=30.00	.92	.401	2 1 0
	1=31.58			
	2=32.50			
2	0=30.03	5.03	.008*	2 1 0
	1=33.88			
	2=39.00			
3	0=22.03	.61	.547	1 0 2
	1=23.00			
	2=20.00			
4	0= 9.83	3.40	.038*	2 1 0
	1=11.04			
	2=13.50			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.
* $p < .05$.

Table 36

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Linguistic Courses Taken by
Canadian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=24.98	1.74	.180	2 1 0
	1=27.00			
	2=28.00			
2	0=28.36	1.44	.240	1 0 2
	1=30.31			
	2=28.00			
3	0=24.41	1.38	.256	0 1 2
	1=23.42			
	2=18.00			
4	0= 9.48	.05	.950	1 0 2
	1= 9.56			
	2= 9.00			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.
 * $\underline{p} < .05$.

Table 37

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Cultural Anthropology Courses
Taken by all the Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=27.43 2=28.25	.50	.686	1 2 0 3
	1=28.42 3=25.00			
2	0=29.14 2=31.88	2.14	.097	3 2 1 0
	1=31.23 3=33.00			
3	0=22.85 2=24.75	.74	.527	2 1 0 3
	1=23.83 3=21.00			
4	0= 9.53 2= 9.25	2.11	.100	3 1 0 2
	1=10.41 3=12.00			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses;
 3 = 5-6 courses.
 * $\underline{p} < .05$.

of ordered means failed to yield any difference between. Inspection of Table 36 showed that there were no significant differences between the mean scores of the groups of Canadian teachers on any of the factors. The teachers, regardless of the number of linguistic courses taken, did not have significantly different mean attitudinal factor scores.

The results of the analyses of variance of the attitudinal factor scores classified on the basis of the number of cultural anthropology courses taken by teachers in the Total, Australian and Canadian samples are displayed on Tables 37, 38, and 39, respectively. An inspection of Tables 37 and 39 showed that there were no significant differences among the mean scores on the four attitudinal factors for the teachers who had taken different numbers of cultural anthropology courses in the Total and Canadian samples. Regardless of the number of courses taken, these two groups of teachers did not have significantly different mean attitudinal factor scores. Inspection of Table 38, showed that the resultant F value of 5.63 on Factor 2 (Difference/Deficit) indicated significant differences among the mean factor scores for the Australian teachers who had taken different numbers of cultural anthropology courses. The Newman-Keuls comparisons between ordered means however, did not differentiate between the groups.

The results of the analyses of variance of the attitudinal factor scores classified on the basis of the number of sociology of education courses taken by teachers in the Total, Australian, and Canadian samples are displayed on Tables 40, 41, and 42, respectively. An inspection of Table 40 showed that the resultant F value of 9.79 for Factor 2 (Difference/Deficit) indicated significant differences among the mean factor scores for the groups of teachers in the Total sample but the

Table 38

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Cultural Anthropology Courses

Taken by Australian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=30.07	1.23	.296	1 0 2
	1=31.63			
	2=27.00			
2	0=29.91	5.63	.005*	2 1 0
	1=33.67			
	2=40.00			
3	0=22.04	.39	.677	1 0 2
	1=22.81			
	2=20.50			
4	0= 9.70	4.07	.020*	<u>1 2 0</u>
	1=11.41			
	2=11.00			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.

* $p < .05$.

Table 39

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Cultural Anthropology Courses

Taken by Canadian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=24.96 2=28.67	1.11	.348	2 1 3 0
	1=26.36 3=25.00			
2	0=28.43 2=29.17	.56	.640	3 1 2 0
	1=29.67 3=33.00			
3	0=23.60 2=26.17	.54	.659	2 1 0 3
	1=24.48 3=21.00			
4	0= 9.38 2= 8.67	.67	.508	3 1 0 2
	1= 9.76 3=12.00			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses;
 3 = 5-6 courses.

* $p < .05$.

Table 40

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Sociology of Education Courses
Taken by all Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=27.41	.36	.701	1 2 0
	1=28.12			
	2=28.08			
2	0=28.58	9.79	.000*	2 1 0
	1=31.66			
	2=32.15			
3	0=23.33	.54	.586	2 0 1
	1=22.92			
	2=24.54			
4	0= 9.41	2.84	.060	2 1 0
	1=10.15			
	2=10.69			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.
 * $p < .05$.

Table 41

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Sociology of Education Courses
Taken by Australian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=30.08	1.22	.298	2 1 0
	1=30.64			
	2=36.00			
2	0=28.56	11.96	.000*	2 1 0
	1=34.07			
	2=38.50			
3	0=21.87	.37	.692	2 1 0
	1=22.62			
	2=23.50			
4	0= 9.62	3.15	.047	2 1 0
	1=10.83			
	2=12.50			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.
 * $p < .05$.

Newman-Keuls comparisons between ordered means failed to yield difference between the groups. Inspection of Table 41 showed that the resultant F value of 11.96 on Factor 2 (Difference/Deficit) indicated significant differences among the mean factor scores for the of Australian teachers but the Newman Keuls did not find a difference between the mean scores of each of the groups. The results displayed on Table 42 indicate that there was no significant difference between the mean attitudinal factor scores for the Canadian sample.

A summary of the results of the analyses of variance of the attitudinal factor scores classified on the basis of the number of Indigenous education/studies courses taken by teachers in the Total, Australian, and Canadian samples is displayed in Tables 43, 44, and 45, respectively. Inspection of Table 43 showed that the resultant F value of 5.18 for Factor 2 (Difference/Deficit) indicated a significant difference among the mean factor scores of the teachers who had taken different numbers of Indigenous education/studies courses, but the Newman-Keuls comparisons failed to determine a difference between scores of each of the groups. The results of the analyses for the Australian sample are displayed in Table 44. Inspection of this table showed that the F value of 3.87, on Factor 2 (Difference/Deficit) and the Newman-Keuls comparisons, 2 1 0, indicated a significant difference between the mean scores of groups of teachers who had taken different numbers of Indigenous education/studies courses. The Australian teachers who had taken three to four courses had significantly higher mean scores than those teachers without any such courses (0). The results of the analyses of variance of the scores on the attitudinal factors classified on the basis of the number of Indigenous

Table 42

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Sociology of Education Courses
Taken by Canadian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=24.98	.71	.494	2 1 0
	1=26.11			
	2=26.64			
2	0=27.77	2.42	.093	2 1 0
	1=29.75			
	2=31.00			
3	0=24.67	.97	.384	2 0 1
	1=23.15			
	2=24.72			
4	0= 9.23	1.06	.350	2 1 0
	1= 9.60			
	2=12.50			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.
 * $p < .05$.

Table 43

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Indigenous Education Courses
Taken by all Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=27.25 3=25.00	.90	.465	1 2 0 3 4
	1=28.61 4=22.00			
	2=28.33			
2	0=28.71 3=40.00	5.18	.001*	3 2 4 1 0
	1=30.75 4=34.00			
	2=35.00			
3	0=23.27 3=33.00	.92	.451	3 4 2 0 1
	1=22.91 4=26.00			
	2=23.53			
4	0= 9.68 3=14.00	1.13	.345	3 2 4 1 0
	1= 9.80 4=10.00			
	2=10.67			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses;
 3 = 5-6 courses; 4 = 7+ courses.

Table 44

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Indigenous Education Courses
Taken by Australian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=30.07	.32	.726	1 2 0
	1=31.00			
	2=30.60			
2	0=30.07	3.87	.024*	<u>2 1 0</u>
	1=31.94			
	2=37.80			
3	0=22.44	.26	.769	2 0 1
	1=21.81			
	2=23.00			
4	0=10.16	.34	.711	2 0 1
	1=10.14			
	2=11.20			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.
 * $p < .05$.

Table 45

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Indigenous Education Courses
Taken by Canadian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=25.03 3=25.00	.65	.629	2 1 0 3 4
	1=26.41 4=22.00			
	2=27.20			
2	0=27.64 3=40.00	4.10	.004*	3 4 2 1 0
	1=29.64 4=34.00			
	2=33.60			
3	0=23.93 3=33.00	.59	.670	3 4 0 1 2
	1=23.92 4=26.00			
	2=23.80			
4	0= 9.30 3=14.00	1.29	.277	3 2 4 1 0
	1= 9.49 4=10.00			
	2=10.40			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses;
 3 = 5-6 courses; 4 = 7+ courses.
 * $p < .05$.

education/studies courses taken by the Canadian teachers are displayed on Table 45. The resultant F value of 4.10 on Factor 2 (Difference/Deficit) indicated that there was a significant difference among the mean scores of teachers with different numbers of classes but the Newman-Keuls comparisons of ordered means failed to yield any difference between the mean attitudinal factor scores of the various groups.

A summary of the results of the analyses of variance of the attitudinal factor scores classified on the basis of the number of Indigenous language courses taken by teachers in the Total, Australian, and Canadian samples is displayed on Tables 46, 47, and 48, respectively. Inspection of Table 46 showed that the resultant F value of 6.18 for Factor 2 (Difference/Deficit) was significant at the .05 level of significance for the Total sample. The Newman-Keuls indicated significant differences among the mean scores of the groups but failed to yield a difference between them. The Newman-Keuls comparison, 1 0 2, as shown in this table indicated that the teachers with one to two courses in Indigenous languages (1), had the highest mean score on this factor, followed by those with no courses in Indigenous languages (0) and then by those with three to four courses (2). It should be noted that there was only one respondent in the three to four courses category (2) and that this individual may or may not have been representative of all teachers with that number of Indigenous language courses.

A summary of the results of the analyses for the Australian sample is displayed in Table 47 and the F value of 4.89 on Factor 2 (Difference/Deficit) indicated significant differences between the mean scores of the groups of Australian teachers who had taken different

factors classified on the basis of the number of Indigenous education/studies courses taken by the Canadian teachers are displayed on Table 45. The resultant F value of 4.10 on Factor 2 (Difference/Deficit) indicated that there was a significant difference among the mean scores of teachers with different numbers of classes but the Newman-Keuls comparisons of ordered means failed to yield any difference between the mean attitudinal factor scores of the various groups.

A summary of the results of the analyses of variance of the attitudinal factor scores classified on the basis of the number of Indigenous language courses taken by teachers in the Total, Australian, and Canadian samples is displayed on Tables 46, 47, and 48, respectively. Inspection of Table 46 showed that the resultant F value of 6.18 for Factor 2 (Difference/Deficit) was significant at the .05 level of significance for the Total sample. The Newman-Keuls indicated significant differences among the mean scores of the groups but failed to yield a difference between them. The Newman-Keuls comparison, 1 0 2, as shown in this table indicated that the teachers with one to two courses in Indigenous languages (1), had the highest mean score on this factor, followed by those with no courses in Indigenous languages (0) and then by those with three to four courses (2). It should be noted that there was only one respondent in the three to four courses category (2) and that this individual may or may not have been representative of all teachers with that number of Indigenous language courses.

A summary of the results of the analyses for the Australian sample is displayed in Table 47 and the F value of 4.89 on Factor 2 (Difference/Deficit) indicated significant differences between the mean

Table 46

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Indigenous Language Courses
Taken by all Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=27.68	.19	.829	1 0 2
	1=28.52			
	2=27.00			
2	0=29.46	6.18	.003*	1 0 2
	1=34.33			
	2=28.00			
3	0=23.01	1.66	.193	1 0 2
	1=25.29			
	2=22.00			
4	0= 9.71	1.58	.208	1 0 2
	1=10.76			
	2= 9.00			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.
 * $p < .05$.

Table 47

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Indigenous Language Courses
Taken by Australian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=30.35	.42	.520	1 0
	1=31.71			
2	0=30.78	4.89	.030*	<u>1 0</u>
	1=36.29			
3	0=21.99	3.28	.073	1 0
	1=25.29			
4	0=10.16	.42	.518	1 0
	1=10.86			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses.
 * $p < .05$.

numbers of Indigenous language courses. The Newman-Keuls comparisons between ordered means, 10, indicated that those teachers who had one to two courses in an Indigenous language (1) had higher mean scores on the Difference/Deficit factor than those teachers without any courses in this area of specialty (0).

The results of the analyses for the Canadian teachers are displayed in Table 48. The F value of 4.89 on Factor 2 (Difference/Deficit) indicated significant differences among the mean factor scores but the Newman-Keuls, 102, failed to find a significant difference between the mean factor scores of the various groups. It should be noted that there was only one respondent in the three to four category (2) and that this individual may or may not be representative of all teachers with that number of courses.

A summary of results of the analyses of variance of the the attitudinal factor scores classified on the basis of the number of ESL/ESD courses taken by the Total, Australian, and Canadian teachers, is displayed on Tables 49, 50, and 51. An examination of Table 49 showed that the F value of 7.13 on Factor 2 (Difference/Deficit) was significant at the .05 level. The Total sample of teachers had significantly different mean scores among the groups however, the Newman-Keuls failed to yield any differences between the mean scores. Inspection of Table 50 showed that there were significant differences among the mean scores for the Australian teachers as indicated by the F value 5.12. The Newman-Keuls comparisons of ordered means indicated that those teachers with one to two courses had significantly higher mean scores on the Difference/Deficit factor than those teachers with no ESL/ESD courses. An examination of the results of the analyses for the

Table 48

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Indigenous Language Courses
Taken by Canadian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=25.44	.43	.649	2 1 0
	1=26.93			
	2=27.00			
2	0=28.36	4.89	.009*	1 0 2
	1=33.36			
	2=28.00			
3	0=23.86	.40	.669	1 0 2
	1=25.29			
	2=22.00			
4	0= 9.34	1.96	.146	1 0 2
	1=10.71			
	2= 9.00			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.
 * $p < .05$.

Table 49

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of ESL/ESD Courses Taken by
all Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=27.37	1.93	.148	1 0 2
	1=28.98			
	2=22.00			
2	0=29.07	7.13	.001*	1 0 2
	1=32.48			
	2=24.00			
3	0=22.90	1.62	.200	2 1 0
	1=24.02			
	2=30.00			
4	0= 9.62	1.87	.157	2 1 0
	1=10.32			
	2=12.00			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.
 * $p < .05$.

Table 50

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of ESL/ESD Courses Taken by
Australian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=30.07	1.20	.276	1 0
	1=31.41			
2	0=30.26	5.12	.026*	1 0
	1=33.52			
3	0=22.00	.58	.448	1 0
	1=22.81			
4	0= 9.97	1.86	.176	1 0
	1=10.81			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses.

* $p < .05$.

Table 51

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of ESL/ESD Courses Taken by
Canadian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=25.32	.85	.430	1 0 2
	1=26.72			
	2=22.00			
2	0=28.16	4.24	.017*	1 0 2
	1=31.52			
	2=24.00			
3	0=23.58	1.25	.290	2 1 0
	1=25.14			
	2=30.00			
4	0= 9.35	.98	.378	2 1 0
	1= 9.86			
	2=12.00			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.

* $p < .05$.

Canadian teachers in Table 51 showed that the F value of 4.24 on Factor 2 (Difference/Deficit) was significant at the .05 level. There were significant differences among the mean scores of the three groups of Canadian teachers, however the Newman-Keuls comparisons of ordered means failed to yield a difference between the various groups.

A summary of the results of the analyses of variance of the attitudinal factor scores classified on the basis of the number of cross-cultural education courses taken by the Total, Australian, and Canadian teachers, is displayed in Tables 52, 53, and 54. Inspection of Table 52 showed that the F value 3.76 for Factor 1 (Dialect Description) was significant at the .05 level for the Total sample. This indicated differences among the mean scores of the groups of teachers, but the Newman-Keuls comparisons of ordered means did not indicate any differences between the groups of teachers who had taken different numbers of courses in cross-cultural education. Similarly, on Factor 2 (Difference/Deficit), the F value of 6.45 indicated significant differences among the mean scores of the groups of teachers but the Newman-Keuls did not yield a difference between the various groups. Further inspection of this table showed that the F value of 4.64 on Factor 4 (Adequacy/Inadequacy) indicated significant differences among the mean scores but the Newman-Keuls failed to yield a difference between the mean scores of groups of teachers who had taken different numbers of cross-cultural courses.

A summary of the results of the analyses of variance of the attitudinal factor scores classified on the basis of the number of language methodology courses taken by the Total, Australian, and Canadian teachers is displayed in Tables 55, 56, and 57. Inspection of

Table 52

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Cross Cultural Courses Taken
by all Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=27.12	3.76	.025*	2 1 0
	1=29.57			
	2=33.00			
2	0=29.09	6.45	.002*	2 1 0
	1=32.31			
	2=37.00			
3	0=22.96	.77	.467	1 0 2
	1=24.02			
	2=22.00			
4	0= 9.54	4.64	.011	1 0 2
	1=10.69			
	2= 7.00			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.
 * $p < .05$.

Table 53

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Cross Cultural Courses Taken
by Australian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=30.18	.34	.713	2 1 0
	1=31.007			
	2=33.00			
2	0=29.93	4.56	.013*	2 1 0
	1=33.96			
	2=37.00			
3	0=21.81	.93	.397	1 2 0
	1=23.25			
	2=22.00			
4	0= 9.67	6.25	.003*	1 0 2
	1=11.61			
	2= 7.00			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.
 * $p < .05$.

Table 54

Results of Analyses of Variance of the Scores on the Attitudinal Factors Classified on the Basis of Cross-Cultural Courses Taken by Canadian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=24.97 1=28.04	6.03	.016*	1 0
2	0=28.49 1=33.54	2.56	.112	1 0
3	0=23.78 1=24.85	.65	.423	1 0
4	0= 9.44 1= 9.69	.21	.650	1 0

Note. Groups: 0 = 0 courses; 1 = 1-2 courses.

* $p < .05$.

Table 55

Results of Analyses of Variance of the Scores on the Attitudinal Factors Classified on the Basis of Language Methods Courses Taken by all Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=28.08 2=28.63 1=27.05 3=32.00	.68	.565	3 2 0 1
2	0=29.38 2=31.75 1=30.58 3=38.00	1.43	.236	3 2 1 0
3	0=22.91 2=24.13 1=23.25 3=20.00	.52	.667	2 1 0 3
4	0= 9.66 2=11.75 1= 9.86 3=11.00	1.71	.166	2 3 1 0

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses; 3 = 5-6 courses.

* $p < .05$.

Tables 55 and 56 showed that there were no significant differences between the mean scores of groups of the Total sample on any of the factors. Inspection of Table 57, however, showed that the F value of 2.93 for Factor 4 was significant at the .05 level. This would indicate that there were significant differences among the mean scores of the groups of Canadian teachers on Factor 4 (Adequacy/Inadequacy). The Newman-Keuls comparisons between ordered means, 2 3 1 0, indicated that the teachers with three to four courses in language methodology (2) had significantly higher mean scores on the Adequacy/Inadequacy factor than did those teachers without any language methodology courses (0).

In summary, since the resultant F values for Factor 3 were not significant at the .05 level for any of the above analyses, the statistical hypothesis of no difference was accepted for Factor 3 and the research hypothesis that differences would be found on the attitudinal dimension of Acceptability/Unacceptability was rejected for the Total, Australian and Canadian samples. Also since the resultant F values were significant at the .05 level the statistical hypothesis that there would be no differences among the mean scores on Factor 1, Factor 2, and Factor 4 were rejected and the research hypotheses that there would be differences on the Dialect Description, Difference/Deficit and Adequacy/Inadequacy attitudinal dimensions were supported for the Total, Australian and Canadian samples.

In conclusion, for the Total sample there were different attitudinal judgements on Factor 1 (Dialect Description) as related to the number of cross-cultural courses taken by teachers. The teachers

Table 56

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Language Methods Courses Taken
by Australian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=30.29	.26	.769	1 0 2
	1=31.00			
	2=28.00			
2	0=30.76	2.00	.141	2 1 0
	1=31.88			
	2=43.00			
3	0=22.49	.39	.680	0 1 2
	1=21.56			
	2=21.00			
4	0=10.20	.22	.807	2 0 1
	1=10.16			
	2=12.00			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses.
 * $p < .05$.

Table 57

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Language Methods Courses Taken
by Canadian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	0=25.60 2=28.71	1.22	.307	3 2 0 1
	1=25.12 3=32.00			
2	0=27.82 2=30.14	2.25	.086	3 2 1 0
	1=29.94 3=38.00			
3	0=23.39 2=24.57	.66	.580	1 2 0 3
	1=24.76 3=20.00			
4	0= 9.05 2=11.71	2.93	.037*	2 3 1 0
	1= 9.71 3=11.00			

Note. Groups: 0 = 0 courses; 1 = 1-2 courses; 2 = 3-4 courses;
 3 = 5-6 courses.
 * $p < .05$.

who had taken more cross-cultural courses described the dialect features more strongly than did those teachers with fewer courses. There were also different attitudinal judgements on Factor 2 (Difference/Deficit) when classified by the number of linguistics, sociology of education, Indigenous education/studies, Indigenous language, ESL/ESD, and cross-cultural courses taken by the teachers. The teachers with more specialty courses had more positive attitudes towards the oral English of Indigenous students.

For the Australian sample there were different attitudinal judgements on Factor 2 (Difference/Deficit) when relating to the number of courses taken in linguistics, cultural anthropology, sociology of education, Indigenous education/studies, Indigenous language, cross-cultural education, and ESL/ESD. The Australian teachers with more of these specialty courses were less supportive of the deficit model than those teachers with fewer courses. On Factor 4 (Adequacy/Inadequacy) there were differences between the teachers who had taken courses in linguistics, cultural anthropology, and cross-cultural education. Those with more courses were more likely to see the students' language as adequate.

