

Teaching **English**

ELT-10

Language Issues and Education Policies

Exploring Canada's multilingual resources

Milestones in ELT

ELT DOCUMENTS: 119

LANGUAGE ISSUES AND EDUCATION POLICIES



PERGAMON PRESS in association with THE BRITISH COUNCIL

Milestones in FLT

The British Council was established in 1934, and one of our main aims has always been to promote the wider knowledge of the English language. Over the last 75 years, we have issued many important publications that have set the agenda for ELT professionals, often in partnership with other organisations and institutions.

As part of its 75th anniversary celebrations, we are re-launching a selection of those publications online. Many of the messages and ideas are just as relevant today as they were when first published. We believe they are also useful historical sources through which colleagues can see how our profession has developed over the years.

Language Issues and Education Policies – Exploring Canada's multilingual resources

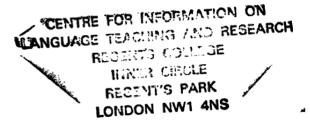
Very different to the other ELT Documents, this volume focuses on the work of a single institution: the Modern Language Centre at the Ontario Institute for Studies in Education (OISE). The book, published in 1984, introduces the Canadian context and the work of the Centre, and then provides articles on a range of research. Issues featured include minority language students; immersion education; learning strategies; and observation.

PERGAMON INSTITUTE OF ENGLISH (OXFORD)

English Language Teaching Documents

General Editor: C. J. BRUMFIT

LANGUAGE ISSUES AND EDUCATION POLICIES



British Council ELT Documents published by Pergamon Press

- 114 Video Applications in English Language Teaching
- 115 Teaching Literature Overseas: Language-based Approaches
- 116 Language Teaching Projects for the Third World
- 117 Common Ground: Shared Interests in ESP and Communication Studies
- 118 General English Curriculum Design

Back Issues (published by The British Council but available now from Pergamon Press):

document no.	title
77/1	Games, Simulation and Role Playing
102	English as an International Language
104	Developments in the Training of Teachers of English
105	The Use of Media in ELT
106	Team Teaching in ESP
108	National Syllabuses
109	Studying Modes and Academic Development of Overseas Students
110	Focus on the Teacher—Communicative Approaches to Teacher Training
111	Issues in Language Testing
112	The ESP Teacher: Role, Development and Prospects
113	Humanistic Approaches—An Empirical View

Special Issues and Occasional Papers

- 1. The Foreign Language Learning Process
- 2. The Teaching of Comprehension
- 3. Projects in Materials Design
- 4. The Teaching of Listening Comprehension Skills

LANGUAGE ISSUES AND EDUCATION POLICIES

Exploring Canada's multilingual resources

Edited by

PATRICK ALLEN and MERRILL SWAIN

Modern Language Centre, Ontario Institute for Studies in Education (OISE), Toronto, Canada

ELT Documents 119

Published in association with

THE BRITISH COUNCIL

by

PERGAMON PRESS

Oxford · New York · Toronto · Sydney · Paris · Frankfurt

ЦK Pergamon Press Ltd., Headington Hill Hall,

Oxford OX3 0BW, England

USA Pergamon Press Inc., Maxwell House, Fairview Park,

Elmsford, New York 10523, U.S.A.

CANADA Pergamon Press Canada Ltd., Suite 104.

150 Consumers Road, Willowdale, Ontario M2J 1P9, Canada

AUSTRALIA Pergamon Press (Aust.) Pty. Ltd., P.O. Box 544,

Potts Point, N.S.W. 2011, Australia

Pergamon Press SARL, 24 rue des Ecoles, **FRANCE**

75240 Paris, Cedex 05, France

FEDERAL REPUBLIC OF GERMANY

Pergamon Press GmbH, Hammerweg 6.

D-6242 Kronberg-Taunus, Federal Republic of Germany

Copyright © 1984 Pergamon Press Ltd. and The British Council All rights reserved. No part of this publication may be reproduced. stored in a retrieval system or transmitted in any form or by any means: electronic, electrostatic, magnetic tape, mechanical, photocopying, recording or otherwise, without permission in writing from the copyright holders.

First edition 1984

Library of Congress Cataloging in Publication Data

Main entry under title:

Language issues and education policies. (English language teaching documents; 119) Includes bibliographical references.

1. Languages. Modern - Study and teaching - Ontario -Addresses, essays, lectures. 2. Ontario Institute for Studies in Education - Addresses, essays, lectures.

3. Education, Bilingual - Ontario - Addresses, essays, lectures. I. Allen, Patrick. II. Swain, Merrill.

III. Series.

PB38.C3L3 1984 418' .007 84-3861

British Library Cataloguing in Publication Data

Language issues and education policies. -(English language teaching documents; 119) 1. English language - Study and teaching -Canada - Foreign speakers II. Swain, Merrill I. Allen, Patrick.

III. Series

PE1128.A2 428.1 ISBN 0-08-031083-4

PRFFACE

This issue of *ELT Documents* is the first to be specifically devoted to the work of a particular institution. It is hoped that occasionally, as the series progresses, we shall be able to offer descriptions of the work of key institutions in the development of language policy and language teaching. There are two reasons for taking an interest in institutions in this way. The first is the intrinsic interest of the work being done; we shall not be concerned with any except those very few places whose work is seminal in a number of issues with which all language teachers should be centrally concerned. The second reason is that often we are able to see possibilities for research, experiment and practical development through institutions better than through individual reports of isolated projects. Different countries organize their research and development in different ways, and we can only benefit from seeing different models in operation, with their varying implications across the separate projects enclosed within one institutional structure.

It is an enormous pleasure to be able to launch the institutionally-based series with an issue devoted to the work of the Modern Language Centre at the Ontario Institute for Studies in Education (OISE). Anyone who travels round the world talking to language teachers and researchers will recognize the significance of work from OISE in a wide range of fields. It is hoped that, by bringing together in a compact form serious accounts of the most important projects from the Centre, we can make a great deal of crucial work accessible far beyond North America, and far beyond the academic journals where much of it has previously been reported.

In many ways the Modern Language Centre has been lucky—in spite of the difficulties outlined in the historical account in Paper 2. It has been lucky in its situation: Canada has been able to draw simultaneously on a pragmatic and open attitude to research in education from Britain and a strong, well-founded tradition of empirical research from the States, and the Centre has been able to apply this to one of the most interesting multilingual situations in the world. The Centre has been lucky in its timing: the period of the last fifteen years has been one of increasing interest in language in education—academically, politically and economically. The Centre has also been lucky in its first Director, for David Stern was able to offer a unique blend of internationalism, multilingualism, scholarship, genuine language teaching experience and academic vision. Perhaps it is the academic vision which is most important, for luck in time and place needs to be exploited. The Modern Language Centre at OISE has become a shorthand term for evaluation of immersion programmes (Paper 4), characteristics of good

language learners (Paper 6), communicative testing (Paper 10), and other topics. according to the interests of the speaker, for many of the Centre's projects have achieved classic status.

This issue of ELT Documents, then, offers one of the most authoritative surveys available of current research on Canadian immersion programmes. the good language learner, and implications of bilingualism for minority language students and their education. In addition, it reports on exciting new developments in classroom observation to try to establish the characteristics of genuine communication in language classrooms (Paper 9), initial literacy in ESL (Paper 8), module making research (Paper 7) and other specific projects that deserve wider recognition. It also provides some indication of what can be done in a multilingual environment if governments and schools are prepared seriously to examine their principles and practice.

Of course, the work of the MLC in OISE has encountered difficulties, but it has at least been able to proceed, recognizing that many people—teachers, officials, parents, politicians – see multilingualism as a right, an enrichment, and a responsibility: a right for those born as minority group speakers, an enrichment for those born into monolingual communities, and a responsibility for all members of society and for government. There are many rich countries, including Britain, that scarcely dream of asking for systematic and rigorous self-examination of language and language teaching on the scale that is indicated in these papers. Whatever criticisms might be made – from whatever political standpoint - of the Canadian experience in this field. serious research and investigation are both encouraged and funded. This collection must be read, not only by those interested in second language acquisition and learning, communicative teaching or ESL, but also by those who wish to see how linguistic aspects of multiculturalism can be taken seriously. We do not have to be fully conversant with the political background to Canadian education to see that behind the questions examined and clarified here lie larger questions affecting the future of all post-industrial societies in a mobile world.

Christopher Brumfit

ACKNOWLEDGEMENTS

A book of this sort is a collaborative enterprise, involving the work of many people apart from those whose names appear at the top of the papers. In presenting this collection, therefore, it gives us great pleasure to acknowledge the help we have received from our support staff, from our graduate students, from our colleagues at the Ontario Institute for Studies in Education and at the University of Toronto, the institution with which we are affiliated, and from our colleagues in the field. Without the help of the OISE central offices the burden of administration would have been impossible to sustain. We also owe a special debt of gratitude to the Modern Language Centre Advisory Committee, consisting of representatives of the groups with whom we have carried out our research, who have given us useful advice and moral support over a period of fifteen years.

Much of the research reported on in this volume could not have been undertaken without the financial support of the Ontario Institute for Studies in Education, and of a number of federal and provincial government agencies. These have included transfer grants to OISE from the Ontario Ministry of Education, the Learning Materials Development Plan of the Ontario Ministry of Education, the Social Sciences and Humanities Research Council of Canada, the Canadian Secretary of State, the Ontario Regional Office of the Department of Indian Affairs and Northern Development, and the National Institute of Education (U.S.A.). In addition, we are grateful to a number of school boards and other agencies, in Ontario and elsewhere, who have provided funds for research in the Modern Language Centre. Among those who should be mentioned in this connection are the York Region Board of Education, the Toronto Board of Education, the boards of education in Ottawa and Carleton, the Saskatchewan Ministry of Education, the New Brunswick Ministry of Education, and the California State Department of Education.

Research funds in themselves, of course, are of little use unless we can count on the whole-hearted support of the local teaching community. We would therefore like to give special thanks to all the principals, teachers, parents, school board officials, liaison people and consultants who have provided us with advice, contacts, and access to schools. Finally, we dedicate this collection to the Ontario students and other language learners who have participated in our research projects over the years; for without them we would never have had any data!