For the Canadian sample there were different attitudinal judgements on Factor 1 (Dialect Description) only among the teachers who had taken different numbers of cross-cultural education courses. The teachers who had taken one or two of these courses described the dialect features of their students speech more strongly than did the teachers who had not taken any cross-cultural education courses. On Factor 2 (Difference/Deficit) there were differences related to the number of courses taken in Indigenous education/studies, Indigenous language, and

ESL/ESD. Regardless of the number of linguistics, cultural anthropology, and sociology of education courses there were no differences among the Canadian teacher attitudes toward their students' speech.

Hypothesis Number Seven

The seventh hypothesis stated that there would be no significant differences found between the mean attitudinal factor scores of the teachers classified on the basis of age and sex of the Indigenous Students' Oral English Questionnaire

Age of Teachers For all of the teachers in the sample the age variable was categorized as: group 1 = 20-24 years; group 2 = 25-29 years; group 3 = 30-34 years; group 4 = 35-44 years; group 5 = 45 years and over. Analyses of variance of the scores on the attitudinal factors classified according to the age of the teachers were executed. A summary of the results of the analyses of variance for the Total sample is presented in Table 58. An inspection of this table showed that the resultant F value of 2.09 on Factor 3 was not significant at the .05 level. Therefore the statistical hypothesis of no difference was accepted for Factor 3 and the research hypothesis that differences would be found on the attitudinal dimensions of Acceptability/Unacceptability was rejected for the Total sample.

Table 58

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Age Groups of all
Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group X		Fo	P	Newman-Keuls
1	1=30.10	4=27.82	2.90	.023*	<u>1</u> 2 4 <u>3</u> 5
	2=28.55	5=26.16			
	3=26.61				
2	1=32.10	4=25.32	10.99	.000*	<u>3</u> <u>1</u> <u>2</u> <u>5</u> <u>4</u>
	2=31.15	5=27.76			
	3=32.10				
3	1=22.98	4=21.65	2.09	.082	3 5 1 2 4
	2=22.87	5=23.63			
	3=24.86				
4	1=10.37	4= 8.82	2.49	.045*	1 3 2 5 4
	2=10.13	5= 9.42			
	3=10.16				

Note. Groups: 1 = 20-24 yrs; 2 = 25-29 yrs; 3 = 30-34 yrs; 4 = 35-44 yrs; 5 = 45+ yrs.

* $p < .05$.

Further inspection of Table 58 showed that there were significant differences on Factor 1 (Dialect Description), Factor 2 (Difference/Deficit), and Factor 4 (Adequacy/Inadequacy) as indicated by the F values of 2.90, 10.99 and 2.49. The Newman-Keuls comparisons between ordered means, 1 2 4 3 5, on Factor 1 (Difference/Deficit) indicated that teachers who were 20-24 years old had significantly higher mean scores than those 30-34 years old and those 45 years and over. The Newman-Keuls comparisons between ordered means, 3 1 2 5 4, for Factor 2 demonstrated that the younger teachers, (1, 2, and 3), had higher mean scores on the Difference/Deficit factor than the teachers 35 years and older (4 and 5). The Newman-Keuls comparisons between ordered means for Factor 4, failed to yield a difference between the groups.

The results of the analyses of variance of the attitudinal items classified by age are displayed in Appendix Table A-19. Inspection of this table showed that items 6, 9, and 10 from Factor 1 (Dialect Description) had F values of 5.05, 3.48 and 4.59, respectively. The Newman-Keuls comparisons between ordered means, 1 2 3 4 5, 1 2 4 3 5, and 1 2 4 3 5, indicated that the younger teachers (1) had significantly higher mean scores on these Dialect Description items than did the teachers who were 30 years and older (3, 4, and 5). These items described the students speech in the following way: it reflected the grammar of formal English, had a consistently different phonological system and different vocabulary than formal English.

Further inspection of Table A-19 showed that there were six items from Factor 2 (Difference/Deficit) that differed significantly as indicated by the F values of 4.03, 8.07, 6.70, 2.70, 4.19 and 3.64 on items 2, 4, 7, 16, 24, and 25. These items reflected the following Difference/Deficit attitudes: home vocabulary should not be accepted in the classroom, the students' speech was indicative of cognition, vocabulary was limited, differences from standard English from the students' phonological system were the result of careless habits, the students did not hear well-formed language in the home and community, and the students' speech was less correct than formal English. The Newman-Keuls comparisons for these items indicated differences between the younger and older groups of teachers with the younger teachers having higher mean scores.

Item 14, from Factor 4 (Adequacy/Inadequacy) differed significantly at the .05 level as shown by the F value of 4.45. An examination of the Newman-Keuls comparison between ordered means, 1 3 2 5 4, showed that the teachers who were 20-24 years old (1) and those 30-34 years old (3) had significantly higher mean scores than the 40-44 years old group (4) on this Adequacy/Inadequacy item. This item stated that the students' oral English was a poorer quality communication system than formal English.

Since significant differences were found the statistical hypothesis of no difference was rejected for Factor 1, Factor 2 and Factor 4 and the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description, Difference/Deficit and Adequacy/Inadequacy was accepted for the Total sample.

The results of analyses of variance of the scores on the attitudinal factors as classified by the age groups of the Australian teachers are displayed in Table 59. An inspection of this table showed that Factor 1 (Dialect Description) and Factor 2 (Difference/Deficit) showed significant differences at the .05 level with F values of 2.91 and 6.49 respectively. According to the Newman-Keuls comparisons between ordered means on Factor 1 (Dialect Description) 2 4 3 1 5, the 25-29 year old teachers (2) had significantly higher mean scores than the over 45 group (5). According to the Newman-Keuls comparison of ordered means for Factor 2 (Difference/Deficit), 3 2 1 5 4, the younger teachers had significantly higher mean scores on this Difference/Deficit factor than the older teachers.

Table 59

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Age Groups of Australian
Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group X		Fo	P	Newman-Keuls
1	1=30.53	4=31.70	2.91	.026*	<u>2</u> 4 3 1 <u>5</u>
	2=31.95	5=25.92			
	3=31.00				
2	1=31.69	4=24.70	6.49	.000*	<u>3</u> <u>2</u> 1 <u>5</u> 4
	2=32.58	5=27.25			
	3=34.68				
3	1=22.86	4=20.00	.79	.537	1 3 5 2 4
	2=21.84	5=22.17			
	3=22.63				
4	1=10.17	4= 8.80	1.85	.127	3 2 1 5 4
	2=10.63	5= 9.25			
	3=11.21				

Note. Groups: 1 = 20-24 yrs; 2 = 25-29 yrs; 3 = 30-34 yrs; 4 = 35-44 yrs; 5 = 45+ yrs.

* $p < .05$.

The results of the analyses of variance of the the scores on the attitudinal items as classified by age groups of Australian teachers are displayed in Appendix, Table A-20. Inspection of this table showed that items 1 and 3 with F values of 2.69 and 3.64 showed significant difference at the .05 level. Item 1 suggested that the students' grammatical system was different from formal English but had its own predictable pattern. The Newman-Keuls comparisons of ordered means was 4 2 3 1 5, which indicated that the teachers aged 25-29 years (2) and those 40-44 years old (4) had significantly higher mean scores than those teachers of 45 years and over (4). Item 3 also showed differences among the mean scores on the various age groups but the Newman-Keuls failed to yield a difference between the various age groups.

Further inspection of Table A-20 showed that the items from Factor

2 (Difference/Deficit) which differed significantly were items 2, 4, and 5 which had F values of 2.95, 3.35, and 4.61. Item 2 suggested that the students' home vocabulary should not be accepted in the classrooms and the Newman-Keuls comparisons, 3 2 1 5 4, indicated that the teachers who were 30-34 (4) had significantly higher mean scores than those 49-44 years old. Item 4 indicated that the students' cognitive abilities were reflected in their speech patterns. The Newman-Keuls comparisons of ordered means, 2 3 1 5 4, indicated a difference between the mean scores of the groups of teachers younger than 34 years (1, 2, and 3) and those in the 34-44 years age group (4). Item 5 stated that any differences between the phonological systems were due to the fact these students had different vocal cords. The Newman-Keuls comparison between ordered means, 3 4 2 1 5, indicated differences between the group of teachers who were 45 years and older (5) and the younger groups (1, 2, 3, and 4).

The analyses of variance of the scores on the attitudinal factors as classified by the age groups of the Canadian teachers are displayed in Table 60. The resultant F values of .90, for Factor 1, 1.76 for Factor 3 and 1.88 for Factor 4 are not significant at the .05 level. Therefore the statistical hypothesis of no difference was accepted for Factors 1, 3 and 4 and the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description, Acceptability/ Unacceptability and Adequacy/Inadequacy was rejected for the Canadian sample. Further inspection of this table showed that the resultant F value of 5.29 indicated a significant difference on Factor 2 (Difference/Deficit). The Newman-Keuls comparisons between ordered means, 1 3 2 5 4, indicated that the older groups of teachers

(4 and 5) had significantly lower mean scores the youngest group of teachers (1).

Table 60

Results of Analyses of Variance of the Scores on the Attitudinal Factors Classified on the Basis of Age Groups of Canadian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group X		Fo	P	NewmanKeuls
1	1=27.00	4=26.21	.90	.465	1 5 2 4 3
	2=26.25	5=26.27			
	3=24.00				
2	1=35.00	4=25.58	5.29	.000*	<u>1</u> 3 2 <u>5</u> 4
	2=30.18	5=28.00			
	3=30.56				
3	1=23.80	4=22.33	1.76	.143	3 5 1 2 4
	2=23.57	5=24.31			
	3=26.19				
4	1=11.80	4= 8.83	1.88	.120	1 2 3 5 4
	2= 9.79	5= 9.50			
	3= 9.53				

Note. Groups: 1 = 20-24 yrs; 2 = 25-29 yrs; 3 = 30-34 yrs; 4 = 35-44 yrs; 5 = 45+ yrs.

* $p < .05$.

A summary of the results of the analyses of variance of the attitudinal item scores for Factor 2, classified on the basis of age are displayed in the Appendix, Table A-21. The F values of 2.79, 5.13, and 2.68, indicated that items 4, 7 and 24 were significant at the .05 level. These items referred to the students' speech and reflected the following attitudinal judgements: the students' speech is indicative of cognitive ability, the vocabulary is limited, and outside of the school setting these students hear very little well-formed language. The Newman-Keuls comparisons between ordered means for items 4 and 7 failed to show differences between the groups but the Newman-Keuls for item 24,

Table 61

Results of Analyses of Variance of Scores on the Attitudinal
Factors Classified on the Basis of Sex of all Teachers
with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	1=27.67	.00	.962	1 2
	2=27.63			
2	1=30.13	.00	.940	1 2
	2=30.06			
3	1=22.85	3.83	.051	2 1
	2=24.37			
4	1= 9.80	.98	.325	2 1
	2=10.16			

Note. Groups: 1 = female; 2 = male.
 * $\underline{p} < .05$.

Table 62

Results of Analyses of Variance of Scores on the Attitudinal
Factors Classified on the Basis of Sex of Australian
Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group \bar{X}	Fo	P	Newman-Keuls
1	1=29.94	.84	.363	2 1
	2=30.98			
2	1=30.92	.15	.704	2 1
	2=31.44			
3	1=21.80	.95	.331	2 1
	2=22.27			
4	1= 9.96	1.17	.283	2 1
	2=10.58			

Note. Groups: 1 = female; 2 = male
 * $\underline{p} < .05$.

3 1 2 5 4 indicated that the 30-34 years age group (3) had significantly higher mean scores than the 35-44 years age group (4).

Sex of Teachers For all the teachers in the sample the sex variable was recorded as 1 = female and 2 = male (1). A summary of the results of the analyses of variance of the scores on the attitudinal factors as categorized by the sex of the teachers in the Total, Australian and Canadian samples, is displayed in Tables 61, 62 and 63.

Table 63

Results of Analyses of Variance of the Scores on the Attitudinal Factors Classified on the Basis of Sex of Canadian Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group X	Fo	P	Newman-Keuls
1	1=26.12	4.78	.031*	1 2
	2=23.64			
2	1=29.59	1.02	.315	1 2
	2=28.42			
3	1=23.56	5.57	.020*	2 1
	2=26.28			
4	1= 9.69	.00	.970	1 2
	2= 9.67			

Note. Groups: 1 = female; 2 = male.

* $p < .05$.

Table 61 and 62 display the results for the Total and Australian samples and showed no significant differences on the basis of sex. An examination of Table 63, representing the Canadian sample, showed significant differences, with an F value of 4.78 for Factor 1. The Newman-Keuls comparisons between ordered means indicated that the female Canadian teachers, had higher scores on Factor 1 (Dialect Description) than did the male teachers. The F value of 5.57 for Factor 3

(Acceptability/Unacceptability) indicated that the Canadian male teachers had higher mean scores on this Factor.

The results of the analyses of variance of the attitudinal item scores are displayed in Appendix, Table A-24. The F values of 5.31, 7.56, 5.57 and 4.38, for items 1, 6, 10, and 15 indicated significant differences. These items described the dialect in the following way: this speech had the grammatical rules of formal English as well as other rules, there were vocabulary items and intonation patterns that differed from formal English. The Newman-Keuls comparison between ordered means for each of these items indicated that the Canadian female teachers scored higher on these Dialect Description items than did the male teachers.

Further inspection of this table showed that on Factor 3 (Acceptability/Unacceptability) items 18 and 19 had F values of 7.70 and 11.7, which indicated significant differences. These items said that the students' speech was not a detriment to their classroom learning, and particularly, it was not detrimental to their learning to read. The mean scores indicated that Canadian male teachers (2) supported these statements significantly more strongly than did Canadian female teachers (1).

Since significant differences were found, the statistical hypothesis of no difference was rejected for Factor 1 (Dialect Description) and Factor 3 (Acceptability/Unacceptability) and the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description and Acceptability/Unacceptability was supported for the Canadian sample.

Discussion. The results of these analyses may be explained by

changes in the teacher training and that the younger teachers are those who have graduated most recently, have less experience and may be benefitting from more recent research into language theory and methodology that has moved away from the deficit theories of the 1960s and 1970s.

The female teachers in the Canadian sample were significantly more aware of the dialect features than the men, which may be a result of interests and teaching experience. There are often more women teaching in the primary grades, where issues and concerns in language and how it is learned seem more prominent. In the upper years, where more men are classroom teachers, the subject and content are more varied.

Further Analyses Although it was not explicitly required for the testing of the hypotheses in this study, the researcher felt that additional analysis would provide further information that would be useful for understanding and discussing the results of the study. For this reason analyses were performed on the Canadian and Australian groups of Non-Indigenous teachers. The results of the analyses of variance of the scores on the attitudinal factors classified on the basis of Australian and Canadian Non-Indigenous teachers are displayed in Table 64. The F value of 3.23 on Factor 4 (Adequacy/Inadequacy) was not significant at the .05 level. Therefore the statistical hypothesis of no difference was accepted for Factor 4 and the research hypothesis that differences would be found on the attitudinal dimension of Adequacy/Inadequacy was rejected.

However, the F values of 32.01, 5.26 and 3.92, respectively, indicated significant differences between the Australian and Canadian Non-Indigenous teachers on the attitudinal factors, Dialect Description,

Difference/Deficit and Acceptability/Unacceptability.

Table 64

Results of Analyses of Variance of the Scores on the Attitudinal
Factors Classified on the Basis of Groups of Non-Indigenous
Teachers with Newman-Keuls Comparisons

Attitudinal Factor	Group X	Fo	P	Newman-Keuls
1	1=25.92 2=30.67	32.01	.000*	2 1
2	1=28.64 2=30.72	5.26	.023*	2 1
3	1=23,54 2=21.92	3.92	.049*	1 2
4	1= 9.34 2=10.05	3.23	.074	2 1

Note. Groups: 1 = Non-Native; 2 = Non-Aboriginal.

* $p < .05$.

The results of the analyses of variance of the scores on the attitudinal items for factors 1, 2 and 3 classified on the basis of Non-Indigenous cultural groups are displayed in Appendix Table A-25. Inspection of this table showed that there were six items from Factor 1 (Dialect Description) that had F values of 25.18, 12.15, 43.05, 16.62, 43.14, and 9.30, which indicated significant differences between the mean scores for the groups. The Australian Non-Indigenous teachers had significantly higher mean scores than the Canadian Non-Indigenous teachers. These items suggested that there were different grammatical features, this speech had its own linguistic system, the sound system was consistently different and there were different vocabulary items and intonation patterns from standard English. There were three items from Factor 2 (Difference/Deficit) on which the scores differed significantly

as indicated by the F values 19.19, 5.75 and 7.96. On each of these items the Australian teachers had higher mean scores. These items indicated that the Australian teachers agreed that the students' speech was not indicative of cognitive ability, phonological differences were not due to careless habits, and this speech was not less correct than formal English. For Factor 3 (Acceptability/Unacceptability) the Canadian teachers had significantly higher mean scores as indicated by the F values of 4.61, 19.71, 11.45 and 4.68 on items 12, 17, 19 and 26.

In conclusion, there were some patterns that were quite similar in the two countries and some that were quite different. The Australian Non-Indigenous teachers were significantly more definitive in the description of their students' dialect than were the Canadian Non-Indigenous teachers (Factor 1); less likely to hold the attitude that this dialect was deficit (Factor 2); whereas the Canadian Non-Indigenous teachers were more accepting of their students' speech in the classroom than were the Australian Non-Indigenous teachers (Factor 3). The Canadian teachers said that the students' speech was not detrimental to his learning in the classroom and was not detrimental to his learning to read.

The Australian teachers rated each of these Dialect Description items more definitively than did the Canadian teachers. The Australian teachers strongly agreed that the students who spoke Aboriginal English could articulate ideas and feeling adequately for their grade placement. Canadian teachers disagreed that this was true. The Canadian teachers were more positive on the items which suggested that the students' speech did cause communication difficulties or misunderstandings, was not detrimental to the student when learning to read, and was adequate

for dealing with all concepts and modes of thinking in the classroom. The Canadian Non-Indigenous teachers appeared to be more willing than the Australian Non-Indigenous teachers to accept language variety in the classroom as demonstrated by the mean scores on Factor 3 (Acceptability/Inacceptability).

The fact that the Australian Non-Indigenous teachers were significantly more positive than the Canadian Non-Indigenous teachers on the Difference/Deficit factor could have been due to the research and program development done by the Queensland Department of Education and the VanLeer Project. Many of these teachers have been aware of the "difference theory" through inservice training and the use of the language program designed for the Aboriginal community schools. One explanation for the difference in classroom acceptability may be that the language variety spoken by Aboriginal children was more distinctly different from standard English than the English spoken by Native children, therefore the Australian Non-Indigenous teachers were less likely to accept this language variety for academic classroom functions.

Summary

In the chapter, the samples and the selected teacher characteristics have been described. The hypotheses have been tested and a brief discussion given following the results.

Chapter 5

SUMMARY, CONCLUSIONS AND IMPLICATIONS

This study was designed to investigate the relationship between demographic characteristics of teachers and their attitudes toward the oral English of Indigenous students in Saskatchewan, Canada and Queensland, Australia. The demographic characteristics which were examined in this study included culture, language facility, education, experience, sex, and age. The study identified attitudes of 217 teachers and examined the literature to assess possible educational implications. Since there is a scarcity of research in the area of teacher attitudes toward the spoken language of Indigenous students, it was an intent of this study to provide a framework for further studies.

The purpose of this chapter is to provide a general summary of the study, and to present the findings, conclusions and implications. As well, recommendations are made for further research.

Summary of the Study

The General Summary

Research literature has suggested that teacher attitudes toward language are related to characteristics of culture, language, education, teaching experience, sex, and age. Language and culture in combination have been found to be related to teacher attitudes. It was also

suggested that cross-cultural teaching experience, and educational background in Indigenous, cross-cultural and language education would relate to teacher attitudes. It was against this research background that the present study was designed and conducted.

The sample for this study was drawn from the teacher population in central and northern Saskatchewan, Canada, and Queensland, Australia. It was composed of 217 teachers of Indigenous children in elementary schools. The sample of teachers in this study was selected from schools that met the following criteria: located in central or northern Saskatchewan or Queensland, had an Indigenous student population of at least 10%, represented integrated and segregated schools administered by the various educational institutions, and employed both Indigenous and Non-Indigenous teachers.

The following school systems were represented in the Saskatchewan sample: seven band controlled schools, four federal schools on reserves, three northern provincial schools in Metis communities and seven integrated provincial schools. From the teachers surveyed, 50.4% were from integrated schools, 38% were from reserve schools and 11.6% were from schools in Metis communities. The following school systems were represented in the Queensland sample: nine state community schools, one Catholic community school, and seven integrated state schools. From the teachers surveyed, 40.4% were from community schools, 58.8% were from integrated schools, and 0.8% did not indicate the type of school in which they taught.

The variables investigated in the study were the teacher attitudes toward the students' speech, the teachers' culture, language, experience, education, age, and sex. The teacher attitudes were the

dependent variables while selected teacher characteristics were considered independent variables.

The Indigenous Students' Oral English Questionnaires (see Appendix E and F) were designed for the purposes of this study and were used to collect the data in Saskatchewan and Queensland. The questionnaire was designed in two parts. The first part examined the background characteristics set out in this research. Part Two of the questionnaire was designed on a Likert format with a five-point response scale to measure the strength of response to the attitudinal items outlined in the research. The instrument was administered in Queensland during February and March, 1983 and in Saskatchewan during May and June, 1983.

The scores on the attitudinal items contained in the second part of the questionnaire were submitted to a varimax rotated factor analysis in order to assess the degree to which the response scores reflected underlying categories of attitudinal judgements. Results of the factor analysis led to definitions of four factors which, according to the items that constituted them, were named to describe the attitudinal judgements toward oral English which they reflected: Factor 1 was called Dialect Description, Factor 2 was called Difference/Deficit, Factor 3 was called Acceptability/ Unacceptability, and Factor 4 was called Adequacy/ Inadequacy. The seven hypotheses posed in the study were tested using one-way analyses of variance with accompanying Newman-Keuls comparisons between ordered means. The significance level was set at .05. Findings from the analyses were reported, conclusions were made on the basis of results, and educational and research implications were discussed.

Summary of Findings Related to the Hypotheses

Hypothesis One

The first hypothesis stated that differences would be found between the attitudes of Native and Non-Native teachers toward the validity and acceptability of the oral English of Native children.

No significant differences were found when the research hypothesis data were analyzed and therefore the hypothesis was rejected. This finding indicated that for the Canadian Native and Non-Native teachers, membership in a cultural group did not influence attitudes toward language variation.

Hypothesis Two

The second research hypothesis stated that differences would be found between the attitudes of Aboriginal and Non-Aboriginal teachers toward the validity and acceptability of the oral English of Aboriginal children.

The research hypothesis was rejected since the analyses found no significant differences. This finding indicated that for the Australian Aboriginal and Non-Aboriginal teachers, membership in a cultural group did not influence their attitudes toward language variation.

Hypothesis Three

It was hypothesized that differences would be found between the attitudes of Native and Aboriginal teachers toward the validity and acceptability of the oral English of Native and Aboriginal children.

The research hypothesis that differences would be found on the attitudinal dimensions of Difference/Deficit, Acceptability/Unacceptability and Adequacy/Inadequacy for the Indigenous teachers was rejected. However, the research hypothesis that differences would be found on the attitudinal dimension of Dialect Description was accepted for the Aboriginal teachers who were found to differ significantly from the Native teachers. The Aboriginal and Native teachers were found to differ significantly in their description of the dialect spoken by Indigenous children in these two countries. This finding was supported by similar findings among Non-Indigenous teachers from Australia and Canada. The Non-Aboriginal Australian teachers were also found to differ significantly from the Non-Native Canadian teachers on these factors. They were more precise in their description of their students' dialect.

Hypothesis Four

The fourth hypothesis stated that a relationship would be found between the language background of teachers and their attitudes toward the oral English of their Native and Aboriginal students.

The research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description and Acceptability/Unacceptability was rejected for the Total sample since no significant differences were found for those factors. However, the research hypothesis that differences would be found on the attitudinal dimensions of Difference/Deficit and Adequacy/Inadequacy was accepted for the Total sample. The research hypothesis in relation to all factors was rejected for the Australian and Canadian sub-samples.

The teachers in the Total sample, who either spoke or understood an Indigenous language or Indigenous English, were found to differ significantly from those who spoke only English or English and another Non-Indigenous language. Those teachers who either spoke or understood an Indigenous language or Indigenous English stated that the oral English of their Indigenous students was Different but not Deficit and that it was Adequate rather than Inadequate.

An Alternative Hypothesis

The alternative hypothesis stated that a relationship would be found between the combined culture and language backgrounds of teachers and their attitudes toward the oral English of their Native and Aboriginal students.

The research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description and Acceptability/Unacceptability was rejected for the Total sample. However, the research hypothesis was accepted for the attitudinal dimensions of

Difference/Deficit and Adequacy/ Inadequacy. The research hypothesis of differences between the attitudes of teachers with different culture and language backgrounds was rejected for all factors for the Australian and Canadian samples.

Testing of the alternative hypothesis showed that teachers of Indigenous cultural backgrounds who spoke or understood either an Indigenous language or Indigenous English differed from the other groups in their attitudes toward the oral English of Indigenous students. They described the language as Different but not Deficit, and Adequate rather than Inadequate.

Hypothesis Five

The fifth research hypothesis stated that a relationship would be found between the length and type of teaching experience of the teachers and their attitudes toward the oral English of their Native and Aboriginal students.

Total Teaching Experience For the Total sample the finding of no significant differences among groups on the attitudinal dimensions of Dialect Description and Acceptability/Unacceptability led to rejection of the research hypothesis for those two factors. The hypothesis that differences would be found on the attitudinal dimensions of Difference/Deficit and Adequacy/Inadequacy was accepted since the analysis found significant differences on Factor 2 and Factor 4.

The finding of no significant differences led to the rejection of the research hypothesis of differences on the attitudinal dimensions of Dialect Description and Acceptability/ Unacceptability for the

Australian group. Since significant differences were found on the attitudinal dimensions of Difference/Deficit and Adequacy/Inadequacy, the hypothesis was accepted for the Australian sample for those two factors.

The research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description and Acceptability/Unacceptability was not supported by significant differences among the mean scores of the Canadian teachers. However the hypothesis that differences would be found on the attitudinal dimensions of Difference/Deficit and Adequacy/Inadequacy was accepted for the Canadian sample.

For all three groups of teachers the hypothesized relationship between length of teaching experience was found to be non-significant on Factor 1 and Factor 3, but significant on Factor 2 and Factor 4.

Indigenous Teaching Experience. The research hypothesis that a relationship would be found between experience in Indigenous education and differences on the attitudinal dimensions of Dialect Description and Acceptability/Unacceptability was rejected for the Total sample. The hypothesis that differences would be found on the attitudinal dimensions of Difference/Deficit and Adequacy/Inadequacy was accepted for the Total sample.

Similarly the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description and Acceptability/Unacceptability was rejected when no significant differences were found for the Australian sample but the research hypothesis that differences would be found on the attitudinal dimensions of Difference/Deficit and Adequacy/Inadequacy was accepted. Significant differences were found on

Factor 2 and Factor 4.

For the Canadian sample the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description, Acceptability/Unacceptability and Adequacy/Inadequacy was rejected. However, the research hypothesis that differences would be found on the attitudinal dimension of Difference/Deficit was accepted for the Canadian sample.

Findings from the analyses performed to test the hypothesis showed that with the exception of one group of teachers, the length and type of teaching experience related significantly to attitudinal differences on the Difference/Deficit and Adequacy/Inadequacy factors for all respondents. For the sub-sample of Canadian teachers, experience was significant only in relation to the teachers' ability to clearly describe the dialectal features of student speech. In general, the teachers with less experience in Indigenous education were more positive towards the oral English of their students. They tended to describe the language as Different rather than Deficit, and Adequate rather than Inadequate.

Hypothesis Six

The sixth hypothesis stated that a relationship would be found between the educational background of the teachers and their attitudes toward the oral English of their Native and Aboriginal students.

Number of Years of Post-Secondary Education. The finding of no

significant differences led to rejection of the hypothesis that differences would be found on the attitudinal dimensions of Dialect Description, Acceptability/Unacceptability, and Adequacy/Inadequacy for the Total group. Significant differences were be found on the attitudinal dimension of Difference/Deficit and the hypothesis was accepted for this factor for the Total sample.

The research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description and Acceptability/Unacceptability was rejected for the Australian sample. Hypothesized differences were found on the attitudinal dimension of Difference/Deficit and Adequate/ Inadequate for the Australian group and the hypothesis was accepted for Factor 2 and Factor 4.

The research hypothesis that there would be differences between the attitudes of the Canadian teachers with varying years of education toward the validity and acceptability of the speech of Canadian Native children was rejected.

The Total Number of Specialty Courses. The research hypothesis that a relationship existed between the number of specialty courses taken and the differences on the attitudinal dimension of Difference/Deficit was accepted for the Total, Australian and Canadian samples. Those teachers who had taken seven or more of the courses listed, suggested that the student language was Different but not Deficit.

Type of Specialty Courses. The research hypothesis that a relationship would be found between the type of specialty courses taken by teachers and the attitudinal dimension of Dialect Description among teachers with cross-cultural courses was accepted for the Total sample.

The research hypothesis that differences would be found on the attitudinal dimension of Difference/Deficit among teachers with linguistics, sociology of education, Indigenous education, Indigenous language, ESL/ESD and cross-cultural education courses was accepted for the Total sample. The hypothesis of differences on Factor 3 and Factor 4 were rejected since no significant differences were found.

For the Australian sample the research hypothesis that differences would be found on the attitudinal dimension of Difference/Deficit among teachers with linguistics, cultural anthropology, sociology of education, Indigenous education/studies, Indigenous language, ESL/ESD and cross-cultural education courses was accepted. The research hypothesis that differences would be found on the attitudinal dimension of Adequacy/Inadequacy among teachers with linguistics, cultural anthropology, and cross-cultural education courses was also accepted.

For the Canadian sample the research hypothesis that differences would be found on the attitudinal dimension of Dialect Description among teachers with cross-cultural courses was accepted. The research hypothesis that differences would be found on the attitudinal dimension of Difference/Deficit among teachers with Indigenous education/studies, Indigenous language, and ESL/ESD courses was accepted.

Testing of Hypothesis 6 showed that with the exception of the Canadian group, teachers in this study who had had three to four years of education were more positive towards the oral English of Indigenous students than were those with less education. For the Total group education to the level of a degree related to the attitudinal dimension of classroom acceptability of students' speech. The Australian teachers, who had taken three to four years post-secondary education

appeared to be more accepting and to see the language as Different rather than Deficit. Among Canadian teachers, the amount of education received in preparation for teaching was of no significance in relation to attitudes toward the oral English of Indigenous students.

Tests of the sub-hypothesis relating to the types of specialty courses taken during teacher education found that for the total group where seven or more special courses had been taken, teachers were likely to describe students' language as Different but not Deficit. Cross-cultural education courses related to teachers being better able to describe the dialect of students' English. This was true for the Total sample of teachers.

Teachers who had taken courses in linguistics, sociology of education, Indigenous education/studies, Indigenous languages, ESL/ESD and cross-cultural education were likely to describe students' language as Different but not Deficit. Among Australian teachers, those who described students' language as Different rather than Deficit had taken linguistics, cultural anthropology, sociology of education, Indigenous education/studies, Indigenous language, ESL/ESD or cross-cultural education. The courses which related to Australians who rated the language as Adequate were linguistics, cultural anthropology and cross-cultural education.

Among Canadian teachers, cross-cultural courses related to teachers being able to clearly describe students' dialect. In addition, those Canadian teachers who had taken Indigenous education/studies, Indigenous language and ESL/ESD courses described students' language as Different but not Deficit.

Hypothesis Seven

The final research hypothesis stated that a relationship would be found between the age and sex of teachers and their attitudes toward the oral English of their Native and Aboriginal students.

Age of Teachers. The research hypothesis that a relationship would be found between the age and differences on the attitudinal dimension of Acceptability/Unacceptability was rejected for the Total group. The research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description, Difference/Deficit and Adequacy/Inadequacy was accepted for the Total sample.

The research hypothesis that differences would be found on the attitudinal dimensions of Acceptability/Unacceptability and Adequacy/Inadequacy was rejected when no significant differences were found but the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description, and Difference/Deficit was accepted for the Australian sample.

For the Canadian sample the research hypothesis that differences would be found on the attitudinal dimensions of Dialect Description, Acceptability/Unacceptability and Adequacy/Inadequacy was rejected. However, the research hypothesis that differences would be found on the attitudinal dimension Difference/Deficit was accepted for the Canadian sample.

Among respondents in this study, the younger teachers tended to be more positive towards oral English of Indigenous students. Within the Total and Australian groups, the younger teachers were able to clearly

describe the dialect of students' language. They also rated the language as Different and Adequate for use in the classroom.

Sex of Teachers. The research hypothesis that there would be differences between the attitudes of the male and female teachers toward the validity and acceptability of the speech of Indigenous children was rejected for the Total and Australian samples. However analysis of data found significant differences on the attitudinal dimension of Dialect Description and Acceptability/Unacceptability, for the Canadian sample. The hypothesis was accepted for the Canadian group only. Canadian female teachers were noted as being able to clearly describe the dialect of oral English of Indigenous children. Canadian male teachers were more accepting of the students' language for classroom use.

Conclusions

Seven statistical hypothesis of no difference were tested in this study and were rejected when the one-way analyses of variance found significant differences among the groups. Research hypotheses which had postulated the existence of differences in teacher attitudes towards the oral English of Indigenous children, in relation to cultural background, language facility, length and type of post secondary education, length and type of teaching experience, age and sex of respondents, were accepted since significant differences were found.

It was found that whether a Canadian teacher was of Native or Non-Native background did not relate to attitudinal difference toward the oral English of Indigenous children. Likewise, in Australia, the teachers of Aboriginal or Non-Aboriginal cultural background were found

to express similar attitudes toward students' speech.

Among Indigenous teachers, the Aboriginal Australians saw the English spoken by Indigenous students as being significantly different in vocabulary and grammar from formal English. No other significant differences were found and it was concluded that cultural background was not an important variable in relation to the attitudes of teachers toward the oral English of Indigenous students.

When language facility was investigated, those teachers who spoke an Indigenous language or Indigenous English stated that the English spoken by Indigenous students was not indicative of their cognitive abilities and was no more incorrect nor lacking in vocabulary than formal English. In other words, this group of teachers saw the students' language as Different but not as Deficit. The study concluded that the only important language facility variable in relation to teacher attitudes towards students' language was that of the teacher's ability to speak or understand an Indigenous language or Indigenous English.

Cultural background and linguistic facility in combination proved to be an important variable with the finding that the teachers most likely to be positive towards the oral English of Indigenous students were those who themselves were of Indigenous background and who spoke or understood an Indigenous language or Indigenous English. This group described students' oral English as being no less correct than formal English. They also saw no lowering of standards if the students were allowed to use their own speech forms in school. In other words, the Indigenous teachers who had facility in Indigenous languages saw students' oral English as Different but Adequate for use in schools.

The study found that the amount and type of teaching experience

were important factors. In general, the least experienced teachers held the most positive attitudes towards students' oral English. They described student language as having acceptable and not limited vocabulary, as not being indicative of cognitive ability, as not less correct than formal English, and not as an indication of careless speech habits. They described the language as Different, but not as a Deficit.

The less experienced Australian teachers agreed with these assessments but added that Indigenous children did not lack language stimulation at home. Similarly, among the Canadian teachers, less experience meant more positive attitudes. This group specified that the oral English of Indigenous students was not indicative of their cognitive abilities and was not of limited vocabulary. In other words, the less experienced Australian and Canadian teachers described students' language as being different from formal English, but also as being an adequate form of communication for classroom use.

It was found that if the teaching experience involved the teaching of Indigenous students, the teachers with fewer years experience had more positive attitudes than the more experienced teachers. Again, the teachers spoke of students' language as having an adequate and appropriate vocabulary for the classroom; as not being an indication of students' cognitive abilities; as not being incorrect, nor the result of careless speech habits. They also rated students' language as of equal quality to formal English. In sum, the teachers with only a few years of experience in Indigenous education saw students' language as Different but Adequate for classroom use and as a valid form of communication.

As with the Total group, the Australian teachers, with less

experience in Indigenous education were more positive towards students' language. They described it as not resulting from differences in vocal cords; as having an adequate vocabulary; and, as not less correct than formal English. These teachers found no lack of language stimulation in the home and would not want their students to replicate the phonological structure of formal English. In general, they rated students' oral English as Different but Adequate.

The Canadian teachers with the least experience differed from more experienced teachers in saying that students' vocabulary was neither limited nor less satisfactory than formal English. They also stated that students' language was not indicative of their cognitive abilities. They described the language as Different but Adequate.

A conclusion of this study concerning the relationship of teaching experience to the attitudes expressed by teachers towards the oral English of Indigenous students was that the teacher with fewer years teaching were the more likely to rate the language as Different rather than Deficit, which was in contrast to the more experienced teachers.

The length of post secondary education was found to be a significant variable when it came to describing students' language as Different or Deficit. The study found that teachers who had three to four years of training were more positive towards their students' oral English than those with less training. The teachers with three to four years of training described students' language as not indicative of cognitive abilities, not the result of careless speech habits, not due to lack of language stimulation at home. They also suggested that new vocabulary items from home should be accepted in school. This group of teachers described students' oral English as Different but not Deficit.

Among Australian teachers with three to four years of training, the rating of student language was that it was Different and Adequate. They suggested: that vocabulary from home should be accepted in school, that student language did not indicate cognitive abilities, that students need not replicate the sound system of formal English, that differences were not due to careless speech habits, that students' English was not incorrect compared to formal English, and that there was no lack of language stimulation in the homes.

These teachers also stated that students' oral English was not a poorer quality system of communication than formal English and that it should be included in the language arts curriculum. Among Canadian teachers the amount of post secondary training made no significant difference in attitudes.

The amount of training teachers had in specialty areas was found to relate to attitudinal differences. Those teachers with seven or more special courses saw students' language as Different, but not Deficit. The same finding was true for the Australian and Canadian groups. Courses which related to differences for the total group were found to be linguistics, sociology of education, Indigenous education/studies, Indigenous language, ESL/ESD and cross-cultural education. The number of special courses taken varied from two to four and those teachers who had taken more than one or two described students' language as Different rather than Deficit. For cross-cultural education courses the graduates described the language as Different and were also able to describe the dialect features of the students' language.

Among Australian teachers, courses in linguistics, cultural anthropology, sociology of education, Indigenous education/studies,

Indigenous language, ESL/ESD were found to be important in relation to teachers who rated student language as Different. Cross-cultural education courses in Australia were found to relate to those teachers who saw the language as both Different and Adequate.

Canadian teachers who saw the language as Different had taken courses in Indigenous education/studies, Indigenous language and ESL/ESD. Cross-cultural education courses related to Canadian teachers who were able to more clearly describe the dialect features of the language.

Younger teachers were generally more positive towards the oral English of Indigenous students. Within the total group, younger teachers described the language as Different but Adequate. They had a clear idea of Dialect Description. Students' language was described: as reflecting the grammar of formal English; as having a different phonological and grammatical system from English; as being acceptable for classroom use; as not being indicative of cognitive abilities; as not having a limited vocabulary; as not being due to careless speech habits; as no less correct than formal English; and as not the result of poorly-formed language in the home and community. Younger teachers also rated student language as being of an equal quality communication system to formal English.

Younger Australian teachers saw the language as Different but not Deficit. They were able to clearly describe the dialect. This group described the students' language as not indicative of cognitive abilities; differences were not due to different vocal cords; and students' home vocabulary should be accepted in the classroom. Younger Canadian teachers differed only in that they saw the students' language

as Different but not Deficit. They described the language as not indicative of cognitive abilities. Students were not limited by hearing poorly formed language in the home or community.

Attitudinal differences between males and females were found to exist only among Canadian teachers. Female Canadians scored higher on Dialect Description, and spoke of the language as having grammatical rules of English as well as other rules, and as having vocabulary and intonation patterns that differed from standard English. Canadian male teachers scored highest on the Acceptability factor and described the language as not being detrimental to learning and not a detriment to learning to read.

Summary

The study concluded that the variables of language facility, cultural background and language in combination, experience, education, age and sex all related significantly to teacher attitudes towards the oral English of Indigenous students. Variations were found in the importance of these variables for the total study group and for the sub-samples of Australian and Canadian teachers.

The attitudinal factors of Dialect Description and Difference/Deficit were the two most likely to be influenced by differences in demographic variables. Dialect Description was important only in relation to teachers having taken cross-cultural education courses and to teachers who were female Canadians. The only significant variable in relation to the Acceptability/Unacceptability factor was that of gender. Only male Canadian teachers differed from others in the

sample.

The type of teacher who was most likely to hold positive attitudes towards Indigenous students' language was; a young, male or female Aboriginal teacher; one who spoke or understood an Indigenous language or Indigenous English; one who had relatively little teaching experience and relatively little experience in Indigenous education; and one who had three to four years of training including at least seven specialty courses.

Relationship to Previous Research

Research concerning teacher attitudes toward students' oral language has presented evidence that the variables under investigation in this study are important, but the evidence is not clear as to the relationship of each variable to attitudes. The findings from this research project has confirmed the work of Ford (1984) who found no significant difference in ratings of Hispanic children's English between those teachers who identified themselves as Hispanics and those who did not. Canadian Native teachers and Australian Aboriginal teachers in this study did not differ from the Non-Indigenous teachers in their attitudinal judgements of their Indigenous students' speech. In contrast Tucker and Lambert (1969), whose research was later replicated by Fraser (1976), found that the respondents' cultural background did correspond to how each rated various dialects of American English. Although Black and White respondents in the Tucker and Lambert study all preferred the speaking style of the white radio announcers, there was a difference in the selection of the least favourable dialect with Blacks evaluating Negro speech more favourably than did Whites. Shuy and

Williams (1972) reported similar findings. Williams, Whitehead, and Miller (1971) found that Anglo and Black teachers rated Mexican children more "ethnic non-standard" than Anglo children but Mexican teachers did not rate the groups of children any differently.

A second finding from Ford's 1984 study was that although teacher ethnicity alone did not alter ratings of students' language, ethnicity in combination with the teachers' first language did make a significant difference. This result was confirmed by the present research which showed that Indigenous teachers who spoke or understood an Indigenous language or Indigenous English differed significantly from the other groups of teachers and were more positive about the language variety spoken by their Indigenous children.

The results of this research did not support the finding from other research that the more experience teachers had working with dialect speakers, the more positive their attitudes would be. On the contrary, this study found that those teachers with two years or less experience with Indigenous children were significantly more positive toward their students' speech as a valid form of language that was acceptable to them in the classroom than were the more experienced teachers. In a somewhat similar study, Taylor (1973) found that teachers who had taught in predominantly Black schools were significantly more positive towards the structure of non-standard English, than teachers from predominantly white schools.

In an examination of teaching experience as a variable under study, the results of this research differed somewhat from other findings in the Taylor study. Among the Canadian and Australian teachers, there was a trend for the teachers with more than 10 years of experience to

hold less positive attitudes towards oral English of Indigenous students than the less experienced teachers. Among the Canadian teachers the less experienced teachers, those with two years or less were significantly more positive than all of the more experienced teachers. Both supporting and contradicting these results, Taylor (1973) found that teachers with three to five years of teaching had significantly more positive attitudes toward the consequences of using and accepting non-standard English than did the group of teachers who had been teaching for more than 10 years or less than two years.