December 1983

Patrick Allen Merrill Swain

CONTENTS

1. Language in Education: The Canadian Context	1
Introduction. The relationship between French and English. French as a second language. English as a second language. Maintenance of non-official languages. Native Indian languages. The papers in this collection. A note on terminology.	
2. The Modern Language Centre 1968–1983	13
Notes.	
3. Implications of Bilingual Proficiency for the Education of Minority Language Students	21
Introduction. Implicit notions of language proficiency in psychological assessments. Learning English as a second language: proficiency and time. Evolution of a theoretical framework for relating language proficiency to academic achievement. Theoretical approaches to bilingual proficiency. Empirical studies of bilingual proficiency. Educational implications of the research findings. Future directions.	
4. A Review of Immersion Education in Canada: Research and Evaluation Studies	35
Introduction. Academic achievement. First language development. Second language development. IQ, learning disabilities and immersion. Social and psychological effects. Conclusions. Notes.	
5. Second Language Acquisition in an Immersion Context	53
Introduction. L2 development in early total immersion. Reactions of native speakers to immersion French. The relationship between age and L2 acquisition in an immersion context. Conclusions and implications. Notes.	
6. Can we Teach our Students How to Learn?	65
Introduction. Interview study. Strategies for oral communication. The picture reconstruction study. The concept-identification study. General conclusions. Appendix A. Appendix B.	
7. Module Making Research	83
Introduction. FSL modules. ESL modules. Conclusion.	

x Contents	
------------	--

8. Initial Literacy in Two ESL Programs	99
Introduction. Native-speaking children. Adult ESL literacy learners. Size of ESL adult literacy and Native-speaking child populations. Methods, materials and teachers. First language and second language literacy training. Conclusion.	
9. Approaches to Observation in Second Language Classes	113
Using observation as a research tool. The conceptualization of observation instruments. Approaches to second language teaching. Two second language classroom observation schemes. Conclusion. Notes. Appendix A.	
10. Communicative Language Test Development	129
Introduction. The Ontario Assessment Instrument Pool (OAIP). The York Region Core French Evaluation Project. Linguistic interdependence among Japanese and Vietnamese immigration students. Saskatchewan Test Development Project and Second Language Maintenance Project. Development of Bilingual Proficiency Project. Conclusion. Appendix A.	
References	149
Biographical Notes	159

1. LANGUAGE IN EDUCATION: THE CANADIAN CONTEXT¹

PATRICK ALLEN AND MERRILL SWAIN

Introduction

No visitor to Canada can fail to be impressed, not only by the vast size of the country, but also by its rich linguistic and cultural heritage. The image of the mosaic is now so well established it can scarcely be avoided in any attempt to make a general statement about the Canadian national identity. As Jack Chambers points out in his Introduction to The Languages of Canada, the image has retained its hold over the popular mind partly because of its favourable connotations, which seem to express an ideal of what a culturally and linguistically diverse society should be like: 'It summons up the notion of a pluralism that is not only a sign of health but a source of vitality, of a surface of disparate elements that rejoice in their differentness even while they function in the service of a grander national design' (Chambers 1979:1). The mosaic metaphor is often compared with the equally well known, but less flattering, image of the American melting-pot, which expresses the idea that all ethnic groups regardless of origin should be assimilated as quickly as possible into a single cultural mainstream with English as the language of expression. The maintenance of languages other than English has been a major theme in Canadian politics for over two hundred years, but it has to be admitted that members of the dominant culture have often been slow to acknowledge the rights of linguistic minorities. Although an official multicultural policy has been adopted by the federal and some provincial governments, we still have a long way to go before we can claim to have achieved a society in which all ethnic groups are regarded as equal.

The language situation in Canada is a complicated one, and it may be helpful to begin by distinguishing three major classes of language: the official or 'charter' languages (French and English) which have legal rights embodied in a national code of laws; the immigrant languages which do not have official status within Canada but which are spoken as national or regional languages elsewhere in the world; and the ancestral languages of the Native peoples, which do not receive legal protection at the national level, and which are not as a rule spoken by politically or economically powerful groups in other countries. The following table shows the number of people in Canada who claimed to have various languages as their mother tongue in 1976 and 1981. In the Canadian census 'mother tongue' is defined as the language first learned and still understood. (Infants who have not yet learned to speak are considered to have as their mother tongue the language most often spoken in the home.)

	1981	1976
Official languages		
English	14,918,460	14,122,770
French	6,249,095	5,887,205
Other European languages		
Croatian, Serbian, etc.	87,870	77,575
Czech and Slovak	42,825	34,955
Finnish	33,385	28,470
German	522,850	476,715
Greek	122,955	91,530
Italian	528,775	484,050
Magyar (Hungarian)	83,725	69,300
Netherlandic languages	156,645	122,555
Polish	127,960	99,845
Portuguese	165, 510	126,535
Russian	31,485	23,485
Scandinavian languages	67,720	59,410
Spanish	70,160	44,135
Ukranian	292,265	282,060
Yiddish	32,760	23,435
Asian and African languages		
African languages	3,265	_
Arabic	50,115	_
Armenian	17,135	10,335
Chinese	224,030	132,560
Indo-Pakistani languages	116,990	58,415
Japanese	20,135	15,525
Korean	17,100	
Philippino and Tagalog	44,865	_
Vietnamese	30,105	_
North American languages		
Native Indian languages	146,285	117,105
Algonquian	102,905	· –
Athapaskan	11,655	_
Inuktituk	18,840	15,900
Iroquoian	6,075	, <u> </u>
Siouan	2,975	_

TABLE 1.1: 1981 and 1976 census: mother tongue, major groups (Source: Statistics Canada)

Note that the table contains only a selection of major languages; it does not allow for those people who give English as their mother tongue but still regard themselves as belonging to a minority ethnic group, and it does not indicate the unequal distribution of minority languages across the country. Nevertheless, it will be clear even from the limited information in the table that language planners in Canada have to provide for the needs of a society which is highly diversified both culturally and linguistically. Among the language issues which currently have to be faced in this country, the following can be identified as having particular significance: (a) the learning of French as a second language by English-speaking Canadians across

Canada and by immigrants into Quebec; (b) the learning of English as a second language by francophones in Quebec as well as by native Indians and Inuit and by immigrants into English-speaking Canada; (c) the maintenance of other ethnic languages, i.e., the languages of immigrants and those of the Native people of the north. A fourth issue which is becoming increasingly important is the maintenance and development of French as a first language in Quebec and among French minorities throughout Canada. The maintenance of French as a first language will not be dealt with in this collection since it has so far not provided a focus for research in the Modern Language Centre. The provision of educational programs in French for francophones outside Quebec, particularly for those in the province of Ontario, is a major concern of the Franco-Ontarian Centre at the Ontario Institute for Studies in Education.

The Relationship between French and English

Official concern over the status of French in Canada is as old as the country itself. The enormous territory which extends from the Gulf of St. Lawrence to the Great Lakes, and from Hudson Bay to the mouth of the Mississippi, first emerged as a focal point of world history during the prolonged struggle between France and Britain which began around the middle of the eighteenth century and was not finally resolved until the Battle of Waterloo. French exploration of the Gulf of St. Lawrence had begun under Jacques Cartier. and was followed by settlement in Acadia and along the St. Lawrence river system under Samuel de Champlain early in the seventeenth century. By the time of the Treaty of Paris (1763), according to which the major French possessions in North America were ceded to Britain, Quebec was a wellestablished community of about 65,000 inhabitants with its own language. laws and institutions. The intermingling of the original French population with an increasing number of English settlers after the Treaty of Paris laid the foundations for the linguistic and cultural duality of Canadian life, and also for the political tension between the two communities which has continued up to the present day.

After the enactment of the Constitutional Act by the British Parliament in 1791, French and English gained recognition as official languages in the Assembly of Lower Canada. This achievement was reversed by the Act of Union of 1840 which combined what is now Ontario and Quebec into a single province called the Province of Canada. Provision was made for a single Assembly with equal representation for Upper and Lower Canada but with English as the only official language. After a further period of struggle the two languages were given official recognition when the provinces of Nova Scotia, New Brunswick, Ontario and Quebec were joined in a confederation by the British North America Act of 1867. For many years the legal foundation of linguistic rights in Canada was section 133 of the British North America Act—'the BNA Act' as it is familiarly known—which provided that English and French may be used in debates in Parliament and in the Quebec

legislature, that both languages are to be used in the journals and records of those houses, and that either may be used in the federal and supreme courts of Canada and in any court of Quebec. Thus French, at an early stage, received recognition in Lower Canada as an official language equal to English; a recognition that, with the passing of the BNA Act, was reconfirmed and extended to the newly created Federal Parliament as part of the fundamental constitutional law of Canada

Section 133, however, was not intended to fully secure the linguistic rights of the French-speaking and English-speaking minorities. For example, although it established English and French as the languages of legislation and of the courts, it had nothing to say about which language should be used in the actual conduct of day-to-day administration in the various government agencies across the country. During the hundred years that followed the passing of the BNA Act, Canada expanded on the basis of its historical nucleus in the Maritimes, Ouebec, and southern Ontario, until by the middle of the twentieth century it had become a confederation of ten provinces and two territories, extending from the Atlantic to the Pacific and constituting, in geographical terms, the second largest country in the world. Under the BNA Act the provinces had retained extensive powers, including control over education and the authority to determine what language should be used in provincial institutions. As a result, progress in the area of language rights had been sporadic and uneven. This was the situation in 1963 when Lester B. Pearson, then Prime Minister of Canada, set up a Royal Commission headed by A. Davidson Dunton and André Laurendeau:

to enquire into and report upon the existing state of bilingualism and multiculturalism . . . and to recommend what steps should be taken to develop the Canadian Confederation on the basis of an equal partnership between the two founding races, taking into account the contribution made by the other ethnic groups to the cultural enrichment of Canada and the measures that should be taken to safeguard that contribution.

In its impressive and enlightened six-volume report (1967-70), the Dunton-Laurendeau Commission, among other matters, proposed that English and French be formally declared the official languages of Canada at the federal level. The recommendation was incorporated into the Official Languages Act of 1969. This Act, which was passed with the support of all parties, gives English and French equal rights, status and privileges as the languages of Parliament and of the federal government, but does not extend to government at the provincial level. In addition, a Commissioner of Official Languages was set up to oversee the application of the 1969 Act, and the government undertook to operate an extensive federal language training program with the aim of creating a civil service which would be capable of working in both languages.

French as a Second Language

The great importance which attaches to the teaching of English to

francophones and of French to English-speaking Canadians should be viewed in the light of a long history of tension between the two communities. giving way to a more positive climate which began to be established by the 'quiet revolution' in Quebec and by the forward-looking federal language legislation of the late 1960s. Stimulated by recent social and political changes. Canadian researchers have been exploring a number of alternative approaches to the teaching of French as a second language. At this point it may be useful to introduce some distinctively Canadian terminology. In this collection we will use the term 'core French' to refer to regular school FSL. programs in which French is taught as a subject within a limited time frame: usually 20-40 minutes at the elementary level, and 40-75 minutes at the secondary level.² In Ontario, the majority of students from grade 4 to grade 8 are enrolled in core French programs, 'Extended French' is a development of core French, and involves the teaching of one or more other school subjects through the medium of the target language, in addition to core French instruction.