The number of years of education of the respondents in the Total sample and the Australian sample in this study proved to be a significant factor, with the teachers with more years of education expressing significantly more positive attitudes towards their students' speech. Years of education was not a significant variable for the Canadian teachers. Findings from this study generally corresponded with those of Anglejan and Tucker (1970) who found that level of education was a significant factor in evaluation of speech styles among French Canadians.

Shuy and Williams (1972) found there was no relationship between the sex of respondents and their overall attitudes towards their students' speech, whereas this study showed that Canadian male teachers were significantly more accepting of language variation in the classroom than were Canadian female teachers and the male teachers stated that their students' speech was not a detriment to learning. Canadian female teachers recognized grammatical, vocabulary, and intonational features of the students' speech as different from standard English whereas the Canadian male teachers had not described these distinctions.

Educational Implications

The findings drawn from the present study and supported by related research have implications for the education of Indigenous children in Queensland, Australia, and Saskatchewan, Canada. These implications are discussed in this section based on the suggestion (Dwyer, 1979) that positive teacher attitude is important and required for successful education of minority children, specifically Indigenous children.

It is crucial to keep in mind that all people vary their speech, both consciously and unconsciously, according to the situation and the context in which the speech event occurs. Language is situationally specific as speakers use different versions according to the context of the situation. An English professor uses quite different language when lecturing than while coaching a soccer game. She/he will select the forms of language that are appropriate for that time and place and will switch from one to another. Similarly, the role of the teacher in a second dialect situation (Dwyer, 1976) is to teach the children the appropriateness and the skills to enable them to switch from one dialect to another. It is important to teach second-dialect-speakers the special rules for communicating in the new social and linguistic context.

In consideration of the findings in this study, there are several areas that need to be examined in terms of the implications for the education of Indigenous children. These include teacher preservice, hiring, and inservice. The teachers who either spoke or understood an

Indigenous language or Indigenous English were the most understanding of language variation, as well as accepting of it in the classroom, regardless of their cultural background. This has serious implications for the training of teachers in both Saskatchewan and Queensland. Teacher education programs for Indigenous and Non-Indigenous teachers alike need to be designing programs and teaching Indigenous language and Indigenous English courses, as well as giving consideration to the prospective student's language background when selecting entrants for teacher education programs. Teachers in training need to become familiar with both the structural and communicative differences between the home and community language of Indigenous children and the target language of the classroom. Eagleson, Kaldor, and Malcolm (1982) pointed out that the teacher need not become a fluent dialect speaker to teach second dialect speaking children but they need to understand the dialects in the area and "may have to use some non-standard items in order to communicate with children at a certain stage in their school career" (p. 18).

The more courses teachers had taken in the specialty areas indicated more positive attitudes among those teachers. Teacher education programs need to examine the courses offered, as well as those that are required, in order to incorporate some of these findings. The specialty areas that were related to teacher attitudes differed in these two countries and a detailed examination of these courses could provide further information for the various educational institutions. As discussed earlier for all the teachers, some facility with either an Indigenous language or Indigenous English related to their outlook towards language variation. In support of this, the teachers who had

taken courses in an Indigenous language related more positively to language variation as did the teachers who had taken several courses in Indigenous education or Indigenous studies.

The implications of these results in terms of the other specialty courses differed between these two countries. In Australia, teacher preparation needs to further examine courses in linguistics, cross-cultural education, sociology of education, and cultural anthropology. In Canada, teacher education needs to further examine cross-cultural education and language methodology instruction as those teachers with three to four language methods classes did not consider the students' language to be a detriment to learning or learning to read, and those teachers with some cross-cultural training were more cognisant of the dialect features than teachers who had not taken any such classes.

When hiring teachers to teach Indigenous children, the various educational institutions in these two countries should consider the amount of teaching experience that the applicant has in view of the evidence that more experience may not necessarily mean that the teacher is more aware and accepting of language variation. In Australia, the teachers with less than 10 years experience displayed more positive attitudes toward language than the teachers who have been teaching for more years than this. In Canada, the teachers with one to two years of experience displayed more positive attitudes than the more experienced teachers, and in relation to their experience with Indigenous children the teachers with one to two years experience differed only from the teachers with more than 11 years teaching Indigenous children.

The younger teachers among the Total group teachers were the most

positive, and administrators hiring teachers in Australia should consider the teachers who are less than 34 years old as compared to those who are older. The Canadian administrators should consider those teachers who are under 25 years of age rather than those 35 and older.

The results of this research would suggest that it is important that professional development workshops and inservice include information about language variation and positive teacher attitudes toward such variation. The importance of teacher attitudes must be considered as it may affect teacher expectations and evaluations of their Indigenous students. It is important that teachers learn to observe and record language in their classrooms as it is used by themselves and their students, and to make the changes in their curriculums and programs to accommodate the differences.

A further implication for the education of Indigenous students would be the effects of dialectal differences on standardized testing and the interpretation of these tests by the teachers. Educators must be aware of dialectal differences when using standard English instruments to make assessments about the learning and the cognitive capabilities of their Indigenous students whose speech is different from standard English.

Implications for Further Research

Given the seriousness of the concerns among educators regarding the importance of language and language facility for successful schooling with Indigenous children, the study of language variety and teacher attitudes is crucial and timely. Earlier research (Ford, 1984) supports

the premise of the present study that teacher attitudes toward language varieties can relate to the teacher's assessment of the child's capability.

If the background characteristics of the teacher have been shown to be significant factors in the determination of teacher attitudes then one step may have been taken as toward improvement in the training and selection of teachers for Indigenous dialect speaking children. Further research in this area of attitudes toward language variety may provide more precise information about how these attitudes are formulated. The numbers of subjects, variety of cultural and language backgrounds as well as type of research methodologies employed all need to be expanded. Research into the linguistic and sociolinguistic aspects of dialects spoken by these Indigenous groups needs to be carried out on a large scale as well as a contrastive analysis of the structures and functions of the students dialect and standard English. These would provide information for the improvement of language education for Indigenous children. It is hoped that this research would also make an important contribution to the rapidly growing field of dialectology.

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APPENDICES

APPENDIX A
Attitudinal Item Tables

Table A-1

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Cultural Groups of Canadian
Teachers with Newman-Keuls Comparisons

Factor/Items	Group X	Fo	P	Newman-Keuls
1	1= 3.56	1.18	.279	2 1
	2= 3.82			
3	1= 3.56	.01	.909	2 1
	2= 3.58			
6	1= 3.00	7.35	.008*	2 1
	2= 3.71			
8	1= 3.18	.50	.483	1 2
	2= 2.98			
9	1= 3.06	.03	.857	2 1
	2= 3.11			
10	1= 2.50	.36	.551	2 1
	2= 2.66			
11	1= 2.89	.05	.825	2 1
	2= 2.95			
15	1= 2.94	2.91	.091	2 1
	2= 3.39			
2	1= 3.56	.21	.651	2 1
	2= 3.69			
4	1= 3.72	2.67	.105	1 2
	2= 3.23			
5	1= 4.39	.011	.947	1 2
	2= 4.37			
7	1= 2.94	.131	.724	2 1
	2= 3.06			
13	1= 3.11	.35	.553	2 1
	2= 3.27			
16	1= 3.65	.51	.478	1 2
	2= 3.43			
24	1= 1.29	5.41	.022*	1 2
	2= 1.04			
25	1= 3.24	2.54	.114	1 2
	2= 2.78			
28	1= 3.17	2.29	.113	1 2
	2= 2.72			
12	1= 3.17	.02	.878	1 2
	2= 3.12			
17	1= 3.61	.26	.614	1 2
	2= 3.47			
18	1= 3.94	3.95	.049*	1 2
	2= 3.40			
19	1= 3.83	4.63	.033*	1 2
	2= 3.22			
20	1= 4.00	.11	.747	1 2
	2= 3.92			
21	1= 4.06	2.28	.133	1 2
	2= 3.70			
26	1= 3.61	2.21	.140	1 2
	2= 3.23			
14	1= 3.44	1.87	.175	1 2
	2= 3.08			
23	1= 3.44	.60	.440	1 2
	2= 3.25			
27	1= 3.56	1.82	.018	1 2
	2= 3.20			

Note. Groups: 1 = Native; 2 = Non-Native.

* $p < .05$.

Table A-2

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Cultural Groups of Australian
Teachers with Newman-Keuls Comparisons

Factor/Items	Group X	Fo	P	Newman-Keuls	
1	1= 4.46	.01	.933	2 1	
	2= 4.48				
	3	1= 3.62	.20	.657	2 1
		2= 3.76			
	6	1= 3.38	7.67	.007*	2 1
		2= 4.19			
	8	1= 3.92	.05	.818	2 1
		2= 3.99			
	9	1= 3.77	.02	.887	2 1
		2= 3.82			
	10	1= 3.92	.29	.589	1 2
		2= 3.73			
	11	1= 3.08	.44	.507	1 2
		2= 2.85			
	15	1= 3.31	3.29	.073	2 1
	2= 3.83				
2	2	1= 4.23	.81	.370	1 2
		2= 3.96			
	4	1= 4.15	.26	.724	2 1
		2= 3.06			
	5	1= 3.11	.35	.553	2 1
		2= 3.27			
	7	1= 3.65	.51	.005*	1 2
		2= 3.01			
	13	1= 3.08	.30	.583	1 2
		2= 3.30			
	16	1= 4.46	2.96	.089	1 2
		2= 3.85			
	24	1= 2.75	.17	.683	1 2
		2= 2.59			
	25	1= 3.85	3.05	.084	1 2
	2= 3.26				
28	1= 3.31	1.75	.189	1 2	
	2= 2.80				
3	12	1= 4.08	14.50	.000*	1 2
		2= 2.72			
	17	1= 3.08	1.10	.297	1 2
		2= 2.71			
	18	1= 3.77	2.23	.139	1 2
		2= 3.22			
	19	1= 2.69	.02	.880	1 2
		2= 2.64			
	20	1= 3.31	3.58	.062	2 1
		2= 3.95			
	21	1= 3.69	.21	.652	2 1
		2= 3.82			
	26	1= 3.85	8.18	.005*	1 2
		2= 2.89			
	4	14	1= 4.08	1.45	.232
		2= 3.63			
23		1= 3.54	.10	.758	1 2
		2= 3.44			
27		1= 3.62	1.35	.248	1 2
	2= 3.23				

Note. Groups: 1 = Aboriginal; 2 = Non-Aboriginal.

* $p < .05$.

Table A-3

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Cultural Groups of Indigenous
Teachers with Newman-Keuls Comparisons

Factor/Items	Group X	Fo	P	Newman-Keuls
1	1= 3.56	7.00	.013*	2 1
	2= 4.46			
3	1= 3.56	.05	.834	2 1
	2= 3.62			
6	1= 3.00	.65	.428	2 1
	2= 3.38			
8	1= 3.18	3.31	.080	2 1
	2= 3.92			
9	1= 3.06	3.16	.086	2 1
	2= 3.77			
10	1= 2.50	11.25	.002*	2 1
	2= 3.92			
11	1= 2.89	.29	.594	2 1
	2= 3.08			
15	1= 2.94	.78	.386	2 1
	2= 3.31			
2	1= 3.56	2.58	.119	2 1
	2= 4.23			
4	1= 3.72	1.30	.263	2 1
	2= 4.15			
5	1= 4.39	.04	.850	2 1
	2= 4.46			
7	1= 2.94	8.78	.006*	2 1
	2= 4.23			
13	1= 3.11	.00	.951	1 2
	2= 3.08			
16	1= 3.65	4.13	.052	2 1
	2= 4.46			
24	1= 3.39	2.25	.145	1 2
	2= 2.75			
25	1= 3.24	3.11	.089	2 1
	2= 3.85			
28	1= 3.17	.12	.735	2 1
	2= 3.31			
12	1= 3.17	5.43	.027*	2 1
	2= 4.08			
17	1= 3.61	1.51	.229	1 2
	2= 3.08			
18	1= 3.94	.23	.635	1 2
	2= 3.77			
19	1= 3.83	8.08	.008*	1 2
	2= 2.69			
20	1= 4.00	2.85	.102	1 2
	2= 3.31			
21	1= 4.06	1.33	.258	1 2
	2= 3.69			
26	1= 3.61	.40	.530	2 1
	2= 3.85			
14	1= 3.44	2.62	.116	2 1
	2= 4.08			
23	1= 3.44	2.62	.777	2 1
	2= 3.54			
27	1= 3.56	.03	.862	2 1
	2= 3.62			

Note. Groups: 1 = Native; 2 = Aboriginal.

* $p < .05$.

Table A-4

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Language Groups of all Teachers
with Newman-Keuls Comparisons

Factor/Items	Group X		Fo	P	Newman-Keuls		
1	1	1= 3.98 2= 4.19	3= 4.06	.45	.639	2 3 1	
	3	1= 3.57 2= 3.57	3= 3.79	1.00	.371	3 2 1	
	6	1= 3.93 2= 3.81	3= 3.43	3.77	.025*	<u>1 2 3</u>	
	8	1= 3.21 2= 3.67	3= 3.67	3.38	.036*	3 2 1	
	9	1= 3.14 2= 4.10	3= 3.53	6.51	.002*	<u>2 3 1</u>	
	10	1= 2.87 2= 3.81	3= 3.23	5.97	.003*	<u>2 3 1</u>	
	11	1= 3.13 2= 2.86	3= 3.09	.53	.590	1 3 2	
	15	1= 3.41 2= 3.67	3= 3.62	1.05	.351	2 3 1	
	2	1= 3.68 2= 4.15	3= 3.79	1.51	.223	2 3 1	
	4	1= 3.65 2= 4.00	3= 3.17	4.38	.014*	<u>2 1 3</u>	
	5	1= 4.40 2= 4.62	3= 4.21	1.57	.211	2 1 3	
	7	1= 3.02 2= 3.71	3= 2.88	3.07	.049*	<u>2 1 3</u>	
	2	13	1= 3.19 2= 3.57	3= 3.02	1.71	.184	2 1 3
		16	1= 3.56 2= 3.86	3= 3.60	.54	.581	2 3 1
		24	1= 2.68 2= 2.76	3= 2.98	1.10	.334	3 2 1
25		1= 2.92 2= 3.65	3= 2.77	4.68	.011*	<u>2 1 3</u>	
28	1= 2.79 2= 3.10	3= 2.67	.93	.398	2 1 3		
12	1= 2.99 2= 3.14	3= 3.19	.47	.623	3 2 1		
17	1= 3.25 2= 3.24	3= 3.11	.23	.799	1 2 3		
18	1= 3.26 2= 3.86	3= 3.40	2.37	.096	2 3 1		
3	19	1= 3.08 2= 2.91	3= 3.06	.20	.822	1 3 2	
	20	1= 3.92 2= 4.00	3= 3.80	.28	.753	2 1 3	
	21	1= 3.79 2= 3.67	3= 3.83	.24	.786	3 1 2	
	26	1= 3.09 2= 3.38	3= 3.33	1.32	.270	2 3 1	
14	1= 3.42 2= 3.71	3= 3.06	2.88	.059	2 1 3		
4	23	1= 3.27 2= 3.71	3= 3.43	1.99	.140	2 3 1	
	27	1= 3.22 2= 3.71	3= 3.17	2.26	.107	2 1 3	

Note. Groups: 1 = English only; 2 = English and Indigenous language/dialect; 3 = English and Non-Indigenous language.

* $p < .05$.

Table A-5

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Language Groups of Australian
Teachers with Newman-Keuls Comparisons

Factor/Items	Group X		Fo	P	Newman-Keuls
1	1= 3.75	3= 4.92	2.84	.065	3 1 2
	2= 3.80				
3	1= 3.53	3= 4.15	1.33	.270	3 1 2
	2= 3.60				
6	1= 3.74	3= 3.85	1.17	.315	1 2 3
	2= 3.60				
8	1= 2.82	3= 4.50	2.11	.129	3 2 1
	2= 2.80				
9	1= 2.86	3= 4.23	2.23	.119	3 2 1
	2= 4.20				
10	1= 2.47	3= 4.23	2.64	.078	3 2 1
	2= 3.00				
11	1= 2.96	3= 2.92	1.43	.247	1 2 3
	2= 2.60				
15	1= 3.23	3= 4.08	.85	.430	3 2 1
	2= 3.00				
2	1= 4.14	3= 4.46	4.08	.021*	<u>3 2 1</u>
	2= 4.16				
4	1= 4.24	3= 4.28	.37	.695	2 1 3
	2= 4.10				
5	1= 4.52	3= 4.54	1.01	.369	2 3 1
	2= 4.53				
7	1= 3.86	3= 2.92	2.06	.135	2 3 1
	2= 3.44				
2 13	1= 3.52	3= 2.83	.90	.413	2 1 3
	2= 3.39				
16	1= 4.14	3= 4.08	.59	.557	3 2 1
	2= 4.13				
24	1= 2.71	3= 2.92	.60	.552	3 2 1
	2= 2.90				
25	1= 3.67	3= 3.31	2.31	.107	2 3 1
	2= 3.52				
28	1= 3.43	3= 2.69	.63	.537	2 1 3
	2= 3.00				
12	1= 3.29	3= 3.15	.55	.581	3 2 1
	2= 3.22				
17	1= 3.10	3= 2.33	1.10	.337	2 1 3
	2= 2.48				
18	1= 3.62	3= 3.31	5.50	.006*	<u>2 3 1</u>
	2= 3.16				
3 19	1= 2.71	3= 2.69	.26	.770	2 3 1
	2= 2.56				
20	1= 3.95	3= 3.69	.05	.956	2 1 3
	2= 4.22				
21	1= 3.67	3= 4.15	2.13	.126	3 1 2
	2= 3.84				
26	1= 3.29	3= 3.31	.83	.439	3 2 1
	2= 2.94				
14	1= 4.05	3= 3.69	.00	.997	3 2 1
	2= 3.97				
4 23	1= 3.29	3= 3.58	1.09	.341	2 3 1
	2= 3.75				
27	1= 3.62	3= 3.23	1.37	.260	2 3 1
	2= 3.25				

Note. Groups: 1 = English only; 2 = English and Indigenous language/dialect; 3 = English and Non-Indigenous language.
 * $p < .05$.

Table A-6

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Language Groups of Canadian
Teachers with Newman-Keuls Comparisons

Factor/Items	Group \bar{X}		Fo	P	Newman-Keuls
1	1= 3.75	3= 3.74	.01	.993	2 1 3
	2= 3.80				
3	1= 3.53	3= 3.66	.29	.749	3 2 1
	2= 3.60				
6	1= 3.74	3= 3.27	2.37	.098	1 2 3
	2= 3.60				
8	1= 2.82	3= 3.36	3.14	.047*	3 1 2
	2= 2.80				
9	1= 2.86	3= 3.26	4.09	.020*	<u>2 3 1</u>
	2= 4.20				
10	1= 2.47	3= 2.85	1.97	.144	2 3 1
	2= 3.00				
11	1= 2.96	3= 3.15	.72	.489	3 1 2
	2= 2.60				
15	1= 3.23	3= 3.44	.69	.504	3 1 2
	2= 3.00				
2	1= 3.71	3= 3.53	.79	.456	2 1 3
	2= 4.20				
4	1= 3.48	3= 2.94	2.65	.076	2 1 3
	2= 3.16				
5	1= 4.48	3= 4.09	2.37	.098	2 1 3
	2= 4.60				
7	1= 3.12	3= 2.86	1.40	.251	2 1 3
	2= 3.80				
13	1= 3.51	3= 3.09	1.63	.201	2 1 3
	2= 4.00				
16	1= 3.51	3= 3.41	.28	.755	2 1 3
	2= 3.80				
24	1= 2.80	3= 3.00	.92	.400	2 3 1
	2= 3.40				
25	1= 2.90	3= 2.56	2.57	.082	2 1 3
	2= 3.75				
28	1= 2.84	3= 2.66	.40	.673	2 1 3
	2= 3.00				
12	1= 3.15	3= 3.20	1.76	.178	2 3 1
	2= 4.20				
17	1= 3.59	3= 3.38	.85	.430	2 1 3
	2= 4.00				
18	1= 3.56	3= 3.44	.14	.868	2 1 3
	2= 3.60				
19	1= 3.44	3= 3.21	.51	.599	1 2 3
	2= 3.40				
20	1= 3.99	3= 3.85	1.41	.249	2 1 3
	2= 4.60				
21	1= 3.79	3= 3.71	1.26	.287	2 1 3
	2= 4.40				
26	1= 3.24	3= 3.34	3.49	.034*	<u>2 3 1</u>
	2= 4.40				
14	1= 3.26	3= 3.83	3.37	.039*	2 1 3
	2= 3.80				
23	1= 3.23	3= 3.37	.54	.587	2 3 1
	2= 3.60				
27	1= 3.30	3= 3.14	1.61	.205	2 1 3
	2= 4.00				

Note. Groups: 1 = English only; 2 = English and Indigenous language/dialect; 3 = English and Non-Indigenous language.

* $p < .05$.