Perhaps the best-known Canadian approach to second language education is the French immersion experiment which began in the mid-sixties in a primary school in the Montreal suburb of St. Lambert, and which has since spread across the entire country. French immersion is based on the principle that students receive the same type of education as they would in the regular English program, but that the medium of instruction—the language through which other school subjects are presented and discussed - is French. In the French medium classes most teachers are native speakers of the target language and as far as possible the children are treated as though they were native speakers of French. Thus, the L2 is acquired in much the same manner as children acquire their first language. The 1981-82 enrolment figures compiled by Canadian Parents for French show 88,000 students enrolled in French immersion programs across Canada, an increase of 12,000 over the previous academic year. Although there are many varieties of immersion program in existence, we will confine ourselves here to giving a brief account of the three main alternatives (early total immersion, early partial immersion, late immersion) which have been researched and evaluated by the Bilingual Education Project in the Modern Language Centre.

In early immersion the aim during the first and second years is to expose children to a large amount of French used by the teacher, but to let them talk among themselves and to the teacher in English. As they acquire more confidence, students gradually begin to use French vocabulary and simple phrases until, in the latter part of grade 1, French is firmly established as the language of the classroom. The early total French immersion program in Ontario studied in the Carleton, Ottawa, and Toronto Boards of Education begins at the kindergarten level when the entire (half-day) school program is conducted in French. The language of instruction throughout grades 1 to 4 is also French, with the exception of a daily period of English language arts which may be introduced in grade 2 or 3. At grade 5, from 60% to 80% of

the school day is allocated to instruction in French, with the percentage of French dropping at grade 6 to between 40% and 50%. At grades 7 and 8, half the curriculum is taught in French and half in English. The secondary school follow-up programs have been designed so that the early immersion students may take three to five subject options in French at high school.

The early partial immersion program in Elgin County, on the other hand, begins at the grade 1 level (following a half-day English kindergarten) with the two languages of instruction used equally throughout the students' elementary schooling. The Ottawa Separate School Board program differs from the Elgin County program in that it begins with a full-day kindergarten in which 50% of the school day is devoted to instruction in French, and 50% to instruction in English.

In a late immersion program, because the students have studied core French in earlier grades, the teacher is more likely to insist that French be used in class by the students right from the beginning. The late French immersion program begins at grade 8 in the Peel County Board of Education. The groups of students tested since 1970-71 began studying French in daily 20-30 minute periods at either grade 6 or grade 7. Approximately 55% to 70% of the grade 8 curriculum is given in French, followed in grades 9 and 10 with about 40% of the curriculum, usually history, geography, and French language arts taught in French. At grade 11, some late immersion groups in Peel County have taken two subjects (25%) in French. For others, no school subject has been available in French at grade 11 apart from a daily class of French language arts (for further details see Swain and Lapkin, 1982).

English as a Second Language

The second major issue we have identified is the learning of English as a second language by francophones in Quebec and in French minority schools in other provinces, as well as by native Indians and Inuit and by immigrants to English-speaking Canada. While French language policies often raise profound questions about national unity and the nature of the Canadian identity, the ESL debate has been conducted for the most part in strictly utilitarian terms. In all parts of Canada except Quebec, English is the main language of communication and, for the majority of immigrants, learning English is not an option but a prerequisite for economic survival.

Until about 1880 the rate of immigration to Canada was slow, with Germans constituting the largest ethnic group other than British and French. The last two decades of the nineteenth century, however, saw the beginning of a long period of immigration, first mainly from central and eastern Europe, and then increasingly from other parts of the world. Whereas the first great wave of eastern European settlers—Ukranians, Poles, Hungarians, Rumanians and Russians—spread out across the wheatlands of the prairies, later immigrants tended to cluster in the big industrial and commercial centres,

particularly Vancouver, Toronto, and Montreal. In recent years Toronto has emerged as the 'immigrant metropolis' of Canada, with implications that have been dramatically highlighted by Mavis Burke:

When we consider that, since the end of World War II, over 2.5 million newcomers have arrived in Ontario, from more than 80 different ethnocultural groups; that in 1982 a newcomer arrived in this province every 10 minutes, 24 hours a day, seven days a week, 52 weeks a year; that we received 44% of the total immigrants to Canada last year, with 60% arriving in the Metropolitan [Toronto] region, the importance of minority language needs and policies becomes clear (Burke, 1983).

Up to World War II there was no official provision for immigrants who wanted to learn English. After the war, however, the need was felt for a more co-ordinated and professional approach. Provincial governments began to provide language and citizenship programs for adult newcomers, school boards set up special language classes for immigrant children, and the growth of community colleges led to the development of ESL programs at the post-secondary level. By the mid-sixties teachers of English as a second language began to acquire their own sense of professional identity, which led to the establishment of a number of provincial ESL associations. In 1978, TESL Canada was formed as a nation-wide federation of associations involved in the teaching of English as a second language.

In spite of all this activity, there has so far been little evidence of coherent planning at the national level to deal with the problem of immigrant settlement and adaptation. Services for newcomers continue to be provided by a complex network of school boards, universities and community colleges, and by agencies of both the federal and provincial governments. A wide variety of approaches—including segregation, immersion, limited assistance, and bilingual programs—have been developed to meet the needs of ESL students in the schools (Handscombe, 1978). Ashworth (1978) mentions a number of recurrent problems, including insufficient numbers of teachers and consultants, inadequate initial and in-service teacher training, the low status of 'New Canadian' teachers, and the lack of appropriate curricula and materials.

Towards the end of the seventies, as the result of an unprecedented influx of refugees from Southeast Asia, the ESL profession became acutely aware of the inadequacies in the current system of language-training and settlement services. In 1981, following a nation-wide symposium on the problems of adult refugees, the TESL Canada Action Committee published a position paper in which they urged the development of an integrated national policy for the settlement of refugees. The Committee recommended a two-stage approach in which a basic three-month program would be followed by a variety of vocational options, with special provision being made for literacy training, English in the workplace, English as a second dialect, and special groups such as young adults, senior citizens, women, and people living in remote areas. The range of services envisioned by the TESL Canada Action

Committee indicates the complexity of the refugee settlement problem, and seeking for ways to implement the recommendations of the 1981 report is bound to be a major preoccupation of the eighties.

Maintenance of Non-official Languages

A third area of need is the maintenance of the non-official languages, i.e., the languages of immigrants and those of the Native people of the north. As we have seen, the population of Canada has always been marked by great linguistic and cultural diversity, and for many years the relative proportion of people of French and British origin has been steadily decreasing. In 1871 the distribution of the population by ethnic origin was 61% British, 31% French, 0.7% Indian and Inuit, and 7.7% others. By 1971 the proportions had shifted to 43% British, 30% French, 1.2% Indian and Inuit, and 25% others. At the time of writing, the population is almost equally divided: one third of British origin, one third French, and one third other ethnic groups.

During the past two decades, in Canada as in other countries, there has been a widespread resurgence of ethnic consciousness and a general revival of interest in the preservation of minority languages. We have already quoted the terms of reference of the Dunton-Laurendeau Commission, which was set up in 1963 to promote the concept of an equal partnership between the two founding peoples, 'taking into account the contribution made by the other ethnic groups to the cultural enrichment of Canada'. The Commission, brushing aside majority fears of possible 'balkanization', took the view that linguistic diversity is a major personal and societal resource which the nation can ill afford to neglect. The potential contribution of immigrant groups can be clearly seen in Ontario where a quarter of all students currently in the provincial school system were not born in Canada. In the mid-seventies it was estimated that more than 50% of the student population in the Toronto Board area came from non-English-speaking home backgrounds.

In 1977, the Ontario government announced its Heritage Languages Program, which provided funds for the teaching of 'heritage' languages (i.e., other than English and French) outside the regular five-hour school day. Similar programs have been started in other parts of Canada, for example the Programme de l'Énseignement des Langues d'Origine (PELO) in Quebec, and programs for teaching a variety of non-official languages in Manitoba, Alberta, British Columbia, and the Northwest Territories. The potential size—and cost—of such programs is indicated by the fact that already over 80,000 children are attending heritage language classes in 47 languages offered by 63 school boards in Ontario alone (Burke, 1983). Although the Heritage Languages Program has been welcomed by many minority groups, it is still politically controversial. A brief introduction to research findings related to bilingualism in minority-language children, and a discussion of the implications for current issues in Canadian education, is provided by Cummins (1981c).

Native Indian Languages

As we have already indicated, the heritage language programs currently being set up imply a responsibility not only for the languages of New Canadians, but also for the indigenous Native languages of Canada. As of February 2, 1983, there were over 292,000 people registered as Indians under the provision of the Indian Act. These official or 'status' Indians were split up into 575 local bands varying from a handful of people to a maximum of 5,000 in each band. There were over 173,000 non-registered Indians and Metis (people of mixed Indian and French-Canadian origin) who were not officially recognized by the federal Department of Indian Affairs. In addition, there were some 25,000 Eskimos, or Inuit, living in small communities on the Mackenzie delta, the Arctic islands and the mainland coast of the Northwest Territories, on the Quebec shores of Hudson and Ungava Bays, and in Labrador.

Linguists recognize eleven major groups of Canadian Native languages: Algonquian, Athapaskan, Iroquoian, Salishan, Eskimo-Aleut, Wakashan, Tsimshian, Siouan, Haidan, Tlingit, and Kutenaian. Some of these groups are represented by only one language, while others contain a number of languages and dialects. The Algonquian language family, which includes Abenaki, Blackfoot, Cree, Delaware, Malecite, Micmac, Montagnais, Ojibwe, and Potawatomi, covers an area extending from the central plains to the Atlantic coast, and is the largest in terms of population, comprising over 182,000 people who are ancestrally associated with this language group. Other language families have smaller populations and are much more localized. The Iroquois community, for example, consists of about 25,000 people who live mainly around Montreal and in southwestern Ontario, while the Haidan community has about 1,500 members clustered on the Queen Charlotte Islands off the coast of British Columbia.

The Canadian Native peoples are highly diversified, not only with regard to their own languages and traditions, but also in terms of how closely associated they are with the French-English majority culture. Apart from their relatively small numbers which are often dispersed over very wide areas, the major problem faced by all Native peoples is the cumbersome and paternalistic nature of the majority power structures with which they have to contend in asserting their economic and cultural rights. Traditionally, the provision of education services to Indians living on reserves has been the responsibility of the federal government, but since the acceptance of the National Indian Brotherhood paper 'Indian Control of Indian Education' in 1973, many Indian bands have been assuming control of their own schools. In recent years there has been a move towards the establishment of Native studies units in Indian schools, and the development of 'culturally compatible' curricula and materials. Several provinces and universities have established special training programs to encourage Amerindians to enter the teaching profession, and Native people are becoming increasingly involved in educational research and policy-making.

Official discussions of Canadian Native education tend to begin with a documentation of failure. Relative to other Canadian students. Native children are more frequently in grades lower than those appropriate to their age group, and they drop out of school more frequently and at earlier ages. One aspect of their education which may have contributed to the low level of achievement is the fact that the medium of instruction in northern schools is English or French, which many of the students have to learn as second languages. In recent years there has been growing interest in developing ESL and FSL curriculum materials for Native students and in conducting research on the conditions under which they learn second languages, but these efforts are still not widespread enough to make a decisive impact. A recent survey of federal schools in northern Ontario, for example, showed that very few of the teachers of Native-speaking children have had ESL training and that appropriate methods and materials were not being used (Burnaby, Nichols and Toohey, 1980). There has been some progress in developing bilingual education programs which will provide maintenance of the ancestral languages while at the same time enabling Native children to acquire a knowledge of French or English. A number of promising curriculum projects have been undertaken in various parts of Canada, with the result that we are discovering new ways of reconciling the teaching of official and Native languages in northern schools (for details, see Burnaby, 1982).

The Papers in this Collection

Since its beginning in 1968 the Modern Language Centre (MLC) at the Ontario Institute for Studies in Education (OISE) has been investigating a wide range of issues relating to first language maintenance and second language learning in the Canadian context. The papers in this collection were written by members of the MLC, and are representative of the research carried out by the Centre during the past fifteen years. The papers are divided into five groups, with two papers in each group. The first two papers are introductory. Up to this point we have considered the language situation in Canada in general terms, and identified three issues which are currently of great importance: French as a second language, English as a second language, and the maintenance of other ethnic languages. These topics will be taken up and explored in more detail by the authors of the other nine papers in the collection. The second introductory paper, by Stern, Swain and Weinrib, provides an account of how the Modern Language Centre came to be established, reviews the development of MLC research since 1968, and explores the relationship between its three main functions of graduate studies, research, and field development.

The second group of papers is concerned with theoretical and empirical aspects of research into bilingual education. In Paper 3, Cummins considers the implications of bilingual proficiency for the education of minority language students, traces the development of a theoretical framework for relating language proficiency to academic achievement, and shows how

children's academic potential is capable of being underestimated when educational administrators fail to make allowance for language difficulties. In Paper 4, 'A review of immersion education in Canada', Swain presents the results of a number of major research and evaluation studies of French immersion programs which have been carried out in the Modern Language Centre, and considers the implications of these studies for the schooling of majority and minority children.

The next two papers investigate various aspects of the second language learning process. In the first paper in this group, Harley discusses systematicity in the acquisition of L2 grammar, the role played by L1 transfer, the reaction of native speakers to immersion French, and the relationship between age and L2 acquisition in an immersion context. As the author points out, the significance of the immersion studies for teachers of English and other languages lies in the general principles of second language learning which they exemplify. The second paper in the group, 'Can we teach our students how to learn?', by Fröhlich and Paribakht, discusses three MLC studies on adult learner strategies: one case study focusing on general learning strategies of successful second language learners, and two experimental studies which set out to investigate specific communicative strategies used by learners in the absence of appropriate target language vocabulary.

The fourth topic to be considered is materials development and curriculum design. In Paper 7, 'Module making research', Allen, Howard and Ullmann compare two materials development projects, one concerned with French modules design and the other with ESL modules, and summarize what we have learned as a result of fourteen years of work in this field. The following paper takes up the theme of literacy training; Burnaby considers this topic in the context of (a) an ESL program for adult immigrants to Canada, and (b) a program for Native children, at kindergarten to grade 2 levels, who come to school speaking only or mainly a Native language. The two literacy projects represent a relatively new departure in the Modern Language Centre, and it is hoped that they will result in materials for two populations whose needs are often neglected.

The last two papers in the collection deal with important aspects of program and student evaluation, i.e., classroom observation, and language test design. Ullmann and Geva discuss two classroom observation instruments which are currently being used in the MLC: the Communicative Orientation of Language Teaching (COLT) scheme, which forms part of the five-year Development of Bilingual Proficiency project, and the Target Language Observation Scheme (TALOS), which has been developed for a large-scale formative evaluation study of an elementary school FSL program. Finally, Green and Lapkin turn to the subject of communicative language testing. The authors provide a historical survey of test development activities in the Modern Language Centre, beginning with some pioneering work in French immersion, and ending with more recent research in the testing of grammatical, discourse, and sociolinguistic competence.

When the Modern Language Centre was established in 1968, it was seen as an opportunity for OISE to make 'a truly original contribution to language study'. No doubt the readers of these papers will draw their own conclusions about what we have been able to achieve so far, and how much remains to be done.

References

- 1. We are grateful to Barbara Burnaby, Jim Cummins, David Harley, Ian Martin, H. H. Stern, Rebecca Ullmann, and Alice Weinrib for their comments on an earlier draft of this paper.
- 2. At the time of writing, Ontario has a 13-grade school system (grade 13 is due to be phased out during the next few years). Elementary school lasts eight years (ages 6-12), and secondary school lasts five years. Most schools provide an optional year of kindergarten for five-year-olds, and in some urban areas there is a junior kindergarten for four-year-olds. The range from kindergarten to grade 8 (K-8) is important for educational research, and children in this age group will be referred to frequently in the following papers.
- 3. 'The Proposals of the Modern Language Committee of the Ontario Institute for Studies in Education for a Modern Language Centre', April 1967. See Stern (1968), p.4.

A Note on Terminology

Following established Canadian practice, the term 'Native people' is used in this book to refer to the descendants of the people who lived in North America before the arrival of the Europeans. The term 'Inuit' is now generally used to refer to the Eskimo, who are an important subgroup of the Canadian Native peoples.

A number of terms used in connection with the teaching of French as a second language in Canada (e.g., core French, extended French, early partial immersion, later immersion) are explained on pages 5-6.

The following standard abbreviations are used throughout:

MLC	Modern Language Centre
OISE	Ontario Institute for Studies in Education
ESL	English as a second language
FSL	French as a second language
L1	first language
L2	second language

2. THE MODERN LANGUAGE CENTRE: 1968-1983

H. H. STERN, MERRILL SWAIN, ALICE WEINRIB

The Modern Language Centre at the Ontario Institute for Studies in Education was founded in 1968. It was set up towards the end of a period in the recent history of language pedagogy that witnessed the establishment of several language centres in different countries. The initiative for founding this Canadian centre came in the mid-sixties from a group of Ontario language teachers who believed that the then newly founded Ontario Institute for Studies in Education - OISE was established in 1965 - would provide an excellent base for a new Canadian language centre. Indeed, OISE offers an unusual combination of interests and activities. It is, first of all, a graduate school of education and for this purpose it is affiliated with the University of Toronto. In this respect it functions rather like the Advanced Studies Department of the London Institute of Education, Secondly, it is a centre for educational research and development and therefore fulfils a role which, in U.K. terms, is similar to that of the Schools Council and of the National Foundation of Educational Research. Thirdly, OISE has a dissemination or field service mandate which brings this academic and research institution into contact with teachers and administrators in the field.

From its inception in 1968, the MLC—within its special sphere of interest, second language teaching/learning and bilingualism—was designed to reflect the three functions of OISE: (a) graduate studies, (b) research and development, and (c) field service and dissemination. This formula for a language centre has proved to be productive and durable. The graduate studies program of the MLC at the master's and doctoral levels annually attracts a number of experienced practitioners in English and French as second languages, teachers of various other languages, and researchers.

As graduate students in the MLC, they specialize in applied linguistics, language learning and teaching research, and bilingual and foreign language education. For its research projects, which it has undertaken regularly over the fifteen years of its existence, the Centre has gathered a staff of full-time and part-time researchers who have become highly experienced in conducting different types of language project. A documentation and information service with a unique and wide-ranging language teaching library has proved to be of direct benefit to students, teachers-in-training and practitioners in the field. The three functions of the Centre—graduate studies, research and development, documentation and field service—have supported and

strengthened each other. Moreover OISE, as the larger institution of which the MLC is a part, not only provides the basic organizational framework, but also offers the necessary administrative services, a first-rate education library, and academic experience in related fields such as curriculum theory, psychology, educational measurement, computer applications, and so on.

Readers of this issue of *ELT Documents*, familiar with the EFL and applied linguistics scene in Britain in the sixties, will recognize in the Modern Language Centre several British influences which have been amalgamated and modified. Thus, the MLC graduate studies program has a certain affinity with the University of Essex M.A. scheme in applied linguistics. One of the MLC's major research projects, the Bilingual Education Project, which has studied the French immersion experiments in Ontario schools from 1969 to the present, was inspired in scope and format (although not in substance) by the Primary French Pilot Project which was carried out in Britain between 1963 and 1974. The materials library and information service provides, on a more modest scale but with the same efficiency, what in the U.K. has been offered by the English Teaching Information Service (ETIC) and the Centre for Information on Language Teaching and Research (CILT)².

As a language centre the MLC would, of course, not have survived for long if it had merely relied on importing certain British experiences and institutions. The Centre had, above all, to respond to the language issues which have played such a crucial role in national and regional politics in Canada over the last two decades. As discussed in the previous paper, Canada is officially a bilingual country with two official languages, English and French. There are also sizeable language minorities, first of all the Native peoples of North America, Indians and Eskimos, and also immigrants from all over the globe who have brought to Canada numerous minority languages. Consequently, Canada has to deal with policy questions concerning bilingualism and biculturalism, multilingualism and multiculturalism, language maintenance and second language learning. These language questions are politically highly sensitive and play a major role on the national political scene.

The MLC has adopted an apolitical and positive stance towards bilingualism, bilingual education, and second language learning. We have seen our role as that of a Centre whose academic basis is applied or educational linguistics, mediating between fundamental disciplines and language teaching practice. While our aim has always been to be close to the reality of teaching and learning, we have seen it as our specific task to provide an input of theory and research³. The main disciplines to which we have related our work are linguistics in its widest sense (including pragmatics, sociolinguistics and discourse analysis), psychology and psycholinguistics, educational theory, and to a somewhat lesser extent sociology and anthropology.

The research undertaken by the MLC has been prompted partly by the

demands arising around us in Canadian language education and partly by our own interpretation of what seemed to us important issues in language pedagogy. In the first decade of our work one of our main concerns was research on the teaching of French to anglophones. The other concern was ESL, the learning of English by immigrants or by native-born Canadians whose first language was a language other than English. We have interested ourselves also in other second or foreign languages, e.g., German, Italian, and Portuguese. In general, it can be said that our focus has shifted somewhat in the course of time from second or foreign language learning to the broader issues of bilingual proficiency, particularly the maintenance of one language and the learning of a new language in multilingual settings.