Table A-7

Results of Analyses of Variance of the Scores on the AttitudinalItems Classified on the Basis of Cultural and LanguageGroups of all Teachers with Newman-Keuls Comparisons

Factor/Items	Group X			Fo	P	Newman-Keuls	
1	1= 4.17	3= 3.73	5= 4.38	1.22	.300	5 6 1 4 3 2	
	2= 3.60	4= 3.97	6= 4.21				
3	1= 3.50	3= 3.60	5= 3.50	.66	.657	6 2 3 4 5 1	
	2= 3.80	4= 3.57	6= 3.88				
6	1= 3.83	3= 2.64	5= 4.00	4.56	.001*	<u>5 4 1 6 2 3</u>	
	2= 3.20	4= 3.94	6= 3.78				
8	1= 3.50	3= 3.60	5= 3.81	1.65	.149	5 6 3 1 2 4	
1	2= 3.20	4= 3.20	6= 3.69				
9	1= 3.17	3= 3.20	5= 4.13	2.94	.014*	<u>5 2 6 3 1 4</u>	
	2= 4.00	4= 3.14	6= 3.69				
10	1= 3.17	3= 2.73	5= 3.81	3.25	.008*	5 2 6 1 4 3	
	2= 3.80	4= 2.86	6= 3.74				
11	1= 2.17	3= 2.87	5= 2.94	1.21	.307	2 5 6 4 3 1	
	2= 3.80	4= 2.91	6= 2.94				
15	1= 3.00	3= 3.29	5= 3.88	1.60	.161	5 6 4 3 2 1	
	2= 3.00	4= 3.43	6= 3.76				
2	1= 3.50	3= 3.80	5= 4.27	.76	.583	5 3 2 6 4 1	
	2= 3.80	4= 3.69	6= 3.78				
4	1= 4.17	3= 3.40	5= 3.93	2.20	.056	2 1 5 4 3 6	
	2= 4.20	4= 3.62	6= 3.06				
5	1= 5.00	3= 4.07	5= 4.63	1.30	.266	1 5 2 4 6 3	
	2= 4.50	4= 4.37	6= 4.28				
7	1= 3.00	3= 3.00	5= 3.38	2.16	.061	<u>2 5 4 3 1 6</u>	
	2= 4.80	4= 3.02	6= 2.82				
2	13	1= 3.00	3= 2.74	5= 3.69	1.02	.405	5 2 4 6 1 3
	2= 3.20	4= 3.20	6= 3.12				
16	1= 3.50	3= 3.71	5= 3.63	.77	.570	2 3 5 4 6 1	
	2= 4.60	4= 3.57	6= 3.55				
24	1= 2.17	3= 3.36	5= 2.44	2.24	.052	2 3 6 4 5 1	
	2= 3.80	4= 2.70	6= 2.88				
25	1= 3.00	3= 3.12	5= 3.44	2.99	.013*	<u>2 5 3 1 4 6</u>	
	2= 4.50	4= 2.92	6= 2.50				
28	1= 2.07	3= 2.93	5= 2.81	1.36	.243	2 3 5 4 1 6	
	2= 4.00	4= 2.80	6= 2.55				
12	1= 3.50	3= 3.27	5= 2.81	1.38	.235	2 1 3 6 4 5	
	2= 4.20	4= 2.96	6= 3.15				
17	1= 3.67	3= 3.21	5= 3.06	.56	.735	2 1 4 3 5 6	
	2= 3.80	4= 3.23	6= 3.06				
18	1= 4.00	3= 3.47	5= 3.63	2.03	.076	2 1 5 3 6 4	
	2= 4.60	4= 3.22	6= 3.38				
3	19	1= 4.17	3= 3.20	5= 2.81	1.23	.295	1 3 2 4 6 5
	2= 3.20	4= 3.03	6= 3.00				
20	1= 3.67	3= 3.67	5= 4.00	.25	.939	5 2 4 6 3 1	
	2= 4.00	4= 3.93	6= 3.87				
21	1= 4.17	3= 3.93	5= 3.63	.38	.865	1 3 2 6 4 5	
	2= 3.80	4= 3.77	6= 3.79				
26	1= 3.67	3= 3.60	5= 3.19	1.64	.151	2 1 3 6 5 4	
	2= 4.00	4= 3.05	6= 3.21				
14	1= 3.50	3= 3.27	5= 3.44	2.14	.063	<u>2 1 5 4 3 6</u>	
	2= 4.60	4= 3.41	6= 2.97				
4	23	1= 3.83	3= 3.27	5= 3.69	1.34	.250	1 2 5 6 3 4
	2= 3.80	4= 3.24	6= 3.50				
27	1= 3.67	3= 3.13	5= 3.38	2.63	.025*	<u>2 1 5 4 6 3</u>	
	2= 4.80	4= 3.19	6= 3.18				

Note. Groups: 1 = Indigenous, Eng. only; 2 = Indigenous, Indigenous language/dialect; 3 = Indigenous, Eng. and other language; 4 = Non-Indigenous, English; 5 = Non-Indigenous, Indigenous language/dialect; 6 = Non-Indigenous, Eng. and other language.

* $p < .05$.

Table A-8

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Australian Language and Cultural
Groups with Newman-Keuls Comparisons

Factor/Items	Group X			Fo	P	Newman-Keuls
1	1= 5.00	3= 5.00	5= 5.54	2.48	.040*	3 1 6 5 4 2
	2= 3.33	4= 4.33	6= 4.89			
3	1= 3.00	3= 3.75	5= 3.46	.86	.512	6 2 3 4 5 1
	2= 4.00	4= 3.64	6= 4.33			
6	1= 5.00	3= 2.50	5= 4.00	3.09	.014*	1 6 4 5 2 3
	2= 3.33	4= 4.22	6= 4.44			
8	1= 4.00	3= 5.00	5= 4.00	1.09	.376	3 6 5 1 4 2
	2= 3.67	4= 3.84	6= 4.33			
9	1= 3.00	3= 4.25	5= 4.08	.92	.476	3 6 5 2 4 1
	2= 4.00	4= 3.60	6= 4.22			
10	1= 4.00	3= 4.50	5= 4.08	1.12	.359	3 6 5 2 1 4
	2= 4.00	4= 3.51	6= 4.11			
11	1= 2.00	3= 2.50	5= 2.92	1.15	.345	2 6 5 4 3 1
	2= 3.67	4= 2.62	6= 3.38			
15	1= 3.00	3= 4.00	5= 4.00	.66	.654	6 5 3 4 2 1
	2= 3.33	4= 3.70	6= 4.11			
2	1= 4.00	3= 4.25	5= 4.17	1.66	.156	6 3 5 2 1 4
	2= 4.00	4= 3.61	6= 4.56			
4	1= 5.00	3= 3.00	5= 4.08	.89	.492	1 2 6 5 4 3
	2= 4.33	4= 3.91	6= 4.11			
5	1= 5.00	3= 4.25	5= 4.69	.71	.622	1 5 6 2 4 3
	2= 4.33	4= 4.27	6= 4.67			
7	1= 5.00	3= 3.15	5= 3.46	2.08	.078	1 2 3 5 4 6
	2= 4.67	4= 2.80	6= 2.56			
13	1= 4.00	3= 1.67	5= 3.62	1.55	.187	1 5 6 4 2 3
	2= 2.67	4= 3.05	6= 3.22			
16	1= 5.00	3= 4.00	5= 3.77	.55	.739	1 2 6 3 5 4
	2= 4.33	4= 3.63	6= 4.11			
24	1= 1.00	3= 2.67	5= 2.46	.65	.663	6 2 3 4 5 1
	2= 3.00	4= 2.51	6= 3.00			
25	1= 3.00	3= 3.00	5= 3.46	1.30	.275	2 5 6 3 1 4
	2= 4.33	4= 2.95	6= 3.44			
28	1= 2.00	3= 2.00	5= 2.85	1.30	.275	2 6 5 4 3 1
	2= 4.33	4= 2.73	6= 3.00			
12	1= 5.00	3= 4.00	5= 2.46	2.79	.024*	1 2 3 6 4 5
	2= 4.33	4= 2.69	6= 2.78			
17	1= 2.00	3= 2.33	5= 2.77	1.05	.394	2 5 4 6 3 1
	2= 4.00	4= 2.73	6= 2.33			
18	1= 3.00	3= 2.50	5= 3.69	3.44	.008*	2 5 6 1 4 3
	2= 5.00	4= 2.80	6= 3.67			
19	1= 4.00	3= 1.75	5= 2.69	1.20	.316	1 6 2 5 4 3
	2= 3.00	4= 2.49	6= 3.11			
20	1= 1.00	3= 3.50	5= 3.92	1.23	.303	5 4 6 3 2 1
	2= 3.33	4= 3.87	6= 3.78			
21	1= 4.00	3= 4.00	5= 3.46	.87	.508	6 3 1 4 5 2
	2= 3.33	4= 3.80	6= 4.22			
26	1= 4.00	3= 4.25	5= 3.00	1.35	.255	3 1 2 5 6 4
	2= 3.33	4= 2.82	6= 2.89			
14	1= 5.00	3= 3.25	5= 3.54	.57	.724	1 2 6 4 5 3
	2= 4.33	4= 3.64	6= 3.89			
23	1= 3.00	3= 3.25	5= 3.62	.82	.539	2 6 5 4 3 1
	2= 4.33	4= 3.34	6= 3.75			
27	1= 4.00	3= 2.50	5= 3.31	2.53	.037*	2 1 6 5 4 3
	2= 5.00	4= 3.07	6= 3.56			

Note. Groups: 1 = Indigenous, Eng. only; 2 = Indigenous, Indigenous language/dialect; 3 = Indigenous, Eng. and other language; 4 = Non-Indigenous, English; 5 = Non-Indigenous, Indigenous language/dialect; 6 = Non-Indigenous, Eng. and other language.

* $p < .05$.

Table A-9

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Canadian Language and Cultural
Groups with Newman-Keuls Comparisons

Factor/Items	Group X			Fo	P	Newman-Keuls	
1	1= 4.00	3= 3.27	5= 3.67	.86	.509	2 1 6 4 5 3	
	2= 4.00	4= 3.73	6= 3.96				
3	1= 3.60	3= 3.55	5= 3.67	.19	.967	6 5 1 3 4 2	
	2= 3.50	4= 3.52	6= 3.71				
6	1= 3.60	3= 2.17	5= 4.00	2.18	.062	5 4 1 6 2 3	
	2= 3.00	4= 3.75	6= 3.52				
8	1= 3.40	3= 3.20	5= 3.00	1.70	.141	6 1 3 5 4 2	
1	2= 2.50	4= 2.78	6= 3.43				
9	1= 3.20	3= 2.82	5= 4.33	2.24	.055	5 2 6 1 4 3	
	2= 4.00	4= 2.84	6= 3.48				
10	1= 3.00	3= 2.09	5= 2.67	3.20	.010*	5 6 1 5 4 3	
	2= 3.50	4= 2.43	6= 3.22				
11	1= 2.20	3= 3.00	5= 3.00	1.24	.296	2 4 5 3 6 1	
	2= 4.00	4= 3.10	6= 2.78				
15	1= 3.00	3= 3.00	5= 3.32	1.03	.405	6 5 4 3 1 2	
	2= 2.50	4= 3.25	6= 3.63				
2	1= 3.40	3= 3.64	5= 4.67	.65	.665	5 4 3 2 6 1	
	2= 3.50	4= 3.74	6= 3.48				
4	1= 4.00	3= 3.55	5= 3.33	2.31	.049*	2 1 3 4 5 6	
	2= 4.00	4= 3.44	6= 2.65				
5	1= 5.00	3= 4.00	5= 4.33	1.48	.205	2 1 4 5 6 3	
	2= 5.00	4= 4.44	6= 4.13				
7	1= 2.60	3= 2.73	5= 3.00	1.40	.231	2 4 5 6 3 1	
	2= 5.00	4= 3.16	6= 2.92				
2	13	1= 2.80	3= 3.00	5= 4.00	.83	.529	5 2 4 3 6 1
	2= 4.00	4= 3.29	6= 3.08				
16	1= 3.20	3= 3.60	5= 3.00	1.05	.392	2 3 4 6 1 5	
	2= 5.00	4= 3.53	6= 3.33				
24	1= 2.40	3= 3.55	5= 2.33	2.99	.015*	2 3 4 6 1 5	
	2= 5.00	4= 2.83	6= 2.73				
25	1= 3.00	3= 3.18	5= 3.33	2.52	.034*	2 5 3 1 4 6	
	2= 5.00	4= 2.89	6= 2.26				
28	1= 2.80	3= 3.27	5= 2.61	1.25	.291	2 3 4 1 5 6	
	2= 3.50	4= 2.85	6= 2.38				
12	1= 3.20	3= 3.00	5= 4.33	.79	.559	5 2 6 1 4 3	
	2= 4.00	4= 3.15	6= 2.29				
17	1= 4.00	3= 3.45	5= 4.33	.63	.679	5 1 4 2 3 6	
	2= 3.50	4= 3.56	6= 3.35				
18	1= 4.20	3= 3.82	5= 3.33	.93	.465	1 2 3 4 5 6	
	2= 4.00	4= 3.51	6= 3.26				
3	19	1= 4.20	3= 3.73	5= 3.33	1.42	.224	1 3 2 4 5 6
	2= 3.50	4= 3.39	6= 2.96				
20	1= 4.20	3= 3.73	5= 4.33	.87	.565	2 5 1 4 6 3	
	2= 5.00	4= 3.97	6= 3.91				
21	1= 4.20	3= 3.91	5= 4.33	.88	.500	2 5 1 3 4 6	
	2= 4.50	4= 3.76	6= 3.63				
26	1= 3.60	3= 3.36	5= 4.00	1.80	.119	2 5 1 3 6 4	
	2= 5.00	4= 3.22	6= 3.33				
14	1= 3.20	3= 3.27	5= 3.00	3.11	.012*	2 3 4 1 5 6	
	2= 5.00	4= 3.27	6= 2.63				
4	23	1= 4.00	3= 3.00	5= 4.00	1.21	.310	5 1 6 3 4 2
	2= 3.00	4= 3.17	6= 3.42				
27	1= 2.60	3= 3.36	5= 3.67	1.05	.395	2 5 1 3 4 6	
	2= 4.50	4= 3.28	6= 3.04				

Note. Groups: 1 = Indigenous, Eng. only; 2 = Indigenous, Indigenous language/dialect; 3 = Indigenous, Eng. and other language; 4 = Non-Indigenous, English; 5 = Non-Indigenous, Indigenous language/dialect; 6 = Non-Indigenous, Eng. and other language.
 * $p < .05$.

Table A-10

Results of Analyses of Variance of the Scores on Attitudinal
Items Classified on the Basis of Teaching Experience of all
Teachers with Newman-Keuls Comparisons

Factor/Items	Group \bar{X}		Fo	P	Newman-Keuls
1	1= 4.13	3= 4.02	.39	.757	2 1 3 4
	2= 4.18	4= 4.00			
3	1= 3.54	3= 3.66	.25	.863	2 4 3 1
	2= 3.69	4= 3.68			
6	1= 4.08	3= 4.00	3.10	.028*	<u>1 2 3 4</u>
	2= 3.84	4= 3.53			
8	1= 3.36	3= 3.40	.84	.472	2 3 4 1
	2= 3.65	4= 3.37			
9	1= 3.77	3= 3.49	2.77	.043*	<u>1 2 3 4</u>
	2= 3.93	4= 3.13			
10	1= 3.43	3= 3.05	3.79	.011*	<u>2 1 3 4</u>
	2= 3.43	4= 2.80			
11	1= 2.65	3= 3.02	1.30	.277	2 3 4 1
	2= 3.07	4= 2.91			
15	1= 3.38	3= 3.57	.35	.791	2 3 4 1
	2= 3.57	4= 3.49			
2	1= 4.15	3= 3.81	3.48	.017*	<u>1 2 3 4</u>
	2= 4.00	4= 3.53			
4	1= 4.13	3= 3.75	8.85	.000*	<u>1 2 3 4</u>
	2= 3.87	4= 3.11			
5	1= 4.60	3= 4.35	1.55	.202	1 2 3 4
	2= 4.49	4= 4.26			
7	1= 3.75	3= 3.18	7.39	.000*	<u>1 2 3 4</u>
	2= 3.25	4= 2.61			
13	1= 3.50	3= 3.23	3.23	.085	1 2 3 4
	2= 3.44	4= 3.01			
16	1= 4.10	3= 3.57	3.59	.015*	<u>1 2 3 4</u>
	2= 3.80	4= 3.38			
24	1= 2.98	3= 2.71	2.74	.045*	1 2 3 4
	2= 3.19	4= 2.76			
25	1= 2.54	3= 3.98	4.44	.005*	<u>1 2 3 4</u>
	2= 3.19	4= 2.76			
28	1= 3.28	3= 2.75	3.12	.027*	<u>1 2 3 4</u>
	2= 2.88	4= 2.56			
12	1= 3.40	3= 2.82	2.03	.111	1 2 4 3
	2= 3.14	4= 2.90			
17	1= 3.39	3= 3.27	4.53	.004*	<u>1 4 3 2</u>
	2= 2.67	4= 3.36			
18	1= 3.63	3= 3.43	.69	.562	1 3 4 2
	2= 3.30	4= 3.35			
19	1= 3.03	3= 3.20	.78	.506	3 4 1 2
	2= 2.84	4= 3.05			
20	1= 4.20	3= 3.93	2.32	.076	1 2 3 4
	2= 2.98	4= 3.68			
21	1= 3.75	3= 3.59	.88	.452	4 2 1 3
	2= 3.82	4= 3.87			
26	1= 3.28	3= 3.07	.51	.678	1 4 2 3
	2= 3.07	4= 3.24			
14	1= 3.80	3= 3.41	5.10	.002*	<u>1 2 3 4</u>
	2= 3.55	4= 2.99			
23	1= 3.43	3= 3.30	1.96	.121	2 1 3 4
	2= 3.59	4= 3.18			
27	1= 3.68	3= 3.09	2.66	.049*	1 4 2 3
	2= 3.16	4= 3.23			

Note. Groups: 1 = 1-2 yrs; 2 = 3-5 yrs; 3 = 6-10 yrs;
 4 = 11+ yrs.

* $p < .05$.

Table A-11

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Australian Teachers' Experience
with Newman-Keuls Comparisons

Factor/Items	Group X		Fo	P	Newman-Keuls
1	1= 4.48	3= 4.59	.38	.771	3 2 1 4
	2= 4.53	4= 4.35			
3	1= 3.55	3= 3.59	.60	.614	4 2 3 1
	2= 3.78	4= 3.92			
6	1= 4.29	3= 4.41	2.58	.059	3 1 2 4
	2= 4.13	4= 3.65			
8	1= 3.80	3= 3.71	1.31	.276	2 4 1 3
	2= 4.23	4= 4.00			
9	1= 3.95	3= 3.94	1.16	.330	1 3 2 4
	2= 3.94	4= 3.46			
10	1= 3.90	3= 3.77	2.51	.064	2 1 3 4
	2= 4.06	4= 3.27			
11	1= 2.62	3= 2.94	.66	.582	4 3 2 1
	2= 2.88	4= 3.08			
15	1= 3.38	3= 4.00	1.82	.149	3 2 4 1
	2= 3.94	4= 3.69			
2	1= 4.14	3= 4.00	1.28	.286	2 1 3 4
	2= 4.16	4= 3.68			
4	1= 4.24	3= 4.29	2.63	.055	3 1 2 4
	2= 4.10	4= 3.52			
5	1= 4.52	3= 4.41	.66	.578	2 1 3 4
	2= 4.53	4= 4.23			
7	1= 3.86	3= 3.06	5.03	.003*	<u>1 2 3 4</u>
	2= 3.44	4= 2.39			
2 13	1= 3.52	3= 3.53	2.36	.077	3 1 2 4
	2= 3.39	4= 2.71			
16	1= 4.14	3= 4.00	1.74	.165	1 2 3 4
	2= 4.13	4= 3.48			
24	1= 2.71	3= 2.53	1.44	.236	2 1 3 4
	2= 2.90	4= 2.23			
25	1= 3.67	3= 3.41	2.87	.041*	<u>1 2 3 4</u>
	2= 3.52	4= 2.81			
28	1= 3.43	3= 2.71	3.07	.032*	<u>1 2 3 4</u>
	2= 3.00	4= 2.35			
12	1= 3.29	3= 2.47	2.98	.035*	1 2 4 3
	2= 3.22	4= 2.50			
17	1= 3.10	3= 3.00	1.50	.222	1 3 4 2
	2= 2.48	4= 2.65			
18	1= 3.62	3= 3.47	.98	.406	1 3 2 4
	2= 3.16	4= 3.08			
3 19	1= 2.71	3= 2.82	.23	.878	3 1 4 2
	2= 2.56	4= 2.58			
20	1= 3.95	3= 3.65	2.18	.096	2 1 3 4
	2= 4.22	4= 3.50			
21	1= 3.67	3= 3.53	1.21	.311	4 2 1 3
	2= 3.84	4= 4.04			
26	1= 3.29	3= 2.82	.58	.631	1 4 2 3
	2= 2.94	4= 3.04			
14	1= 4.05	3= 3.59	3.17	.028*	<u>1 2 3 4</u>
	2= 3.97	4= 3.08			
4 23	1= 3.29	3= 3.47	1.61	.193	2 3 1 4
	2= 3.75	4= 3.21			
27	1= 3.62	3= 3.06	.93	.429	1 2 4 3
	2= 3.25	4= 3.20			

Note. Groups: 1 = 1-2 yrs; 2 = 3-5 yrs; 3 = 6-10 yrs;
 4 = 11+ yrs.

* $p < .05$.