But regardless of the specific language focus and the particular educational setting that our projects have been concerned with, we have always emphasized fundamental issues in bilingualism and language learning. This is why the research activities of the MLC are likely to be of interest to ESL/EFL workers, even if a project is not specifically concerned with English. For example, the main charge of the Bilingual Education Project was, as already mentioned above, to monitor the ongoing development of the French immersion experiment. But in performing this evaluation task, the project developed expertise in test development, survey methods, program evaluation, and various research approaches. At the same time the project was also responsive to the general psycholinguistic and pedagogic issues in bilingual education (Swain and Lapkin, 1981, 1982).

A second area of interest to the MLC which is quite naturally of importance in the Canadian linguistic scene, but which is not specific to Canada alone, is the empirical study of second language learning in a variety of situations. The intention to investigate the second language learning process as well as language teaching directly and empirically was there from the time the MLC was set up in 1968. Some thesis studies and a project on explanation in language teaching prepared the ground (Cooke, 1974; Tran, 1975; Wesche, 1975). However, the planning of a major project had to wait until 1973 and finally crystallized in the studies on the good language learner (Stern, 1975; Naiman et al., 1978). After that, our interest in the study of language learning and teaching led from about 1975-6 to a continuing series of enquiries (e.g. Bialystok, 1978) and ultimately culminated in 1980 in a major project on bilingual proficiency which is in progress at the present time. It is also in this context that we want to draw attention to the Working Papers on Bilingualism which were published from 1973 to 1979 and served as an international forum for enquiries on second language learning, bilingualism, and related issues.

A third area of development which was also begun around 1970 and continues at the present time has been one of re-thinking language programs, the concept of the textbook, and the development of language curricula (Stern et al., 1980). To some extent, the French Modules Project and others

that have grown out of it have been a reaction to the monumental integrated programs of the 1960s which, in many respects, were admirable pioneering efforts (e.g., the British Nuffield Language Project) but, in other respects, led to unwieldy packages. In some cases these monster programs had serious defects. Above all they lacked documentation and research underlying the program development. For many years the main vehicle of our early work on the language curriculum was the French Modules materials development project. This project has been treated simply as a producer of somewhat unusual, pioneering teaching materials in French as a second language (and as such it was widely welcomed by French teachers). In our view, however, it was much more than that. It was an experimental approach to curriculum development. As such it is only now coming into its own; for, in recent years, questions of the language curriculum (or syllabus) and issues of curriculum development and evaluation have been more in evidence, and the nature of some of the modules - both in French and in English - is beginning, within this broader curriculum context, to be much more appreciated.

A further area of research interest in the MLC has been evaluation, both program and student evaluation. Many of the previously mentioned projects have involved language testing, the evaluation of materials and other kinds of assessment, so that the MLC has developed a good deal of know-how in this area. In addition, some specific testing or evaluation projects have been initiated. Our first efforts to develop a communicative test go back to the early seventies (Levenston, 1975). These were picked up again and advanced in the late seventies in a project which systematically tried to come to grips with the problem of communicative testing (Canale and Swain, 1980). Furthermore, the MLC has been active in various forms of curriculum evaluation. Thus, in the mid-seventies we participated in a major provincial project which was designed to assess the merits and demerits of different approaches to the teaching of French as a second language (Stern et al., 1976). A few years later, an MLC team evaluated bilingual exchanges between Quebec and Ontario school children (Hanna et al., 1980). The French Modules Project regularly involved systematic materials evaluation (e.g., Stern et al., 1980). More recently, system-wide evaluations of school language programs in different parts of Canada have been the responsibility of the Centre. The subsequent papers will give details of many of these projects and activities of the MLC.

The academic program of the MLC consists entirely of advanced degree work (M.A, M.Ed, Ph.D, Ed.D) and includes courses and thesis research. Course work comprises language pedagogy, linguistics, psycholinguistics, sociolinguistics, and language-specific courses on English and French, as well as courses and colloquia on research and research methodology. In addition to the academic courses within the MLC, the varied academic programs in other units of OISE (e.g., on curriculum studies, applied psychology, educational research) and courses in the graduate departments of the University of Toronto offer an exceptionally wide array of options in advanced studies.

17

Thesis research both at the master's and the doctoral level has further expanded the research work of the MLC. Some theses have arisen directly out of students' interest in, and association with, the Centre's research projects, e.g., Fröhlich (1976), Harley (1982), Lepicq (1980), Paribakht (1982). Other theses have branched out in new directions and have helped to widen the scope of research interests in the MLC, e.g., Schloss (1980), Weinstock (1980), Burnaby (1980). Some of our students from overseas have undertaken studies of language questions arising in their own countries, e.g., Thailand (Brudhiprabha, 1975), Zambia (Africa, 1980), India (Seshadri, 1978), Guyana (King, 1982), the Philippines (Natividad, 1975), Nigeria (Ituen, 1980), and the West Indies (Wright, 1969; Lewis, 1974).

The third function which the MLC has developed is documentation, dissemination and field services. The main basis for this aspect of the Centre's activities is its library of teaching materials, representing a wide range of language programs in the province of Ontario, and publications and other documents related to language pedagogy and bilingualism³. The library is a resource centre for language teachers; it is also of great value to researchers and students who use the specialized MLC language teaching library in addition to the larger OISE education library. The MLC library also disseminates information through the regular publication of bibliographies, reviews and calendars of events, by answering individual enquiries, and through the presentation of workshops, e.g., Weinrib (1981, 1982). Another aspect of the MLC's dissemination activities is the close link with two journals. Apart from its own earlier publication, Working Papers on Bilingualism, some members of the MLC are closely associated with Applied Linguistics and The Canadian Modern Language Review.

Language centres across the world, most of which were created a decade or two ago in times of relative affluence, have had their ups and downs. Some have closed, and some have been amalgamated with departments of linguistics (e.g., the Edinburgh School of Applied Linguistics). Others have become university departments (e.g., the Language Centre of the University of Essex), and others have changed their scope and function (e.g., the Center for Applied Linguistics, Washington). Most of them have had to struggle in order to fulfil their functions. The MLC is no exception. In the early days it survived largely thanks to our own tenacity and to the moral support the Centre received from its Advisory Committee and from the language teaching community in Ontario. The productive associations with other Canadian language centres, such as the language group at McGill and the International Centre for Research on Bilingualism at Laval, were also a great help. Internally, within OISE, it took several years for the Centre to be accepted and eventually to find, as it has now, strong support and recognition. The existence of the Centre and its various activities has often been financially precarious, but we have learned over the years to live dangerously and to remain optimistic.

Looking back over fifteen years of our existence, what have been the key

features of the MLC? The features can be summarized as follows:

Clear Definition of Our Mandate and Our Field of Activity 1

From the beginning, we have attempted to meet a specific area of need on an ongoing basis, namely the study of foreign/second language teaching and learning and bilingualism.

2. Cohesiveness

The combination of academic study, research, and field service in second language education has proved to be a productive formula for assembling people with kindred interests, whether they come as graduate students. academic teachers, or researchers. It has brought together a 'critical mass' of expertise in terms of personnel. It has also created a strong documentation and data base.

3. Regular Contact with the Language Teaching Community

The MLC has always been responsive in its contacts with student teachers. practising teachers, and administrators. Since much of its research work is in Ontario schools, the Centre comes into regular contact with many teachers. Moreover the Centre has an Advisory Committee, made up of members of the language teaching community. Through many such links with the reality of language learning in many different settings, the split between theory and practice and other 'ivory tower' tendencies have been minimized.

4. **Purpose**

It has always been the policy of the Centre to combine two directions: to be responsive to the needs of language education in the community, and to attempt to provide leadership in research, theory, curriculum, and evaluation.

Administrative Backup 5.

In spite of some difficulties in integrating the MLC into the OISE structure, it has proved beneficial for the Centre to be part of a larger and well-organized educational research and graduate education institute, with its financial and personnel services and its fully-developed academic administration.

Notes

The first of these was perhaps the English Language Institute of the University of Michigan (1941). Others include the School of Applied Linguistics, University of Edinburgh (1957), the Center for Applied Linguistics, Washington (1959), Le Centre de Recherche et d'Étude pour la Diffusion du Français (CREDIF), Paris (1959), the English Language Teaching Information Centre of the British Council (ETIC), London (1961), the Centre for Information on Language Teaching and Research (CILT), London (1966). At the beginning of the 1970s W. Grauberg (The Role and Structure of University Language Centres in Europe. Strasbourg: Council of Europe 1971) reported the existence of some thirty centres in universities across Western Europe.

- A bibliography of MLC publications is available from the Librarian on request.
 The theory-research-practice relationship has consistently been of interest to us, and it has been given a good deal of attention. See for example Stern, 1969, 1970, 1974, 1983, and Stern. Wesche and Harley, 1978.

3. IMPLICATIONS OF BILINGUAL PROFICIENCY FOR THE EDUCATION OF MINORITY LANGUAGE STUDENTS

JIM CUMMINS

1. Introduction

One of the most controversial educational issues in western industrialized countries concerns the appropriacy of different program models for minority language students. In the United States the issue revolves around the effectiveness of bilingual in comparison to English-only programs for the two-and-a-half million children of limited English proficiency (see e.g. Baker and de Kanter, 1981). Similarly, neither Canada nor Australia, despite their official policies of multiculturalism, has clearly resolved the issue of what role the public schools should play in fostering minority languages, and in both countries debates on the issue have been volatile. In Europe, the seriousness with which the widespread educational difficulties of migrant workers' children are viewed can be seen in the following comment from a report prepared for the European Commission:

Unless the Member States take immediate action on a scale commensurate with the number of immigrants, their educational systems will continue to filter out second-generation migrants into a sub-proletariat whose resentment will rapidly create an explosive situation (European Commission 1978, p.15).

In addition to the issue of which instructional program to institute for minority students, educators in western countries are also beginning to face up to the inappropriateness of administering to minority students diagnostic psychological assessment procedures which were developed for monolingual children. For example, litigation in the early seventies has led (or forced) school districts in the United States to take steps to reverse the well-documented (e.g. Mercer, 1973) over-representation of Hispanic students in classes for the educable mentally retarded (EMR). Psychologists in Canada, Britain and other countries are likewise grappling with thorny issues such as how long it takes immigrant children to learn sufficient English to permit valid administration of psychological tests.

Theoretical and empirical work carried out in the Modern Language Centre since 1978 has considerable relevance for these issues. This work has focused on the nature of language proficiency and its cross-lingual dimensions. Although the theoretical constructs continue to evolve, the basic premise from the start has been that many of the quandaries faced by educators of minority students derive from fundamental misconceptions about the

22 Jim Cummins

constructs of language proficiency and bilingualism. The implications of this theory and research for educators of minority language students are described below

2. Implicit Notions of Language Proficiency in Psychological Assessments

A study involving both quantitative and qualitative analyses of 428 psychological assessments of children from English as a second language backgrounds (Cummins, 1981) illustrates the often unfortunate consequences of educators' unanalysed notions of the construct of language proficiency. Both teachers and psychologists frequently commented on the fact that students' English communicative skills were considerably better developed than their academic language skills. The following examples illustrate the point:

PS (094)

Referred for reading and arithmetic difficulties in grade 2. Teacher commented that 'since PS attended grade 1 in Italy I think his main problem is language, although he understands and speaks English quite well'. Verbal IQ 75, Performance IQ 84.

GG (184)

Although he had been in Canada for less than a year, in November of the grade 1 year the teacher commented that 'He speaks Italian fluently and English as well'.

DM (105)

Arrived from Portugal at age ten and was placed in a grade 2 class. Three years later, in grade 5, her teacher commented that 'her oral answering and comprehension is so much better than her written work that we feel a severe learning problem is involved, not just her non-English background'. Her Performance IQ (grade 5) was 101 but Verbal IQ was below 70.

These examples illustrate the influence of the environment in developing English communicative skills. In many instances in this study immigrant students were considered to have sufficient English proficiency to take a verbal IQ test within about one year of arrival in Canada.

The dangers of extrapolating from minority students' English conversational skills to their overall proficiency in the language can be seen in the following assessment:

PR (293)

PR was referred for psychological assessment because he was experiencing difficulty in the regular grade 1 work despite the fact that he was repeating grade 1. The principal noted that 'although PR was in Portugal for part (6 months) of the year there is a suspicion of real learning disability. WISC (Wechsler Intelligence Scale for Children) testing would be a great help in determining this'. PR's scores on the WISC-R (revised) were Verbal IQ 64; Performance IQ 101; Full Scale IQ 80. After noting that 'English is his second language but the teacher feels that the problem is more than one of language', the psychologist continued:

Psychometric rating, as determined by the WISC-R places PR in the dull normal range of intellectual development. Assessment reveals performance abilities to be normal while verbal abilities fall in the mentally deficient range. It is recommended that PR be referred for resource room placement for next year and if no progress is evident by Christmas, a Learning Centre placement should be considered.

This assessment illustrates well the abuses to which psychological tests are liable. It does not seem at all unreasonable that a child from a non-English background who has spent six months of the previous year in Portugal should perform very poorly on an English Verbal IQ test. Yet, rather than admitting that no conclusions regarding the child's academic potential can be drawn, the psychologist validates the teacher's 'suspicion' of learning disability by means of a 'scientific' assessment and the use of inappropriate terminology ('dull normal', 'mentally deficient'.) An interesting aspect of this assessment is the fact that neither the teacher nor the psychologist makes any reference to difficulties in English as a second language and both considered that the child's English proficiency was adequate to perform the test.

The extent to which children's academic potential is capable of being underestimated as a consequence of these assumptions can be illustrated by children's scores on the Information subtest of the WISC-R. This subtest includes questions such as 'How many pennies make a nickel?' and 'Who discovered America?' and was administered to more than 90 percent of children who were assessed by means of the WISC-R. Seventy percent of the ESL sample obtained a scale score of 6 or below on this subtest compared to only 16 percent of the WISC-R norming sample, and more than one-third of the ESL students had a score of 3 or below compared to 2.5 percent of the norming sample. Yet in the vast majority of cases Information scores were included in the calculation of Full-Scale IQ's.

It is clear from many of the assessments in this study that psychologists often assume that because ESL children's L2 face-to-face communicative skills appear adequate, they are therefore no longer handicapped on a verbal IQ test by their ESL background. In other words, it is assumed that the language proficiency required for L2 face-to-face communication is no different from that required for performance on an L2 cognitive/academic task. This

assumption leads directly to the conclusion that poor performance on an L2 verbal IQ test is a function of deficient *cognitive* abilities (i.e. learning disability, retardation etc.).

The same type of inference based on implicit assumptions about the nature of language proficiency and its relationship to achievement and cognitive skills is common in the context of bilingual education in the United States. Minority language students are frequently 'exited' from bilingual to English-only classrooms when they have developed what appear to be fluent English communicative skills. Despite being classified as 'English proficient' many such students may fall progressively further behind grade norms in the development of English academic skills (see, e.g., Mazzone, 1980). Because these students are relatively fluent in English, it appears that their poor academic performance can no longer be explained by their English language deficiency, and thus cognitive or cultural 'deficiencies' are likely to be invoked as explanatory factors.

The obvious question that the psychological assessments raise is when do norm-referenced psychological educational measures, such as IQ or reading tests, become valid for ESL students? Or to pose the same question in the U.S. bilingual education context, how long does it take minority language students to acquire sufficient English proficiency to participate on an equal basis with monolingual students in all-English instructional settings? The findings of a reanalysis of data from a survey conducted by the Toronto Board of Education in the late sixties provide some evidence on this issue.

3. Learning English as a Second Language: Proficiency and Time

The original survey (Wright and Ramsey, 1970) involved 25 percent of the grades 5, 7, and 9 classrooms in the Toronto system. In this group of over 6,000 students there were 1,210 ESL students who had been born outside Canada. The reanalysis (Cummins, 1981a) was undertaken in order to investigate the effects of age on arrival (AOA) and length of residence (LOR) on students' academic performance. The results for one of the English language measures, an adaptation of the Ammons Picture Vocabulary Test (PVT), are presented in Figure 3.1. Results for the other English language measures showed the same pattern.

It can be seen that it took immigrant children who arrived in Canada at age six or later between five and seven years (on the average) to approach grade norms in English vocabulary knowledge. The verbal skills measured on this test are very similar to those measured on verbal IQ tests such as the WISC-R, where the vocabulary subtest is typically the best predictor of overall IQ score. The developmental pattern shown in Figure 3.1 implies that IQ scores should not be regarded as valid indices of immigrant students' academic potential until students have been in the host country at least five

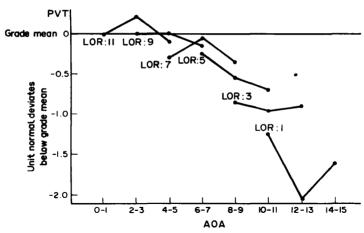


Figure 3.1: Age on arrival, length of residence, and PVT standard scores.

years. It can be seen that students who had been in Canada for three years were still about one standard deviation (i.e. the equivalent of 15 IQ points) below grade norms, but continued to progress more closely to grade norms as their length of residence increased.

These findings carry an important theoretical implication in addition to their obvious practical implications. Specifically, they suggest that the language proficiency manifested in face-to-face interpersonal communicative situations differs in certain respects from the proficiency required in many academic test contexts. The evolution of the theoretical constructs developed to account for these and other data is described in the following section.

4. Evolution of a Theoretical Framework for Relating Language Proficiency to Academic Achievement

The theoretical framework, to which the studies described above contributed, evolved in three phases, as follows:

Phase 1: Surface Fluency and Conceptual – Linguistic Knowledge

The first phase (Cummins, 1978, 1979) derived from the work of Skutnabb-Kangas and Toukomaa (1976) who reported that older immigrant students (10–12 years old), whose academic proficiency in L1 was well-established, developed L2 academic proficiency more rapidly than younger immigrant students, a finding which has been replicated in many subsequent studies (see below). Because younger immigrant and Swedish-born minority students appeared to converse in peer-appropriate ways in everyday face-to-face situations (in both L1 and L2) despite literacy skills which were considerably below age-appropriate levels, a distinction was made, following Skutnabb-Kangas and Toukomaa (1976), between 'surface fluency' and more

cognitively and academically-related aspects of language proficiency (Cummins, 1979). The Skutnabb-Kangas and Toukomaa data and hypotheses were elaborated and formalized in terms of the 'developmental interdependence' hypothesis which proposed that the development of literacy-related skills in L2 is partially a function of prior development of L1 literacy-related skills. This hypothesis was then applied to the apparent contradiction in the results of a home-school language switch for majority and minority students (Cummins, 1979; Swain, 1979).

Phase 2: BICS and CALP

In subsequent papers (e.g., Cummins, 1980b; Swain, 1981a) the distinction between surface fluency and conceptual-linguistic knowledge was expressed in terms of 'basic interpersonal communicative skills' (BICS) and 'cognitive-academic language proficiency' (CALP) and the framework was applied to a broader range of theoretical and educational situations. It was used, for example, to dispute Oller's (1979) claim that one global dimension could account for all individual differences in language proficiency.

The formalization of the distinction in terms of BICS and CALP appeared to facilitate communication to practitioners involved in educating minority language students. Specifically, it drew attention to the fact that minority students' often fluent conversational skills did not necessarily imply that their English proficiency was sufficient to allow them to survive without bilingual support in an all-English classroom or to manifest their abilities on an English psychological test.

However, criticism from other researchers (see e.g., Rivera 1983) suggested that the terms 'CALP' and 'BICS' had the potential to be misinterpreted. For example, we emphasized that the distinction was not a distinction between 'cognitive' and 'communicative' aspects of language proficiency, insofar as BICS referred only to some salient rapidly-developed aspects of communicative proficiency and by no means included everything encompassed by the notion of communicative competence (Canale and Swain, 1980). Similarly, based on Wells' (1981) work, it was stressed that CALP was socially grounded and could only develop within a matrix of human interaction (Cummins, 1981b; Swain, 1981a). Nevertheless, the distinction was being interpreted to mean that communicative proficiency was independent of cognition and cognitive/ academic skills independent of communicative interactions (Edelsky et al., 1983). These misinterpretations spurred a third phase in the evolution of the framework.

Phase 3: Cognitive and Contextual Demands

The framework (Cummins, 1981b, 1983; Swain, 1981b) proposes that language proficiency can be conceptualized along two continuums (see Figure 3.2). First is a continuum relating to the range of contextual support

available for expressing or receiving meaning. The extremes of this continuum are described in terms of 'context-embedded' versus 'contextreduced' communication. They are distinguished by the fact that in contextembedded communication the participants can actively negotiate meaning (e.g., by providing feedback that the message has not been understood) and the language is supported by a wide range of meaningful paralinguistic and situational cues. Context-reduced communication, on the other hand, relies primarily (or at the extreme of the continuum, exclusively) on linguistic cues to meaning and thus successful interpretation of the message depends heavily on knowledge of the language itself. In general, context-embedded communication is more typical of the everyday world outside the classroom. whereas many of the linguistic demands of the classroom (e.g. manipulating text) reflect communicative activities which are close to the context-reduced end of the continuum. This distinction owes much to the one that Margaret Donaldson (1978) makes between embedded and disembedded language and cognition.

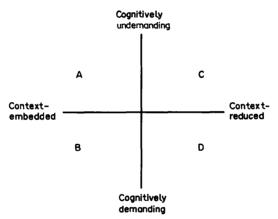


Figure 3.2: Range of contextual support and degree of cognitive involvement in communicative activities.