Table A-12

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Canadian Teachers' Experience
with Newman-Keuls Comparisons

Factor/Items	Group X		Fo	P	Newman-Keuls
1	1= 3.74	3= 3.76	.32	.874	4 1 2 3
	2= 3.70	4= 3.84			
3	1= 3.53	3= 3.70	.23	.878	3 2 4 1
	2= 3.57	4= 3.56			
6	1= 3.83	3= 3.74	.85	.471	1 3 4 2
	2= 3.46	4= 3.47			
8	1= 2.89	3= 3.19	.38	.766	3 4 2 1
	2= 2.92	4= 3.04			
9	1= 3.58	3= 3.19	1.58	.198	1 3 4 2
	2= 2.92	4= 2.96			
10	1= 2.89	3= 2.59	.48	.698	1 3 2 4
	2= 2.58	4= 2.56			
11	1= 2.68	3= 3.07	1.78	.155	2 3 4 1
	2= 3.33	4= 2.82			
15	1= 3.37	3= 3.30	.48	.698	4 1 3 2
	2= 3.09	4= 3.39			
2	1= 4.16	3= 3.69	1.74	.163	1 2 3 4
	2= 3.78	4= 3.45			
4	1= 4.00	3= 3.41	5.02	.003*	<u>1 2 3 4</u>
	2= 3.57	4= 2.90			
5	1= 4.61	3= 4.31	1.05	.375	1 2 3 4
	2= 4.43	4= 4.28			
7	1= 3.63	3= 3.26	2.89	.038*	<u>1 2 3 4</u>
	2= 3.00	4= 2.73			
13	1= 3.47	3= 3.04	1.21	.308	2 1 4 3
	2= 3.50	4= 3.16			
16	1= 4.05	3= 3.30	2.14	.099	1 2 4 3
	2= 3.35	4= 3.33			
24	1= 3.26	3= 2.82	2.20	.092	1 2 3 4
	2= 3.04	4= 2.58			
25	1= 3.39	3= 2.70	1.85	.142	1 2 4 3
	2= 2.74	4= 2.73			
28	1= 3.11	3= 2.78	.64	.594	1 3 2 4
	2= 2.71	4= 2.67			
12	1= 3.53	3= 3.04	.73	.534	1 4 2 3
	2= 3.04	4= 3.10			
17	1= 3.68	3= 3.44	3.12	.029*	<u>4 1 3 2</u>
	2= 2.91	4= 3.74			
18	1= 3.63	3= 3.41	.16	.926	1 2 4 3
	2= 3.50	4= 3.49			
19	1= 3.37	3= 3.44	.19	.901	3 1 4 2
	2= 3.21	4= 3.31			
20	1= 4.47	3= 4.12	3.50	.018*	<u>1 3 4 2</u>
	2= 3.67	4= 3.78			
21	1= 3.84	3= 3.63	.24	.868	1 2 4 3
	2= 3.79	4= 3.78			
26	1= 3.26	3= 3.23	.10	.961	4 1 2 3
	2= 3.25	4= 3.35			
14	1= 3.53	3= 3.30	1.83	.145	1 3 2 4
	2= 3.00	4= 2.94			
23	1= 3.58	3= 3.19	.99	.399	1 2 3 4
	2= 3.38	4= 3.16			
27	1= 3.74	3= 3.11	1.98	.121	1 4 3 2
	2= 3.04	4= 3.25			

Note. Groups: 1 = 1-2 yrs; 2 = 3-5 yrs; 3 = 6-10 yrs;
4 = 11+ yrs.

* $p < .05$.

Table A-13

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Experience of all Teachers
with Indigenous Children with Newman-Keuls Comparisons

Factor/Items	Group X	Fo	P	Newman-Keuls	
1	1= 4.22 3= 3.98	.98	.403	1 2 3 4	
	2= 4.13 4= 3.95				
	3	1= 3.53 3= 3.79	.83	.478	3 2 4 1
		2= 3.73 4= 3.61			
	6	1= 4.17 3= 3.72	5.13	.002*	<u>1 2 3 4</u>
		2= 3.81 4= 3.42			
	8	1= 3.95 3= 3.51	.86	.465	1 3 2 4
		2= 3.39 4= 3.26			
	9	1= 3.73 3= 3.45	3.18	.025*	<u>1 3 2 4</u>
		2= 3.34 4= 3.06			
	10	1= 3.55 3= 2.98	4.29	.006*	<u>1 2 3 4</u>
		2= 3.08 4= 2.78			
	11	1= 2.88 3= 2.98	.42	.741	2 3 1 4
		2= 3.04 4= 2.82			
	15	1= 3.47 3= 3.55	.06	.979	3 4 2 1
2= 3.15 4= 3.52					
2	1= 4.22 3= 3.57	5.04	.002*	<u>1 2 3 4</u>	
	2= 3.86 4= 3.52				
	4	1= 4.06 3= 3.46	4.92	.003*	<u>1 2 3 4</u>
		2= 3.57 4= 3.28			
	5	1= 4.59 3= 4.38	2.23	.086	1 2 3 4
		2= 4.41 4= 4.17			
	7	1= 3.66 3= 2.91	5.91	.000*	<u>1 2 3 4</u>
		2= 3.92 4= 2.75			
	13	1= 3.62 3= 2.98	3.60	.014*	<u>1 2 4 3</u>
		2= 3.24 4= 3.08			
	16	1= 4.05 3= 3.32	4.12	.007*	<u>1 2 4 3</u>
		2= 3.69 4= 3.46			
	24	1= 2.85 3= 2.66	.71	.549	1 2 3 4
		2= 2.83 4= 2.56			
	25	1= 3.49 3= 2.96	4.62	.004*	<u>1 3 2 4</u>
2= 2.85 4= 2.82					
28	1= 3.14 3= 2.62	2.25	.083	1 4 2 3	
	2= 2.68 4= 2.72				
3	1= 3.25 3= 2.85	1.00	.393	1 4 2 3	
	2= 2.96 4= 3.02				
	17	1= 3.13 3= 3.23	2.99	.032*	<u>4 3 1 2</u>
		2= 2.82 4= 3.52			
	18	1= 3.58 3= 3.51	1.78	.151	1 3 4 2
		2= 3.11 4= 3.38			
	19	1= 2.83 3= 3.23	1.16	.325	3 4 2 1
		2= 2.98 4= 3.12			
	20	1= 4.26 3= 3.70	4.28	.006*	<u>1 2 3 4</u>
		2= 3.90 4= 3.64			
	21	1= 3.80 3= 3.60	1.01	.388	4 1 2 3
		2= 3.77 4= 3.92			
	26	1= 3.12 3= 3.04	.78	.507	4 2 1 3
		2= 3.15 4= 3.36			
	4	1= 3.81 3= 3.31	4.82	.003*	<u>1 3 2 4</u>
2= 3.15 4= 3.10					
23		1= 3.60 3= 3.15	2.53	.058	1 2 4 3
		2= 3.40 4= 3.19			
27		1= 3.51 3= 3.15	2.60	.053	<u>1 4 3 2</u>
		2= 3.00 4= 3.35			

Note. Groups: 1 = 1-2 yrs; 2 = 3-5 yrs; 3 = 6-10 yrs;
 4 = 11+ yrs.

* $p < .05$.

Table A-14

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Australian Teachers' Experience
with Indigenous Children with Newman-Keuls Comparisons

Factor/Items	Group X		Fo	P	Newman-Keuls
1	1= 4.54	3= 4.58	1.27	.288	3 1 2 4
	2= 4.52	4= 4.08			
3	1= 3.65	3= 3.95	.54	.654	3 2 1 4
	2= 3.83	4= 3.54			
6	1= 4.34	3= 4.16	5.18	.002*	<u>1 3 2 4</u>
	2= 4.09	4= 3.15			
8	1= 4.05	3= 3.95	1.13	.343	2 1 3 4
	2= 4.14	4= 3.54			
9	1= 4.03	3= 4.06	2.64	.054	3 1 2 4
	2= 3.61	4= 3.15			
10	1= 3.98	3= 3.74	1.70	.172	1 2 3 4
	2= 3.74	4= 3.15			
11	1= 2.83	3= 2.58	1.08	.361	4 2 1 3
	2= 3.04	4= 3.23			
15	1= 3.63	3= 4.11	1.08	.363	3 2 4 1
	2= 3.74	4= 3.69			
2	1= 4.27	3= 3.78	2.13	.102	1 2 3 4
	2= 3.91	4= 3.58			
4	1= 4.25	3= 3.67	1.38	.255	1 4 2 3
	2= 3.91	4= 3.92			
5	1= 4.59	3= 4.53	3.15	.029*	<u>1 3 2 4</u>
	2= 4.43	4= 3.77			
7	1= 3.66	3= 2.47	3.38	.022*	<u>1 4 2 3</u>
	2= 3.00	4= 3.00			
13	1= 3.71	3= 2.84	4.06	.010*	<u>1 2 3 4</u>
	2= 3.19	4= 2.58			
16	1= 4.23	3= 3.74	1.42	.244	1 2 3 4
	2= 3.77	4= 3.62			
24	1= 2.78	3= 2.11	1.43	.240	1 2 4 3
	2= 2.77	4= 2.54			
25	1= 3.73	3= 2.84	3.24	.026*	<u>1 2 4 3</u>
	2= 3.22	4= 3.08			
28	1= 3.29	3= 2.47	2.75	.047*	1 4 2 3
	2= 2.57	4= 2.62			
12	1= 3.24	3= 2.37	2.31	.081	1 2 4 3
	2= 2.87	4= 2.69			
17	1= 2.88	3= 2.53	.72	.542	4 1 2 3
	2= 2.59	4= 3.00			
18	1= 3.54	3= 3.16	1.59	.198	1 4 3 2
	2= 2.87	4= 3.46			
19	1= 2.54	3= 2.42	.90	.443	4 2 1 3
	2= 2.83	4= 3.00			
20	1= 4.24	3= 3.37	4.41	.006*	<u>1 2 3 4</u>
	2= 3.96	4= 3.23			
21	1= 3.80	3= 3.53	1.48	.224	4 1 2 3
	2= 3.78	4= 4.23			
26	1= 3.10	3= 2.74	1.20	.314	4 1 2 3
	2= 2.78	4= 3.46			
14	1= 4.08	3= 3.06	3.22	.027*	<u>1 4 2 3</u>
	2= 3.43	4= 3.77			
23	1= 3.66	3= 3.26	1.27	.290	1 2 3 4
	2= 3.44	4= 3.09			
27	1= 3.56	3= 2.95	2.36	.077	1 4 2 3
	2= 2.96	4= 3.50			

Note. Groups: 1 = 1-2 yrs; 2 = 3-5 yrs; 3 = 6-10 yrs;
 4 = 11+ yrs.

* $p < .05$.

Table A-15

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Canadian Teachers' Experience
with Indigenous Children with Newman-Keuls Comparisons

Factor/Items	Group X		Fo	P	Newman-Keuls	
1	1= 3.67	3= 3.57	.70	.552	4 2 1 3	
	2= 3.38	4= 3.90				
	3	1= 3.33	3= 3.68	.94	.422	3 2 4 1
		2= 3.66	4= 3.63			
	6	1= 3.87	3= 3.43	.83	.481	1 2 4 3
		2= 3.60	4= 3.51			
	8	1= 2.83	3= 3.21	1.08	.363	3 4 1 2
		2= 2.83	4= 3.16			
	9	1= 3.25	3= 3.04	.22	.885	1 2 3 4
		2= 3.14	4= 3.03			
	10	1= 2.83	3= 2.46	.55	.649	1 4 2 3
		2= 2.57	4= 2.66			
	11	1= 2.96	3= 3.25	1.58	.197	3 2 1 4
		2= 3.03	4= 2.68			
	15	1= 3.21	3= 3.18	.50	.683	4 2 1 3
2= 3.31		4= 3.46				
2	1= 4.13	3= 3.43	2.00	.118	1 2 4 3	
	2= 3.81	4= 3.50				
	4	1= 3.75	3= 3.32	1.71	.169	1 3 2 4
		2= 3.31	4= 3.05			
	5	1= 4.61	3= 4.29	.70	.554	1 2 4 3
		2= 4.39	4= 4.31			
	7	1= 2.67	3= 3.21	3.76	.012*	1 3 2 4
		2= 2.87	4= 2.67			
	13	1= 3.46	3= 3.07	.57	.638	1 2 4 3
		2= 3.27	4= 3.23			
	16	1= 3.75	3= 3.04	1.98	.121	1 2 4 3
		2= 3.62	4= 3.41			
	24	1= 2.96	3= 3.04	1.10	.354	3 1 2 4
		2= 2.87	4= 2.57			
	25	1= 3.09	3= 3.04	1.46	.229	1 3 4 2
2= 2.55		4= 2.72				
28	1= 2.87	3= 2.71	.08	.972	1 2 4 3	
	2= 2.77	4= 2.75				
3	1= 3.25	3= 3.18	.14	.934	1 3 4 2	
	2= 3.03	4= 3.13				
	17	1= 3.54	3= 3.71	2.75	.046*	3 4 1 2
		2= 3.00	4= 3.70			
	18	1= 3.67	3= 3.75	1.26	.293	3 1 4 2
		2= 3.30	4= 3.35			
	19	1= 3.33	3= 3.79	2.25	.086	3 1 4 2
		2= 3.10	4= 3.16			
	20	1= 4.29	3= 3.93	1.45	.233	1 3 2 4
		2= 3.86	4= 3.78			
	21	1= 3.79	3= 3.64	.19	.900	4 1 2 3
		2= 3.77	4= 3.81			
	26	1= 3.17	3= 3.25	.23	.879	2 4 3 1
		2= 3.38	4= 3.32			
	4	1= 3.38	3= 3.46	2.62	.054	3 1 2 4
2= 2.93		4= 2.87				
23		1= 3.50	3= 3.07	.97	.411	1 2 4 3
		2= 3.37	4= 3.22			
27		1= 3.42	3= 3.29	.70	.553	1 4 3 2
		2= 3.03	4= 3.31			

Note. Groups: 1 = 1-2 yrs; 2 = 3-5 yrs; 3 = 6-10 yrs;

4 = 11+ yrs.

* $p < .05$.

Table A-16

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Years of Education of all
Teachers with Newman-Keuls Comparisons

Factor/Items	Group X		F _o	P	Newman-Keuls
1	1= 3.97	3= 3.93	1.06	.350	2 1 3
	2= 4.15				
3	1= 3.64	3= 3.74	.24	.787	3 1 2
	2= 3.63				
6	1= 3.64	3= 3.63	1.52	.221	2 1 3
	2= 3.90				
8	1= 3.07	3= 3.42	1.91	.151	2 3 1
	2= 3.53				
9	1= 3.21	3= 3.20	1.89	.154	2 1 3
	2= 3.53				
10	1= 2.86	3= 3.04	1.11	.331	2 3 1
	2= 3.21				
11	1= 2.93	3= 2.98	.03	.975	2 1 3
	2= 2.94				
15	1= 3.34	3= 3.64	.75	.476	3 2 1
	2= 3.50				
2	1= 3.25	3= 3.76	5.08	.007*	<u>2 3 1</u>
	2= 3.96				
4	1= 2.85	3= 3.46	8.96	.000*	<u>2 3 1</u>
	2= 3.83				
5	1= 4.18	3= 4.41	1.05	.350	2 3 1
	2= 4.44				
7	1= 3.07	3= 2.96	.39	.677	2 1 3
	2= 3.16				
13	1= 2.96	3= 3.36	1.14	.321	3 2 1
	2= 3.28				
16	1= 3.04	3= 3.84	6.11	.003*	<u>2 3 1</u>
	2= 3.84				
24	1= 2.52	3= 2.87	.76	.470	3 2 1
	2= 2.73				
25	1= 2.71	3= 2.78	2.80	.063	2 3 1
	2= 3.19				
28	1= 2.61	3= 2.39	4.75	.010	<u>2 1 3</u>
	2= 2.99				
12	1= 2.97	3= 2.94	.30	.743	2 1 3
	2= 3.09				
17	1= 3.50	3= 3.38	2.79	.063	1 3 2
	2= 3.03				
18	1= 3.21	3= 3.32	.73	.483	2 3 1
	2= 3.47				
19	1= 3.25	3= 2.96	.59	.556	1 2 3
	2= 3.00				
20	1= 3.61	3= 3.77	2.29	.104	2 3 1
	2= 4.01				
21	1= 3.61	3= 3.91	.98	.378	3 2 1
	2= 3.77				
26	1= 3.25	3= 3.13	.11	.897	1 2 3
	2= 3.16				
14	1= 3.21	3= 2.98	4.45	.013*	<u>2 1 3</u>
	2= 3.54				
23	1= 3.32	3= 3.36	.02	.979	2 3 1
	2= 3.36				
27	1= 3.46	3= 3.18	.65	.523	1 2 3
	2= 3.26				

Note. Groups: 1 = 1-2 yrs; 2 = 3-4 yrs; 3 = 5+ yrs.

* $p < .05$.

Table A-17

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Years of Education of Australian
Teachers with Newman-Keuls Comparisons

Factor/Items	Group X		Fo	P	Newman-Keuls	
1	1= 4.30	3= 4.42	.34	.710	2 3 1	
	2= 4.51					
	3	1= 3.90	3= 3.50	.43	.654	1 2 3
	2= 3.75					
	6	1= 3.70	3= 4.33	1.09	.341	3 2 1
	2= 4.09					
	8	1= 3.80	3= 3.73	.66	.519	2 1 3
	2= 4.04					
	9	1= 3.73	3= 3.08	4.37	.015*	<u>2 1 3</u>
	2= 3.99					
	10	1= 3.10	3= 4.00	1.99	.142	3 2 1
	2= 3.81					
	11	1= 2.70	3= 2.85	.81	.449	3 2 1
	2= 2.85					
	15	1= 3.70	3= 3.83	.05	.948	3 2 1
2= 3.75						
2	2	1= 2.80	3= 3.92	10.19	.000*	<u>2 3 1</u>
	2= 4.18					
	4	1= 2.67	3= 3.92	9.59	.000*	<u>2 3 1</u>
	2= 4.19					
	5	1= 4.20	3= 4.17	1.12	.332	2 1 3
	2= 4.50					
	7	1= 2.30	3= 3.17	2.11	.127	2 3 1
	2= 3.30					
	13	1= 2.00	3= 3.17	6.04	.004*	<u>2 3 1</u>
	2= 3.44					
	16	1= 2.67	3= 3.75	6.85	.002*	<u>2 3 1</u>
	2= 4.12					
	24	1= 2.00	3= 3.00	1.79	.172	3 2 1
	2= 2.63					
	25	1= 2.30	3= 3.08	5.89	.004*	<u>2 3 1</u>
2= 3.52						
3	28	1= 1.80	3= 2.25	6.68	.002*	<u>2 3 1</u>
	2= 3.11					
	12	1= 2.10	3= 2.50	3.48	.035*	2 3 1
	2= 3.08					
	17	1= 2.70	3= 3.08	.54	.582	3 2 1
	2= 2.71					
	18	1= 2.70	3= 2.92	2.19	.118	2 3 1
	2= 3.43					
	19	1= 2.70	3= 2.50	.11	.890	1 2 3
	2= 2.66					
	20	1= 2.80	3= 3.42	7.27	.001*	<u>2 3 1</u>
	2= 4.08					
	21	1= 3.77	3= 3.10	.18	.832	3 1 2
	2= 3.92					
	26	1= 3.10	3= 2.75	.38	.688	1 2 3
2= 3.05						
4	14	1= 2.80	3= 3.17	4.92	.009*	<u>2 3 1</u>
	2= 3.90					
	23	1= 3.00	3= 2.91	3.57	.032*	2 1 3
	2= 3.60					
27	1= 3.20	3= 2.92	.84	.435	2 1 3	
2= 3.36						

Note. Groups: 1 = 1-2 yrs; 2 = 3-4 yrs; 3 = 5+ yrs.

* $p < .05$.

Table A-18

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Years of Education of Canadian
Teachers with Newman-Keuls Comparisons

Factor/Items	Group X		Fo	P	Newman-Keuls
1	1= 3.79	3= 3.76	.02	.985	1 3 2
	2= 3.75				
3	1= 3.50	3= 3.82	1.91	.153	3 1 2
	2= 3.49				
6	1= 3.61	3= 3.38	.92	.401	2 1 3
	2= 3.68				
8	1= 2.67	3= 3.32	2.46	.090	3 2 1
	2= 2.97				
9	1= 3.11	3= 3.24	.34	.711	3 1 2
	2= 3.03				
10	1= 2.74	3= 2.71	.40	.668	1 3 2
	2= 2.55				
11	1= 3.06	3= 2.77	.73	.482	1 2 3
	2= 3.03				
15	1= 3.16	3= 3.57	1.63	.200	3 2 1
	2= 3.21				
2	1= 3.50	3= 3.70	.26	.772	2 3 1
	2= 3.73				
4	1= 2.94	3= 3.29	1.26	.289	2 3 1
	2= 3.44				
5	1= 4.17	3= 4.50	.83	.438	3 2 1
	2= 4.38				
7	1= 3.47	3= 2.89	1.45	.240	3 2 1
	2= 3.00				
13	1= 3.42	3= 3.43	1.37	.259	3 1 2
	2= 3.10				
16	1= 3.21	3= 3.40	.58	.560	2 3 1
	2= 3.53				
24	1= 2.82	3= 2.82	.01	.993	2 3 1
	2= 2.85				
25	1= 2.94	3= 2.79	.12	.888	1 2 3
	2= 2.81				
28	1= 3.06	3= 2.44	2.12	.125	1 2 3
	2= 2.86				
12	1= 2.42	3= 3.09	.57	.569	1 2 3
	2= 3.09				
17	1= 3.49	3= 3.49	1.76	.178	1 3 2
	2= 3.38				
18	1= 3.50	3= 3.46	.03	.968	2 1 3
	2= 3.52				
19	1= 3.56	3= 3.11	1.05	.354	1 2 3
	2= 3.38				
20	1= 4.06	3= 3.89	.18	.836	1 2 3
	2= 3.94				
21	1= 3.44	3= 3.91	1.53	.220	3 2 1
	2= 3.76				
26	1= 3.33	3= 3.26	.03	.973	1 2 3
	2= 3.29				
14	1= 3.42	3= 2.91	1.49	.229	1 2 3
	2= 3.15				
23	1= 3.50	3= 3.50	2.48	.089	3 1 2
	2= 3.10				
27	1= 3.61	3= 3.27	1.47	.235	1 3 2
	2= 3.15				

Note. Groups: 1 = 1-2 yrs; 2 = 3-4 yrs; 3 = 5+ yrs.
 * $p < .05$.