The upper parts of the vertical continuum consist of communicative tasks and activities in which the linguistic tools have become largely automatized (mastered) and thus require little active cognitive involvement for appropriate performance. At the lower end of the continuum are tasks and activities in which the communicative tools have not become automatized and thus require active cognitive involvement. Persuading another individual that your point of view is correct and writing an essay are examples of quadrant B and D skills respectively. The CALP (quadrant D) - BICS (quadrant A) distinction is fully retained within this framework.

A major component of the Development of Bilingual Proficiency project currently under way in the Modern Language Centre involves an attempt to integrate, both empirically and theoretically, the framework described above with the communicative competence framework developed by Canale and Swain (1980). This study is briefly described in a later section of the paper.

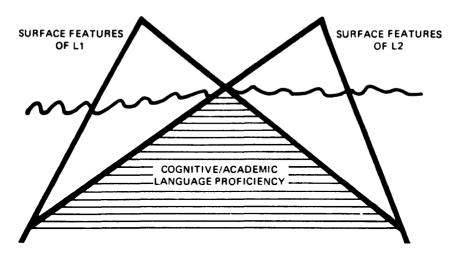
The theoretical framework described above was elaborated in tandem with considerable work on the nature of bilingual proficiency, specifically on the issue of the relationship between L1 and L2 skills. The theoretical approach to this issue is described in section 5, and two relevant empirical studies undertaken in the Modern Language Centre are described in section 6.

5. Theoretical Approaches to Bilingual Proficiency

To many educational administrators and policy-makers in the United States. the success of French immersion programs in Canada (see Paper 4) implied that bilingual education was unnecessary for minority language students (see e.g. Epstein, 1977). The fallacies in this inference have been pointed out by several investigators (e.g. Cohen and Swain, 1976; Cummins, 1979; Paulston, 1976; Swain, 1979; Tucker, 1977). The thrust of much of the theoretical work carried out in the Modern Language Centre (Cummins, 1979, 1980b; Swain, 1979, 1981a) was to show that the same principles accounted for the success of both Canadian immersion programs and bilingual programs for minority students in the United States and elsewhere. A central principle in this theoretical integration was the 'interdependence' hypothesis (Cummins, 1978, 1979) which proposed that L1 and L2 academic proficiency were developmentally interdependent; in other words, in educational contexts, the development of L2 proficiency was partially dependent upon the prior level of development of L1 proficiency. Thus, as reported initially by Skutnabb-Kangas and Toukomaa (1976) and replicated in subsequent studies (see below), older immigrant students (10-12 years old) whose literacy-related cognitive/academic skills in L1 were well-established. developed L2 academic proficiency more rapidly than younger immigrant students.

Within the framework of the CALP-BICS distinction, the interdependence hypothesis was reformulated in terms of the Common Underlying Proficiency (CUP) model of bilingual proficiency in which CALP in L1 and L2 were regarded as manifestations of one underlying dimension (Cummins. 1980b). This common underlying proficiency is theoretically capable of being developed through instruction or experience in either language. Thus, instruction in Spanish (the minority language) in a U.S. bilingual program for minority students or instruction in French (also the minority language) in a Canadian immersion program for majority students is not developing only Spanish or French academic skills, it is also developing the general cognitive and academic abilities which underlie English achievement (e.g. understanding of concepts, critical thinking skills, inferencing skills so important in getting meaning from text, etc.); hence, the rapid transfer of literacy skills across languages and the lack of relationship between amount of instructional time in the majority language and achievement in that language observed in these programs. The CUP model is represented graphically in Figure 3.3 and the interdependence hypothesis is formally expressed as follows:

To the extent that instruction in Lx is effective in promoting proficiency in Lx, transfer of this proficiency to Ly will occur provided there is adequate exposure to Ly (either in school or environment) and adequate motivation to learn Ly.



6. Empirical Studies of Bilingual Proficiency

The interdependence hypothesis has been applied to a variety of data sources on a post-hoc basis (e.g. bilingual program findings, age and L2 acquisition, use of L1 in minority homes – i.e. effects of home-school language switching) and in addition has been directly tested in two studies carried out in the Modern Language Centre. The first of these studies involved the same reanalysis of the Toronto Board survey data considered earlier, while the second was a study of Japanese and Vietnamese immigrant students in Toronto.

(a) Age and L2 Acquisition: the Toronto Board Survey

In Figure 3.1 above, immigrant students' scores are presented in relation to how rapidly they approached grade norms. It can be seen that within length of residence (LOR) categories (e.g. LOR 5, 7, etc.) students who arrived at older ages tend to perform as well (i.e. be as close to grade norms) as students who arrived at younger ages. This implies that students who arrived at older ages made more rapid absolute progress in acquiring L2 than younger students since they had further to go to catch up to age or grade norms in English cognitive/academic skills (compare, for example, the vocabulary knowledge of a 6-year-old and a 14-year-old monolingual child).

The interdependence hypothesis would predict that older children would make more rapid progress in acquiring L2 cognitive/academic skills, since their L1 cognitive/academic skills are more fully developed than those of younger students. This hypothesis is strongly supported in this study when

students' scores are expressed in absolute terms rather than in relation to grade norms. In 89 out of a possible 90 comparisons between older and younger students on L2 cognitive/academic tasks, older students performed better (Cummins, 1981a).

These findings are not surprising when viewed within the context of the CUP model. An older child who already has the concept of, for example, 'honesty' in his or her L1 only has to acquire a new label in L2 for an already-existing concept; on the other hand, for the younger child who does not yet have the concept, acquiring the abstract concept of 'honesty' is a much longer process involving conceptual development in addition to the acquisition of a new lexical item.

(b) Interdependence among Japanese and Vietnamese Immigrant Students

This study (Cummins et al., in press) involved assessing the L1 and L2 conversational and cognitive/academic proficiency of immigrant students who had arrived in Canada at different ages. The interdependence hypothesis was tested by investigating the extent to which students' acquisition of English cognitive/academic proficiency was related to their L1 proficiency on arrival. The use of Japanese and Vietnamese immigrant students provided a stringent test of the hypothesis because of the considerable difference between English and these two languages. Also, the generalizability of the hypothesis was tested by the use of two groups of students with very different background characteristics, namely upper-middle-class Japanese 'temporary resident' students and Vietnamese refugee students.

The Japanese sample administered group cognitive/academic measures consisted of 91 grades 2-3 and 5-6 students of which 59 were also given individual cognitive/academic measures and interviews. The Vietnamese sample was more limited, involving 45 students between the ages of 9 and 17 years who had immigrated between 5 and 22 months prior to testing. Because of the recency of immigration no L1 interviews were administered to this sample.

The first step of the Japanese analysis was to carry out an exploratory factor analysis of English and Japanese measures. Factor analysis is a statistical procedure which is designed to distinguish the underlying dimensions or 'factors' which are revealed in the relationships among a set of variables. Thus, scores which are strongly related to (i.e. have high correlations with) one another will tend to form or 'load on' a common factor. For example, the verbal and nonverbal subtests on IQ tests such as the WISC-R tend to form two separate (although related) factors when factor-analysed.

In the present study the three factors which emerged in the English analysis were labelled 'conversational syntax', 'interactional style' and 'cognitive

academic proficiency'. Indices of syntactic sophistication, article use, and inflections of verbs and nouns loaded on the first factor; the second factor involved measures of conversational 'richness' – e.g. degree of response elaboration and ease in the interview situation. The formal tests of vocabulary and reading defined the third factor on which all cognitive/academic measures (oral and written) loaded. Although these three dimensions could be distinguished, they showed a moderate relationship to each other, indicating that they were not totally independent.

The Japanese measures were also factor-analysed and again three factors emerged. The first involved similar indices to the first and second factors of the English analysis (i.e. both syntactic and 'richness' measures); the second was defined by fluency and pronunciation, and Japanese academic proficiency also loaded on this factor. This factor had a strong negative correlation with length of residence (LOR), suggesting that these were the aspects of Japanese proficiency that deteriorated most rapidly with time spent abroad. The third factor was defined by use of English in the interview.

A variety of analyses including comparison of older and younger siblings were employed to test the interdependence hypothesis. Regression analyses with the three English factor scores as dependent variables are presented in Table 3.1. Regression analysis is designed to show the relationship between a dependent variable (e.g. the amount of English proficiency attained by immigrant students) and a variety of independent or predictor variables (e.g. exposure to English, age on arrival, etc.) The degree of relationship is usually expressed in terms of the amount or proportion of the dependent variable that can be accounted for or 'explained' by the predictor variables. In Table 3.1 this is expressed as the R square. The kinds of questions that can be answered by means of regression analysis are questions of the type: What impact does age, sex, parental educational background, and exposure to English have on the acquisition of English by immigrant students?

	EFAC 1			EFAC 2			EFAC 3		
	R	Rsq		R	Rsq		R	Rsq	
	square	change	Beta	square	change	Beta	square	change	Beta
1. LOR	.26	.26	.54	.21	.21	.49	.17	.17	.73
2. Japanese academic									
proficiency	.26	.00	.13	.25	.04	.11	.26	.09	.25
3. AOA: older group	.28	.02	06	.27	.01	.06	.35	.09	.40
4. Age in months	.29	.01	05	.27	.00	14	.35	.00	.08
5. Personality*	.30	.01	03	.32	.05	.09	.37	.01	09
6. JFAC 1	.33	.03	21	.44	.12	.42	.37	.01	11
7. Sex**	.36	.02	16	.48	.04	.21	.38	.01	.07

^{*5} point scale, 1 = very shy, 5 = very outgoing

TABLE 3.1: Exposure and attribute predictors of English proficiency.

^{**}2 = Female, 1 = Male

What is of primary interest here is the differential impact of the various predictors on acquisition of aspects of English proficiency. LOR accounts for most variance on the conversational syntax factor but neither cognitive (Japanese academic proficiency, AOA, age) nor personal (personality, interactional style in L1, sex) attributes account for appreciable additional amounts of variance. This is in sharp contrast to the interactional style and cognitive/academic factors. Personal attributes add an additional 21 percent of variance explained to the prediction of L2 interactional style, while cognitive/academic attributes add an additional 18 percent to the prediction of L2 cognitive/academic proficiency. Further analyses confirmed that indices of students' behaviour in the L2 acquisition context, and exposure to and use of L2 (derived from parental interviews) were considerably more powerful in predicting conversational syntax than either of the other two dimensions of English proficiency.

The Vietnamese analyses offered further strong support for the interdependence hypothesis. For example, performance on an oral Vietnamese antonyms test added more than 50 percent to the explained variance on English antonyms after LOR had been entered into the equation.