Table A-19

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Age Groups of all Teachers
with Newman-Keuls Comparisons

Factor/Items	Group X			Fo	P	Newman-Keuls	
1	1= 4.37	3= 3.98	5= 3.97	1.32	.264	1 2 3 5 4	
	2= 4.13	4= 3.94					
3	1= 3.58	3= 3.63	5= 3.65	.71	.588	4 5 2 3 1	
	2= 3.63	4= 3.91					
6	1= 4.27	3= 3.75	5= 3.46	5.05	.001*	1 2 3 4 5	
	2= 4.04	4= 3.42					
8	1= 3.90	3= 3.32	5= 3.30	1.94	.106	1 4 2 3 5	
1	2= 3.40	4= 3.50					
9	1= 3.88	3= 3.16	5= 3.05	3.48	.009*	1 2 4 3 5	
	2= 3.60	4= 3.55					
10	1= 3.73	3= 2.90	5= 2.76	4.59	.001*	1 2 4 3 5	
	2= 3.38	4= 2.94					
11	1= 2.63	3= 3.24	5= 3.11	2.81	.027*	3 5 2 1 4	
	2= 2.98	4= 2.61					
15	1= 3.48	3= 3.36	5= 3.42	.96	.431	4 2 1 5 3	
	2= 3.60	4= 3.76					
2	1= 4.15	3= 4.08	5= 3.51	4.03	.004*	1 3 2 5 4	
	2= 3.89	4= 3.34					
4	1= 4.10	3= 3.82	5= 3.19	8.07	.000*	1 2 3 5 4	
	2= 3.93	4= 2.91					
5	1= 4.54	3= 4.43	5= 4.16	1.42	.230	2 1 3 4 5	
	2= 4.55	4= 4.33					
7	1= 3.46	3= 3.55	5= 2.82	6.70	.000*	3 1 2 5 4	
	2= 3.13	4= 2.24					
2	13	1= 3.34	3= 3.29	5= 3.19	1.19	.317	2 1 3 5 4
	2= 3.40	4= 2.88					
16	1= 4.05	3= 3.74	5= 3.32	2.70	.032*	1 2 3 4 5	
	2= 3.79	4= 3.33					
24	1= 2.63	3= 3.25	5= 2.62	4.19	.003*	3 2 1 5 4	
	2= 2.72	4= 2.26					
25	1= 3.31	3= 3.24	5= 2.84	3.64	.007*	1 2 3 5 4	
	2= 3.26	4= 2.48					
28	1= 2.98	3= 3.08	5= 2.59	1.65	.169	3 1 2 5 4	
	2= 2.78	4= 2.50					
12	1= 3.27	3= 3.14	5= 2.76	.96	.431	1 3 4 2 5	
	2= 2.99	4= 3.09					
17	1= 2.78	3= 3.32	5= 3.55	2.63	.036*	5 3 2 4 1	
	2= 3.17	4= 2.94					
18	1= 3.94	3= 3.73	5= 3.50	2.81	.027*	3 5 2 1 4	
	2= 3.43	4= 2.91					
3	19	1= 2.96	3= 3.25	5= 3.21	1.84	.122	3 5 2 4 1
	2= 3.04	4= 2.85					
20	1= 4.24	3= 4.26	5= 3.58	4.88	.001*	3 1 2 5 4	
	2= 3.70	4= 3.56					
21	1= 3.36	3= 3.98	5= 4.00	1.80	.130	5 3 2 1 4	
	2= 3.70	4= 3.62					
26	1= 3.22	3= 3.25	5= 3.22	.62	.651	3 4 1 5 2	
	2= 2.96	4= 3.24					
14	1= 3.88	3= 3.56	5= 3.16	4.45	.002*	1 3 2 5 4	
	2= 3.30	4= 2.85					
4	23	1= 3.39	3= 3.35	5= 3.42	1.27	.283	2 1 3 5 4
	2= 3.60	4= 3.12					
27	1= 3.20	3= 3.45	5= 3.42	1.49	.220	3 5 2 1 4	
	2= 3.23	4= 2.94					

Note. Groups: 1 = 20-24 yrs; 2 = 25-29 yrs; 3 = 30-34 yrs;
 4 = 35-44 yrs; 5 = 45+ yrs.

* $p < .05$.

Table A-20

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Age Groups of Australian
Teachers with Newman-Keuls Comparisons

Factor/Items	Group \bar{X}			Fo	P	Newman-Keuls
1	1= 4.42 2= 4.68	3= 4.53 4= 4.90	5= 3.92	2.69	.036*	<u>4 2 3 1 5</u>
3	1= 3.57 2= 3.89	3= 3.74 4= 4.40	5= 3.42	1.63	.173	4 2 3 1 5
6	1= 4.31 2= 4.37	3= 4.16 4= 3.40	5= 3.42	3.64	.009*	2 1 3 5 4
8	1= 4.00 2= 4.05	3= 4.05 4= 4.30	5= 3.36	1.41	.238	4 3 2 1 5
9	1= 3.91 2= 3.95	3= 4.00 4= 4.00	5= 2.83	2.83	.029*	4 3 2 1 5
10	1= 3.89 2= 4.11	3= 3.79 4= 3.20	5= 3.25	1.76	.145	2 1 3 5 4
11	1= 2.58 2= 3.00	3= 3.06 4= 2.60	5= 3.58	2.25	.070	5 3 2 4 1
15	1= 3.54 2= 3.89	3= 3.95 4= 4.10	5= 3.58	1.11	.358	4 3 2 5 1
2	1= 4.06 2= 4.06	3= 4.42 4= 3.20	5= 3.73	2.95	.025*	<u>3 2 1 5 4</u>
4	1= 4.15 2= 4.37	3= 4.16 4= 3.10	5= 3.55	3.35	.013*	<u>2 3 1 5 4</u>
5	1= 4.47 2= 4.58	3= 4.68 4= 4.16	5= 3.50	4.61	.002*	<u>3 4 2 1 5</u>
7	1= 3.42 2= 3.16	3= 3.42 4= 1.90	5= 3.17	2.43	.053	3 1 5 2 4
13	1= 3.22 2= 3.42	3= 3.74 4= 2.38	5= 3.00	2.00	.101	3 2 1 5 4
16	1= 3.97 2= 4.16	3= 4.26 4= 3.56	5= 3.25	1.79	.135	3 2 1 4 5
24	1= 2.56 2= 2.37	3= 3.26 4= 1.89	5= 2.67	2.35	.060	3 5 1 2 4
25	1= 3.29 2= 3.79	3= 3.58 4= 2.70	5= 2.92	2.27	.068	2 3 1 5 4
28	1= 3.06 2= 2.89	3= 3.16 4= 2.40	5= 2.33	1.17	.331	3 1 2 4 5
12	1= 3.22 2= 2.84	3= 2.74 4= 2.90	5= 2.33	1.27	.287	1 4 2 3 5
17	1= 2.69 2= 3.06	3= 2.74 4= 2.10	5= 3.08	1.39	.243	5 2 3 1 4
18	1= 3.31 2= 3.37	3= 3.58 4= 2.50	5= 3.33	1.30	.277	3 2 5 1 4
19	1= 2.67 2= 2.74	3= 2.59 4= 2.30	5= 2.83	.32	.862	5 2 1 3 4
20	1= 4.19 2= 3.53	3= 4.32 4= 3.30	5= 3.17	3.99	.005*	<u>3 1 2 4 5</u>
21	1= 3.67 2= 3.58	3= 4.00 4= 3.70	5= 4.33	1.72	.153	5 3 4 1 2
26	1= 3.19 2= 2.98	3= 2.68 4= 3.20	5= 3.08	.72	.583	4 1 5 2 3
14	1= 3.86 2= 3.68	3= 3.88 4= 2.80	5= 3.67	1.54	.198	3 1 2 5 4
23	1= 3.33 2= 3.68	3= 3.84 4= 3.30	5= 2.90	1.96	.108	3 2 1 4 5
27	1= 3.08 2= 3.26	3= 3.89 4= 2.70	5= 3.45	2.68	.037	<u>3 5 2 1 4</u>

Note. Groups: 1 = 20-24 yrs; 2 = 25-29 yrs; 3 = 30-34 yrs;
 4 = 35-44 yrs; 5 = 45+ yrs.

* $p < .05$.

Table A-21

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Age Groups of Canadian
Teachers with Newman-Keuls Comparisons

Factor/Items	Group X			Fo	P	Newman-Keuls
1	1= 4.00	3= 3.66	5= 4.00	.882	.515	5 1 2 3 4
	2= 3.74	4= 3.54				
3	1= 3.60	3= 3.56	5= 3.76	.56	.691	5 4 1 3 2
	2= 3.44	4= 3.71				
6	1= 4.00	3= 3.50	5= 3.48	.76	.551	1 2 3 5 4
	2= 3.81	4= 3.43				
8	1= 3.20	3= 2.87	5= 3.27	.61	.662	5 1 4 2 3
1	2= 2.96	4= 3.14				
9	1= 3.60	3= 2.65	5= 3.15	2.15	.078	1 2 4 5 3
	2= 3.36	4= 3.35				
10	1= 2.60	3= 2.38	5= 2.54	1.10	.363	2 4 1 5 3
	2= 2.89	4= 2.83				
11	1= 3.00	3= 3.34	5= 2.88	1.67	.164	3 1 2 5 4
	2= 2.96	4= 2.61				
15	1= 3.00	3= 3.00	5= 3.35	1.47	.215	4 2 5 3 1
	2= 3.39	4= 3.63				
2	1= 4.80	3= 3.87	5= 3.42	2.04	.094	1 3 2 5 4
	2= 3.78	4= 3.41				
4	1= 3.80	3= 3.63	5= 3.04	2.79	.030*	1 2 3 5 4
	2= 3.63	4= 2.83				
5	1= 5.00	3= 4.27	5= 4.46	1.25	.293	1 2 5 3 4
	2= 4.54	4= 4.22				
7	1= 3.80	3= 3.63	5= 2.65	5.13	.001*	1 3 2 5 4
	2= 3.11	4= 2.38				
2	1= 4.20	3= 3.03	5= 3.26	1.73	.148	1 2 5 4 3
13	2= 3.39	4= 3.04				
16	1= 4.60	3= 3.42	5= 3.35	1.51	.205	1 2 3 5 4
	2= 3.54	4= 3.25				
24	1= 3.20	3= 3.25	5= 2.60	2.68	.036*	3 1 2 5 4
	2= 2.96	4= 2.41				
25	1= 3.50	3= 3.03	5= 2.80	1.55	.192	1 3 2 5 4
	2= 2.98	4= 2.39				
28	1= 2.80	3= 3.03	5= 2.72	.66	.622	3 1 5 2 4
	2= 2.70	4= 2.54				
12	1= 3.60	3= 3.38	5= 2.96	6.67	.617	1 3 4 2 5
	2= 3.00	4= 3.17				
17	1= 3.40	3= 3.68	5= 3.77	1.09	.363	5 3 1 4 2
	2= 3.25	4= 3.30				
18	1= 2.80	3= 3.81	5= 3.58	2.11	.085	3 5 2 4 1
	2= 3.46	4= 3.09				
3	1= 2.60	3= 3.66	5= 3.38	1.52	.201	3 5 2 4 1
19	2= 3.25	4= 3.09				
20	1= 4.60	3= 4.22	5= 3.77	1.92	.112	1 3 2 5 4
	2= 3.82	4= 3.68				
21	1= 3.40	3= 3.97	5= 3.84	.91	.462	3 5 2 4 1
	2= 3.79	4= 3.58				
26	1= 3.40	3= 3.59	5= 3.28	1.45	.224	3 1 5 4 2
	2= 3.00	4= 3.26				
14	1= 4.00	3= 3.39	5= 2.92	2.10	.085	1 3 2 5 4
	2= 3.04	4= 2.88				
4	1= 3.80	3= 3.06	5= 3.44	1.92	.112	1 2 5 3 4
23	2= 3.54	4= 3.04				
27	1= 4.00	3= 3.19	5= 3.40	1.12	.349	1 5 2 3 4
	2= 3.21	4= 3.04				

Note. Groups: 1 = 20-24 yrs; 2 = 25-29 yrs; 3 = 30-34 yrs;
 4 = 35-44 yrs; 5 = 45+ yrs.

* $p < .05$.

Table A-22

Results of Analyses of Variance of Scores on the AttitudinalItems Classified on the Basis of Sex of all Teachers withNewman-Keuls Comparisons

Factor/Items	Group X	Fo	P	Newman-Keuls
1	1= 4.09	.08	.782	1 2
	2= 4.05			
3	1= 3.67	.04	.837	1 2
	2= 3.64			
6	1= 3.86	1.22	.272	1 2
	2= 3.69			
8	1= 3.33	2.45	.119	2 1
	2= 3.59			
9	1= 3.38	.49	.947	2 1
	2= 3.49			
10	1= 3.05	1.11	.293	1 2
	2= 3.24			
11	1= 2.88	1.47	.227	2 1
	2= 3.08			
15	1= 2.57	2.03	.156	2 1
	2= 3.36			
2	1= 3.83	.13	.724	2 1
	2= 3.98			
4	1= 3.69	.59	.442	1 2
	2= 3.56			
5	1= 4.42	.01	.929	2 1
	2= 4.41			
7	1= 3.16	.33	.565	2 1
	2= 3.05			
13	1= 3.33	.95	.330	1 2
	2= 3.16			
16	1= 3.63	.59	.444	2 1
	2= 3.76			
24	1= 2.66	1.83	.178	2 1
	2= 2.90			
25	1= 3.04	2.15	.145	2 1
	2= 3.32			
28	1= 2.85	.00	.958	1 2
	2= 2.84			
12	1= 3.02	.16	.692	2 1
	2= 3.09			
17	1= 3.08	2.42	.122	2 1
	2= 3.35			
18	1= 3.34	2.84	.094	2 1
	2= 3.62			
19	1= 2.91	4.41	.037*	2 1
	2= 3.28			
20	1= 3.93	.00	.981	2 1
	2= 3.94			
21	1= 3.70	2.37	.125	2 1
	2= 3.91			
26	1= 3.09	2.15	.145	2 1
	2= 3.32			
14	1= 3.30	2.98	.086	2 1
	2= 3.59			
23	1= 3.41	.10	.750	1 2
	2= 3.36			
27	1= 3.26	.34	.561	2 1
	2= 3.35			

Note. Groups: 1 = female; 2 = male.

* $p < .05$.

Table A-23

Results of Analyses of Variance of Scores on the AttitudinalItems Classified on the Basis of Sex of AustralianTeachers with Newman-Keuls Comparisons

Factor/Items	Group X	Fo	P	Newman-Keuls
1	1= 4.40	1.15	.288	2 1
	2= 4.58			
3	1= 3.78	.04	.850	1 2
	2= 3.74			
6	1= 4.04	.13	.722	2 1
	2= 4.12			
8	1= 3.84	2.19	.142	2 1
	2= 4.15			
9	1= 3.63	2.41	.124	2 1
	2= 4.00			
10	1= 3.48	6.14	.015*	2 1
	2= 4.07			
11	1= 2.82	.58	.450	2 1
	2= 3.00			
15	1= 3.82	.47	.496	1 2
	2= 3.67			
2	1= 3.92	.53	.467	2 1
	2= 4.07			
4	1= 4.04	.24	.625	1 2
	2= 3.93			
5	1= 4.38	.52	.474	2 1
	2= 4.51			
7	1= 3.14	.01	.941	2 1
	2= 3.16			
2 13	1= 3.33	.40	.531	1 2
	2= 3.17			
16	1= 3.88	.33	.567	2 1
	2= 4.02			
24	1= 2.60	.03	.873	2 1
	2= 2.64			
25	1= 3.28	.51	.478	2 1
	2= 3.45			
28	1= 2.80	.41	.522	2 1
	2= 2.98			
12	1= 2.96	.40	.529	1 2
	2= 2.79			
17	1= 2.57	2.44	.122	2 1
	2= 2.95			
18	1= 3.28	.03	.863	2 1
	2= 3.33			
3 19	1= 2.58	.56	.456	2 1
	2= 2.77			
20	1= 3.82	.21	.654	2 1
	2= 3.93			
21	1= 3.78	.08	.773	2 1
	2= 3.84			
26	1= 2.86	2.44	.122	2 1
	2= 3.23			
14	1= 3.60	1.11	.295	2 1
	2= 3.88			
4 23	1= 3.46	.00	.975	2 1
	2= 3.47			
27	1= 3.24	.12	.733	2 1
	2= 3.33			

Note. Groups: 1 = female; 2 = male.

* $P < .05$.

Table A-24

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Sex of Canadian Teachers
with Newman-Keuls Comparisons

Factor/Items	Group X	Fo	P	Newman-Keuls
1	1= 3.88	5.31	.023*	1 2
	2= 3.42			
3	1= 3.59	.13	.715	1 2
	2= 3.53			
6	1= 3.74	7.56	.007*	1 2
	2= 3.15			
8	1= 2.99	.04	.842	1 2
	2= 2.94			
9	1= 3.20	1.69	.196	1 2
	2= 2.89			
10	1= 2.75	5.57	.020*	1 2
	2= 2.25			
11	1= 2.93	1.18	.280	2 1
	2= 3.17			
15	1= 3.41	4.38	.039*	1 2
	2= 2.97			
2	1= 3.76	.22	.640	1 2
	2= 3.65			
4	1= 3.45	2.07	.153	1 2
	2= 3.11			
5	1= 4.45	.82	.367	1 2
	2= 4.29			
7	1= 3.18	1.08	.301	1 2
	2= 2.92			
13	1= 3.33	.54	.463	1 2
	2= 3.17			
16	1= 3.47	.00	.972	1 2
	2= 3.46			
24	1= 2.70	4.82	.030*	2 1
	2= 3.20			
25	1= 2.87	.19	.666	1 2
	2= 2.77			
28	1= 2.89	.76	.385	1 2
	2= 2.68			
12	1= 3.05	2.44	.121	1 2
	2= 3.44			
17	1= 3.42	2.90	.092	2 1
	2= 3.81			
18	1= 3.38	7.70	.007*	2 1
	2= 3.97			
19	1= 3.14	11.17	.001*	2 1
	2= 3.89			
20	1= 4.01	.13	.724	1 2
	2= 3.94			
21	1= 3.64	3.36	.070	2 1
	2= 4.00			
26	1= 3.25	.73	.395	2 1
	2= 3.42			
14	1= 3.10	.52	.471	2 1
	2= 3.25			
23	1= 3.37	.51	.479	1 2
	2= 3.23			
27	1= 3.26	.26	.608	2 1
	2= 3.37			

Note. Groups: 1 = Female; 2 = Male.
* $p < .05$.

Table A-25

Results of Analyses of Variance of the Scores on the Attitudinal
Items Classified on the Basis of Groups of Non-Indigenous
Teachers with Newman-Keuls Comparisons

Factor/Items	Group X	Fo	P	Newman-Keuls	
1	1= 3.82	25.18	.000*	2 1	
	2= 4.48				
	3	1= 3.58	1.50	.222	2 1
	2= 3.76				
	6	1= 3.71	12.15	.001*	2 1
	2 =4.19				
	8	1= 2.98	43.05	.000*	2 1
	2= 3.99				
	9	1= 3.11	16.62	.000*	2 1
	2= 3.82				
	10	1= 2.66	43.14	.000*	2 1
	2= 3.73				
	11	1= 3.05	.34	.564	1 2
	2= 3.15				
	15	1= 3.39	9.30	.003*	2 1
2= 3.83					
2	2	1= 3.69	2.66	.105	2 1
	2= 3.96				
	4	1= 3.23	19.19	.000*	2 1
	2= 3.99				
	5	1= 4.37	.14	.709	2 1
	2= 4.42				
	7	1= 3.06	.06	.815	1 2
	2= 3.01				
	13	1= 3.27	.02	.898	2 1
	2= 3.30				
	16	1= 3.43	5.75	.018*	2 1
	2= 3.85				
	24	1= 2.75	.79	.377	1 2
	2= 2.59				
	25	1= 2.78	7.96	.005*	2 1
2= 3.26					
28	1= 2.72	.18	.672	2 1	
2= 2.80					
3	12	1= 3.12	4.61	.033*	2 1
	2= 2.72				
	17	1= 3.46	19.71	.000*	1 2
	2= 2.71				
	18	1= 3.40	1.11	.294	1 2
	2= 3.22				
	19	1= 3.22	11.45	.001*	1 2
	2= 2.64				
	20	1= 3.92	.04	.834	2 1
	2= 3.95				
	21	1= 3.70	.73	.393	2 1
	2= 3.82				
	26	1= 3.23	4.68	.032*	1 2
	2= 2.89				
	4	14	1= 3.08	9.99	.002*
2= 3.63					
23		1= 3.25	1.66	.200	2 1
2= 3.44					
27		1= 3.20	.03	.854	2 1
2= 3.23					

Note. Groups: 1 = Non-Native; 2 = Non-Aboriginal.
 * $p < .05$.

APPENDIX B

Letter to Department of Education, Queensland

January 11, 1983.

Mr. C. Gilmour,
Director-General of Education,
P.O. Box 33,
North Quay,
Brisbane, Queensland 4000,
Australia

Dear Mr. Gilmour:

I was given your name by Ms. Betty Murray, from the Cairns College of Technical and Further Education in Queensland, when she was visiting here last June.

I am a graduate student at the University of Saskatchewan. I am presently working on a Master of Education in the Indian and Northern Education Program, which focuses on the preparation of teachers to work more effectively with students of the various Indigenous cultural groups in Canada. The literature available to me concerning Aboriginal education in your country and Indian and Native education here suggests many similarities in the areas of language teaching delivery systems. It seems to me that co-operative study and the sharing of ideas could be beneficial to educators and the original peoples of both of our countries.

I am hoping to conduct a study on one facet of education for the original people of Australia and Canada and am asking your assistance in making this possible.

Among Native people in Saskatchewan there are a significant number who speak a dialect of English other than that used in schools. This dialect of English has syntactical, phonological, lexical and inflectional similarities to the Indian languages. There are distinct differences between this "village English" and "school English," which appear to have common elements to what John Dwyer speaks of as differences between "home talk" and "school talk." The research done by John Dwyer and the Van Leer Project has not been replicated in Saskatchewan and I think it would be interesting and useful to compare these two quite similar teaching situations.

Mr. C. Gilmour
January 11, 1983
Page 2

I am particularly interested in examining how elementary teachers in northern Saskatchewan view the oral English of their students. I would like to question a comparable sample of teachers in northern Queensland on the same criteria. I am proposing to do a descriptive survey using a questionnaire that has been designed for the purpose of seeking teacher perceptions of first language validity of their students. The questionnaire will be piloted, revised, and administered to one hundred educators in northern Saskatchewan, Canada. I would like to obtain your permission to administer the same instrument to a comparable group of educators in northern Queensland.

I intend to spend February, 1983, in Queensland, during which time I could be reached by contacting Ms. Betty Murray, Cairns College of Technical and Further Education, Cairns, Queensland 4870.

Thank you for your consideration. I look forward to hearing from you c/o Ms. Betty Murray.

Sincerely,

Heather Blair.

APPENDIX C

Letter to Teachers

Indian and Northern Education Program
College of Education
University of Saskatchewan
Saskatoon, Saskatchewan
S7N 0W0

Dear Fellow Teacher:

I am a graduate student in the Indian and Northern Education Program at the University of Saskatchewan and am presently doing research for a thesis. My advisor is Dr. Del Koenig.

During five years as a teacher in Native and northern schools, I became aware of the importance of language learning in order for Native children to be successful in school. There are, as you know, many factors that are involved in learning a language. As you are the people who are in the classrooms, you know best what the issues are. I would like to ask you for your assistance by answering this questionnaire.

This questionnaire is going to teachers of Native children in Saskatchewan, as well as teachers of Aboriginal children in Queensland, Australia. These two groups of Indigenous people have had similar educational experiences and the sharing of ideas will hopefully be to the benefit of all involved. This study intends to compare issues in the English language classroom for both Aboriginal Australians and Native Canadians in order to learn from each other.

The information collected in this research will be made available to northern and Native school boards as well as teachers who request it. It is hoped that the findings will be of use to individuals and groups as they grapple with language learning issues in their classrooms.

It is important that your responses remain anonymous. The code number in front of each booklet will be used for checking the return of questionnaires. Answers from the questionnaires will not be identified with you, your school or community.

If you would like a copy of the results of this research, would you please fill out the card attached and return it to the researcher. I would like to thank you for your cooperation and assistance; it is greatly appreciated.

Sincerely,

Heather Blair.

APPENDIX D

Letter to the Director of Education, Saskatchewan

Dear Education Director:

I am a graduate student at the University of Saskatchewan. I am presently working on a Master of Education in the Indian and Northern Education program.

During my five years as a teacher in Native and northern schools I became aware of the importance of language learning in order for Native children to be successful in school. There are, as you know, many factors that are involved in language learning. I am particularly interested in examining how elementary teachers view the oral English of their Native students.

I would like to obtain permission from your school board to include some of your teachers in my sample. As I need a cross-section of the teaching population in Saskatchewan, I have approached other school boards with the same request. The study sample will include Native and Non-Native teachers randomly selected throughout Saskatchewan. I have designed a questionnaire that I will administer to these teachers in April and May, 1983.

I am intending to do a comparison between teachers in Saskatchewan and Queensland, Australia. The review of related literature indicates that there are many similarities between Aboriginal education in Australia and Native education in Canada, and I feel it would be both interesting and useful to examine both.

The information collected in this research will be made available to northern and Native school boards as well as to the teachers who request it. It is hoped that the findings will be useful to school boards and teachers as they grapple with language learning issues in their classrooms.

I appreciate your assistance, and I look forward to hearing from you soon.

Yours sincerely,

Heather Blair.

APPENDIX E

Saskatchewan Indigenous Students' Oral English Questionnaire

SASKATCHEWAN QUESTIONNAIRE

I. BACKGROUND INFORMATION

1. Sex: Please circle one number.
Key: 1 = female; 2 = male

2. Age: Please circle one number.
Key:

20	26	32	38	44	50	56
21	27	33	39	45	51	57
22	28	34	40	46	52	58
23	29	35	41	47	53	59
24	30	36	42	48	54	60
25	31	37	43	49	55	61+

3. Years you have worked as a teacher aide:

Please circle one number.

Key: Each number indicates one year of experience as an aide.

0	2	4	6	8	10
1	3	5	7	9	11+

4. Years you have taught:

Please circle one number.

Key: Each number indicates one year of teaching experience.

0	6	12	18	24	30
1	7	13	19	25	31
2	8	14	20	26	32
3	9	15	21	27	33
4	10	16	22	28	34
5	11	17	23	29	35+

5. Years you have taught with Indian/Metis children in your class:

Please circle one code number.

Key: Each number indicates one year of teaching experience.

1	8	15	22	29
2	9	16	23	30
3	10	17	24	31
4	11	18	25	32
5	12	19	26	33
6	13	20	27	34
7	14	21	28	35+

6. Schools: Please fill in the number of years in the space provided that you have taught in each of the following:

- 1) Band controlled residential schools _____
- 2) Provincial schools in native community _____
- 3) Federal schools on the reserve _____
- 4) Local controlled school in Metis community _____
- 5) Provincial schools in neighboring town _____
- 6) Federal residential school _____
- 7) Provincial school in city _____
- 8) Other agency school or school in another country _____

7. Other work experience. Please list any other work experience you have had that you feel has assisted in preparing for your teaching.

8. Languages: Please circle one code number.

- Key:
- 1) I understand and speak only English.
 - 2) I understand and speak formal English; I understand an Indian language, but do not speak it.
 - 3) I understand and speak both formal English and an Indian language.
 - 4) I understand and speak formal English; I understand Indian English but do not speak it.
 - 5) I understand and speak both formal English and Indian English.
 - 6) I understand and speak formal English and another non-Indian language.

9. Ethnic Origin: Please circle one number.

- Key:
- 1 - I am of Indian ancestry
 - 2 - I am of Metis ancestry
 - 3 - I am of non-Indian/Metis ancestry.

10. Academic and professional training: Please indicate your number of years of academic and professional training.

- Teacher College (other than University) _____
- College of Faculty of Education, University _____
- Other Colleges or Faculties _____

Please answer the following questions (11-24) with a yes or no response.

Key: 1 - yes
2 - no

- 11. I have a standard B certificate. 1 2
- 12. I have a standard A certificate. 1 2
- 13. I have a professional A certificate. 1 2
- 14. I have a Bachelor of Arts Degree and an Education Degree. 1 2
- 15. I have a Master of Education Degree. 1 2
- 16. I have a Degree not listed above. 1 2
If yes, please indicate _____.
- 17. Have you taken any courses/classes in linguistics? 1 2
If so, indicate how many courses _____.
- 18. Have you taken any courses/classes in cultural anthropology? 1 2
If so, indicate how many courses _____.
- 19. Have you taken any courses/classes in sociology of education or contemporary society? 1 2
If so, indicate how many courses _____.
- 20. Have you taken any courses/classes in Indian studies or Indian Education? 1 2
If so, indicate how many courses _____.
- 21. Have you taken any courses/classes in any Indian language? 1 2
If so, indicate how many courses _____.
- 22. Have you taken any courses/classes in teaching English as a second language/dialect? 1 2
If so, indicate how many courses _____.
- 23. Have you taken any courses/classes in cross-cultural approaches to teaching? 1 2
If so, indicate how many courses _____.
- 24. Have you taken any courses/classes in language teaching methodologies? 1 2
If so, indicate how many courses _____.

25. Please name any additional courses you have taken that you feel have been of particular value in preparation for teaching Indian/Metis children.

26. List any in-service training that you have taken, that you feel has been of particular value in preparation for teaching Indian/Metis children.

2. The oral English of my students follows all of the same grammatical rules as formal English. a b c d e
3. My students replace some sounds in the formal English sound system with other sounds. a b c d e
4. The intonation patterns of the oral English of my students follow distinct patterns that differ from oral English. a b c d e

B. Please consider each statement carefully and indicate to what extent you agree or disagree, considering each within the context of the classroom where you teach. Each of these statements asks you to state your opinion.

- Key: if you strongly agree, circle a a b c d e
 if you agree, circle b
 if you are undecided, circle c
 if you disagree, circle d
 if you strongly disagree, circle e.

Each of these statements begins with, In my opinion...

1. There are grammatical features of my students' oral English that I can identify as different from formal English. a b c d e
2. New vocabulary items that students bring from home to the language class should not be accepted in the classroom. a b c d e
3. There is a predictable pattern in the grammatical structures of the oral English of my students. a b c d e
4. The speech of my students indicates their cognitive abilities. a b c d e
5. Any differences between sounds of my students' oral English and formal English are because these students have different vocal chords. a b c d e
6. My students' speech reflects all of the grammatical rules of formal oral English. a b c d e
7. My students' vocabulary is very limited. a b c d e
8. My students' speech has its own linguistic system. a b c d e

9. My students consistently replace some sounds in the formal English sound system with other sounds. a b c d e
10. The oral English of my students includes many words that are not included in formal English. a b c d e
11. The intonation patterns of my students are often incorrect. a b c d e
12. For their grade placement, my students can articulate ideas and feelings adequately. a b c d e
13. These students should be taught to reproduce exactly in their speech the sound system of formal English. a b c d e
14. The oral English of my students is a poorer quality communication system than formal English. a b c d e
15. The oral English that my students speak has different intonation patterns than formal English. a b c d e
16. Any differences between the sounds in my students' oral English and formal English is the result of careless habits. a b c d e
c
17. My students' oral English causes communication difficulties and misunderstandings. a b c d e
18. My students' oral English is detrimental to their overall learning in this classroom. a b c d e
19. My students' speech patterns are detrimental to their learning to read formal English. a b c d e
20. The students' oral English limits their ability to communicate in the community. a b c d e
21. The oral English of my students is acceptable to me for most classroom activities. a b c d e
22. I should use the speech of my students to teach them formal English. a b c d e
23. The speech patterns of my students should not be included in the language arts curriculum. a b c d e
24. Outside of school my students hear little well-formed language. a b c d e

25. Formal English is more correct than my students' oral English. a b c d e
26. The oral English of my students is adequate for dealing with all concepts and modes of thinking. a b c d e
27. Standards of literacy and articulateness will drop if these students are allowed to use their speech forms in the school. a b c d e
28. The speech patterns of my students are due to lack of stimulation to talk or read at home. a b c d e

III. YOUR SUGGESTIONS FOR INDIAN/METIS EDUCATION

1. Rank the following in descending order of importance for the training of teachers to teach Indian/Metis students. (1) will be the most important in your mind and (5) will be the least important.
- a) training in special education _____
- b) training in teaching English as a second language/dialect _____
- c) training in speech therapy _____
- d) training in cross-cultural education _____
- e) training in psychological assessment _____
2. Rank the following in descending order of need for the education of Indian/Metis students. (1) will be needed the most and (5) the least.
- a) increased remedial work _____
- b) increased match-up of learning and teaching styles _____
- c) increased assessment of learning problems _____
- d) increased supplementary teaching materials that are relevant to Indian/Metis people _____
- e) increased employment of teaching assistants from the Indian/Metis community _____
3. Rank the following in descending order of who you think should be planning and evaluating school programs for Indian/Metis children in the provincial school system. (1) would have the most weight in decision making and (6) the least.
- a) The Department of Education _____
- b) The Division School Board _____
- c) The Local School Board _____
- d) The Superintendent of Education _____
- e) The Saskatchewan Teachers' Association _____
- f) The Home and School Association _____

4. Rank the following in descending order by who you think should be planning and evaluating school programs for Indian/Metis children in local/band control schools. (1) would have the most weight in decision-making and (5) the least.

- a) The Saskatchewan Indian Education Commission _____
- b) The Department of Indian Affairs _____
- c) The Principal and Staff _____
- d) The Band Council _____
- e) The Education Committee _____

5. List any suggestion for the advancement of Indian/Metis Education today.

Thank you for your assistance!

APPENDIX F

Queensland Indigenous Students' Oral English Questionnaire

QUEENSLAND QUESTIONNAIRE

I. BACKGROUND INFORMATION

1. Sex: Please circle
- one
- number.

Key: 1 = female; 2 = male

2. Age: Please circle
- one
- number.

Key:

20	26	32	38	44	50	56
21	27	33	39	45	51	57
22	28	34	40	46	52	58
23	29	35	41	47	53	59
24	30	36	42	48	54	60
25	31	37	43	49	55	61+

3. Years you have worked as a teacher aide:

Please circle one number.Key: Each number indicates one year of experience as an aide.

0	2	4	6	8	10
1	3	5	7	9	11+

4. Years you have taught:

Please circle one number.Key: Each number indicates one year of teaching experience.

0	6	12	18	24	30
1	7	13	19	25	31
2	8	14	20	26	32
3	9	15	21	27	33
4	10	16	22	28	34
5	11	17	23	29	35+

5. Years you have taught with Aboriginal/Islander children in your class:

Please circle one code number.Key: Each number indicates one year of teaching experience.

1	8	15	22	29
2	9	16	23	30
3	10	17	24	31
4	11	18	25	32
5	12	19	26	33
6	13	20	27	34
7	14	21	28	35+

6. Schools: Please fill in the number of years in the space provided that you have taught in each of the following:

- 1) State operated Aboriginal/Islander community schools _____
- 2) State operated mainstream school with some Aboriginal/Islander students _____
- 3) State operated mainstream school with no Aboriginal/Islander students _____
- 4) Catholic school with predominantly Aboriginal/Islander students _____
- 5) Other agency schools in Queensland _____
- 6) Other agencies schools in other states/countries _____

7. Other work experience. Please list any other work experience you have had that you feel has assisted in preparing for your teaching.

8. Languages: Please circle one code number.

- Key: 1) I understand and speak only English.
 2) I understand and speak English; I understand an Aboriginal/Islander language, but do not speak it.
 3) I understand and speak both English and an Aboriginal/Islander language.
 4) I understand and speak English; I understand Aboriginal English but do not speak it.
 5) I understand and speak both English and Aboriginal English.
 6) I understand and speak English and another non-Aboriginal/Islander language.

9. Ethnic Origin. Please circle one number.

- Key: 1 - I am of Aboriginal ancestry
 2 - I am of Islander ancestry
 3 - I am of non-Aboriginal/Islander ancestry.

10. Academic and professional training. Please indicate your number of years of academic and professional training.

- College of Advanced Education _____
- Faculty of Education, University _____
- Other Faculties _____

Please answer the following questions (11-25) with a yes or no response.

Key: 1 - yes
2 - no

- | | | |
|---|---|---|
| 11. I have a diploma of teaching (primary) | 1 | 2 |
| 12. I have a diploma of teaching (secondary) | 1 | 2 |
| 13. I have a Bachelor of Education Degree | 1 | 2 |
| 14. I have a Bachelor of Arts Degree and a one-year Education Diploma | 1 | 2 |
| 15. I have a Master of Education Degree. | 1 | 2 |
| 16. I have a Degree not listed above.
If yes, please indicate _____. | 1 | 2 |
| 17. Have you taken any courses/classes in linguistics?
If so, indicate how many courses _____. | 1 | 2 |
| 18. Have you taken any courses/classes in cultural anthropology?
If so, indicate how many courses _____. | 1 | 2 |
| 19. Have you taken any courses/classes in sociology of education or contemporary society?
If so, indicate how many courses _____. | 1 | 2 |
| 20. Have you taken any courses/classes in Aboriginal studies or Aboriginal Education?
If so, indicate how many courses _____. | 1 | 2 |
| 21. Have you taken any courses/classes in any Aboriginal language?
If so, indicate how many courses _____. | 1 | 2 |
| 22. Have you taken any courses/classes in teaching English as a second language/dialect?
If so, indicate how many courses _____. | 1 | 2 |
| 23. Have you taken any courses/classes in cross-cultural approaches to teaching?
If so, indicate how many courses _____. | 1 | 2 |
| 24. Have you taken any courses/classes in language teaching methodologies?
If so, indicate how many courses _____. | 1 | 2 |
| 25. Please name any additional courses you have taken that you feel have been of particular value in preparation for teaching Aboriginal/Islander children. | | |

26. List any in-service training that you have taken that you feel has been of particular value in preparation for teaching Aboriginal/Islander children.

27. Which of the following is the language situation in this school and community?

Please circle one code number.

- Key: 1 - The students predominantly use formal English in the classroom and the community.
- 2 - The students predominantly use Aboriginal English in the classroom and the community.
- 3 - The students predominantly use formal English in the classroom and Aboriginal English in the community.
- 4 - The students predominantly use formal English in the classroom and an Aboriginal/Islander language in the community.
- 5 - The students predominantly use formal English in the classroom and use both English and an Aboriginal/Islander language equally in the community.
- 6 - The students use both English and Aboriginal English equally in both the classroom and the community.
- 7 - The students use both English and an Aboriginal/Islander language equally in both the classroom and the community.
- 8 - The students predominantly use Aboriginal English in the classroom and an Aboriginal language in the community.

II. ORAL LANGUAGE INFORMATION

Thank you for your assistance with the first portion of this questionnaire. The following is a short explanation of the next section.

The students referred to in these statements, are the Aboriginal/Islander students that you teach. The questions focused on the oral English or speech of these students. The phrases oral English and speech are used interchangeably and have the same meaning in this study. The term formal English is defined as the oral English studied in the school.

- A. Please consider each statement carefully and indicate the frequency with which each occurs in the classroom where you teach.

Key: very often, circle a
often, circle b
occasionally, circle c
seldom, circle d
very seldom, circle e

1. Vocabulary features of the speech of my students differs from the vocabulary of formal oral English. a b c d e

2. The oral English of my students follows all of the same grammatical rules as formal English. a b c d e
3. My students replace some sounds in the formal English sound system with other sounds. a b c d e
4. The intonation patterns of the oral English of my students follow distinct patterns that differ from oral English. a b c d e

- B. Please consider each statement carefully and indicate to what extent you agree or disagree, considering each within the context of the classroom where you teach. Each of these statements asks you to state your opinion.

Key: if you strongly agree, circle a a b c d e
 if you agree, circle b
 if you are undecided, circle c
 if you disagree, circle d
 if you strongly disagree, circle e

Each of these statements begins with, In my opinion...

1. There are grammatical features of my students' oral English that I can identify as different from formal English. a b c d e
2. New vocabulary items that students bring from home to the language class should not be accepted in the classroom. a b c d e
3. There is a predictable pattern in the grammatical structures of the oral English of my students. a b c d e
4. The speech of my students indicates their cognitive abilities. a b c d e
5. Any differences between sounds of my students' oral English and formal English are because these students have different vocal chords. a b c d e
6. My students' speech reflects all of the grammatical rules of formal oral English. a b c d e
7. My students' vocabulary is very limited. a b c d e
8. My students' speech has its own linguistic system. a b c d e

9. My students consistently replace some sounds in the formal English sound system with other sounds. a b c d e
10. The oral English of my students includes many words that are not included in formal English. a b c d e
11. The intonation patterns of my students are often incorrect. a b c d e
12. For their grade placement, my students can articulate ideas and feelings adequately. a b c d e
13. These students should be taught to reproduce exactly in their speech the sound system of formal English. a b c d e
14. The oral English of my students is a poorer quality communication system than formal English. a b c d e
15. The oral English that my students speak has different intonation patterns than formal English. a b c d e
16. Any differences between the sounds in my students' oral English and formal English is the result of careless habits. a b c d e
17. My students' oral English causes communication difficulties and misunderstandings. a b c d e
18. My students' oral English is detrimental to their overall learning in this classroom. a b c d e
19. My students' speech patterns are detrimental to their learning to read formal English. a b c d e
20. The students' oral English limits their ability to communicate in the community. a b c d e
21. The oral English of my students is acceptable to me for most classroom activities. a b c d e
22. I should use the speech of my students to teach them formal English. a b c d e

- 23. The speech patterns of my students should not be included in the language arts curriculum. a b c d e
- 24. Outside of school my students hear little well-formed language. a b c d e
- 25. Formal English is more correct than my students' oral English. a b c d e
- 26. The oral English of my students is adequate for dealing with all concepts and modes of thinking in the classroom. a b c d e
- 27. Standards of literacy and articulateness will drop if these students are allowed to use their speech forms in the school. a b c d e
- 28. The speech patterns of my students are due to lack of stimulation to talk or read at home. a b c d e

III. YOUR SUGGESTIONS FOR ABORIGINAL/ISLANDER EDUCATION.

- 1. Rank the following in descending order of importance for the training of teachers to teach Aboriginal/Islander students. (1) will be the most important in your mind and (5) will be the least important.
 - a) training in special education _____
 - b) training in teaching English as a second language/dialect _____
 - c) training in speech therapy _____
 - d) training in cross-cultural education _____
 - e) training in psychological assessment _____

- 2. Rank the following in descending order of need for the education of Aboriginal/Islander students. (1) will be needed the most and (5) the least.
 - a) increased remedial work _____
 - b) increased match-up of learning and teaching styles _____
 - c) increased assessment of learning problems _____
 - d) increased supplementary teaching materials that are relevant to Aboriginal/Islander people _____
 - e) increased employment of teaching assistants from the Aboriginal/Islander community _____

3. Rank the following in descending order by who you think should be planning and evaluating school programs for Aboriginal/Islander children. (1) would have the most weight in decision making and (5) the least.

- a) The Department of Education _____
- b) The parents _____
- c) The teachers and principal _____
- d) The student body _____
- e) The Queensland Aboriginal and Torres Strait
Island consultative committee _____

4. List any suggestion for the advancement of Aboriginal/Islander education today.

Thank you for your assistance!