The pattern of findings suggested that not only is cognitive/academic proficiency interdependent across languages but interactional style is also similarly interdependent. We speculated that there may be a distinction between 'input-based proficiency' and 'attribute-based proficiency'. Individual differences in the former are determined primarily by differential exposure to 'comprehensible input' (Krashen, 1982), whereas individual differences in the latter reflect, to a greater extent, personal characteristics of the individual. Cognitive variables, on the other hand, account for the interdependence of L1 and L2 literacy-related skills.

Clearly, the distinction between input-based and attribute-based aspects of L2 proficiency is not absolute insofar as characteristics of individual acquirers will influence the extent to which they seek out comprehensible input. The range of personal attributes measured in the present study was probably not adequate to pick up the extent or nature of the relationships that exist between attributes and conversational proficiency. Nevertheless the findings of the study open up interesting avenues for further investigation as well as showing the importance of adopting a differentiated approach to the nature of language proficiency and L1-L2 relationships.

7. Educational Implications of the Research Findings

The research findings outlined above suggest that the academic development of minority language students in the schools of western industrialized societies is a more complex phenomenon than many educators and policymakers realize. In the first place, the acquisition of the major societal language (e.g. English) is not simply a function of exposure to that language in school or in the environment. Especially when we consider academic aspects of English, students' L1 cognitive/academic proficiency plays an important role, in addition to exposure. This finding of our studies on immigrant acquisition of English exemplifies the interdependence hypothesis.

This interdependence hypothesis also accounts for the success of a variety of bilingual programs for both majority and minority students. For majority students the transfer of academic skills across languages opens up the possibility of considerably more effective second or foreign language programs; for minority students who are underachieving academically, transfer of language skills potentially allows L1 literacy skills to be promoted and children's home cultural identity to be reinforced without cost to the acquisition of English.

The fact that it appears to take many immigrant students up to five years, on average, to acquire similar levels of English cognitive/academic proficiency as their monolingual peers has important implications for both assessment practices and teachers' expectations. Psychological assessment should be an extremely cautious process and students' performance should be interpreted as indicative of present level of academic functioning in English rather than as an index of 'IQ', 'ability' or 'potential'. There is probably very little justification to ever compute an IQ score for an immigrant child who has been in the country less than five years. Teachers should also realize that it will tend to take immigrant students a considerable period of time to catch up with their monolingual peers in classroom performance and they should not judge such students as 'slow' or 'less bright' if their academic performance appears to lag during their acquisition of English in the first few years.

8. Future Directions

Much of the theoretical and empirical work reviewed above contributed to the design of the Development of Bilingual Proficiency project which consists of a five-year investigation of the nature of bilingual proficiency and of the influences on its development in different social and educational contexts. The initial two years (1981-83) focused on testing a model of L2 proficiency which combined three dimensions of communicative competence derived from the Canale/Swain (1980) framework within the context-embedded/context-reduced distinction. The three traits are grammatical, discourse and sociolinguistic competence and the project is investigating their inter-relationships as well as their relationships across different performance contexts (embedded-reduced) among grade 6 French immersion students.

34 Jim Cummins

Studies are also being conducted among Portuguese-background students to investigate the impact of sociolinguistic and attitudinal variables on the development of different aspects of Portuguese and English proficiency. Chinese-background and Franco-Ontarian students are also involved in two ethnographic studies encompassed by the project. A classroom observation instrument has been designed specifically to assess the communicative orientation of bilingual and second language classrooms, and its effects on the development of different aspects of proficiency (see Paper 9).

We anticipate that the results of these studies will further contribute to our understanding of the nature of language proficiency and of the ways in which it is acquired in a variety of social and educational contexts. At this stage it is clear that the constructs of language proficiency and bilingualism are complex, and educational practices which ignore this complexity (e.g. by assuming that minority students have succeeded in overcoming their difficulties with English when they can converse in English) are likely to increase the formidable difficulties which many minority students face in adapting to a new culture and language.

4. A REVIEW OF IMMERSION EDUCATION IN CANADA: RESEARCH AND EVALUATION STUDIES¹

MERRILL SWAIN

1. Introduction

From the time it began in 1965 in St. Lambert, Quebec, up to and including the present, immersion education has been viewed as a somewhat radical means of teaching French to anglophone students. Not only was it uncertain how well students would learn French under conditions where it was used as a medium of communication to teach curriculum content areas, but also it was uncertain whether the curriculum content would be adequately learned and the first language adequately maintained and developed. These concerns were expressed by parents and educators alike, and formed the basis of the many research and evaluation studies which have been undertaken across Canada. The extensive bibliography in Swain and Lapkin (1982) listing reports, published articles and books concerned with immersion education, attests to these concerns.

This paper will review the results of the research and evaluation studies associated with immersion education in Canada. The results will be reviewed in line with the goals of immersion programs, first with respect to the achievement attained by participating students in academic subjects such as mathematics and science. Secondly, the promotion and maintenance of first language development will be examined. Thirdly, the results pertaining to second language proficiency will be discussed. Fourthly, the effectiveness of immersion education for children with below average IQ or with learning disabilities will be examined. Finally, the social and psychological impact of immersion education on the participating students and on the communities involved will be considered.

2. Academic Achievement

One principle of immersion education is that the same academic content will be covered as in the regular English program, the only difference between the two programs being the language of instruction. In the immersion program where the language of instruction is the students' second language, the concern that the immersion students will be able to keep up in their academic achievement with students taught in their first language is of considerable importance. This concern has largely been allayed as a result of the research evidence.

Immersion students have been tested using standardized tests of mathematics (at all grade levels) and science (from about grade 5 on), and their performance has been compared to that of students in the English-only program. The tests were typically administered in English even though students were taught the subjects in French. The reason for this was straightforward: although parents wanted their children to learn French, they wanted to be assured that their children would be able to deal with mathematical and scientific concepts in English, the dominant language in North American society. Testing the students in English seemed the best way to gauge their ability to do so. It was thought at the time, however, that not testing the students in the language of instruction might seriously handicap their performance.

The results associated with early total immersion programs consistently show that, both in science and mathematics, the immersion students perform as well as their English-instructed comparison groups. For example, in summarizing the results of nine years of testing early total immersion students in Ontario, Swain and Lapkin (1982) report that in 38 separate administrations of standardized mathematics achievement tests from grades 1 to 8, the immersion students performed as well as, or better than, their English-taught comparison groups in 35 instances. In three instances, an English-instructed group scored significantly higher than an immersion group on one or two of the subtests, but never on the test as a whole. The results with respect to science achievement are similar in that the average scores of the immersion and comparison groups were equivalent in 14 separate administrations from grades 5 to 8.

The results associated with early partial and late immersion programs do not consistently provide evidence for the equivalence of performance between the immersion and comparison groups. In mathematics, inferior performance has occasionally been measured among some groups of early partial immersion students from grade 3 on (Barik and Swain, 1977; Barik, Swain and Nwanunobi, 1977; Edmonton Public Schools, 1980), and in science, from grade 5 on (Barik and Swain, 1978).

In the late immersion programs, when French as a second language (FSL) instruction has been limited to one or two grades prior to entry into the immersion program, the immersion group's performance is occasionally inferior to that of its comparison group in science and mathematics (Barik, Swain and Gaudino, 1976). However, when late immersion students have had FSL instruction each year through to the immersion year, the level of mastery of content taught in French is comparable to that attained by their English-instructed comparison groups (Genesee, Polich and Stanley, 1977; Stern et al., 1976). The results from the early partial and late immersion programs suggest that the second language skills of the students may at times be insufficient to deal with the complexities of the subject material taught to them in French. In general and over the long run, however, the results

suggest that immersion students are able to maintain standards of academic achievement comparable with those of their English-educated peers (see also Tucker, 1975).

The issue of the language of testing is relevant here. As has been noted, the students were usually tested in their first language although they were taught mathematics and science in their second language. This does not seem to have handicapped the students as was suspected. This adds credence to Cummins' (1981b) 'interdependence hypothesis' which suggests that cognitive academic knowledge is held in common storage and underlies the ability to understand or express it in either language given adequate levels of linguistic proficiency in both languages. In this case, the immersion students gained the knowledge in one language but made full use of it in the other language context, both activities being dependent upon a threshold level of linguistic competence in each language.

Would the results have been different had the language of the tests been French? The existing evidence suggests they would not have been different for the early total immersion students (e.g., Barik and Swain, 1975) or for the late immersion students who had had sufficient prior FSL instruction (Genesee, 1976a).

The impact of second language proficiency level on test performance is a serious issue, and one which has not been well attended to in the testing of academic achievement among minority students. An example from the immersion data speaks to this point: the performance on a social studies test of grade 4 early immersion students and students studying only social studies in French (60 minutes a day of instruction in French since beginning school) were compared. Two different versions of the same test were given: one in English and one in French. Results from the English version of the test revealed no differences in social studies achievement between the groups. Results from the French version of the test, however, revealed a significant difference between the two groups in favour of the immersion students. Furthermore, the immersion group performed in French as it had in English, whereas the other group's score when tested in French was much lower than when tested in English, even though they had been taught social studies in French. These results indicate quite clearly that testing students in a second language in which they are not highly proficient may not accurately reflect their level of knowledge related to the content of the test. In other words, testing in a second language is a risky business if one wishes to measure accurately subject content knowledge.

3. First Language Development

Because the immersion programs place so much emphasis on curricular instruction in French, there was naturally a concern that the development of

first language skills might be negatively affected. This was thought to be potentially most serious at the primary level when literacy skills in the first language would normally be taught. Indeed, one of the reasons early partial immersion programs exist is because of the fear on the part of some parents and educators that the negative consequences of the early total immersion program on the development of first language literacy skills in the formative years would be irreparable, and rather than run this risk, it was felt that English literacy training should be introduced right from the beginning.

To what extent were these fears well founded? The research evidence on this issue suggests that for these children, such fears have no basis in fact. In part, this is because these children are members of the dominant linguistic and cultural majority of Canada and as a consequence, English pervades all of their out-of-school life.

On the one hand, the results for students in the early total immersion program indicate that, although initially behind students in unilingual English programs in literacy skills, within a year of the introduction of an English Language Arts component into the curriculum, the immersion students perform equivalently on standardized tests of English achievement to that of students in the English-only program (Genesee, 1978a; Swain, 1978b). This is the case even if English is not introduced until grade 3 (Edwards and Casserly, 1976) or grade 4 (Protestant School Board of Greater Montreal, 1972; Genesee and Lambert, 1983). Furthermore, in some instances, the initial gap is not only closed but the immersion students end up out-performing their English-only program peers in some aspects of measured English language skills (Swain, Lapkin and Andrew, 1981).

On the other hand, the results for the early partial immersion students who have approximately half their program devoted to instruction in, and about, English indicate that they do not perform as well on some aspects of measured English language skills as either their own comparison group in grades 2 or 3, or as well as immersion students at the same grade levels who began to be taught to read in English only in grades 2 or 3 (Barik, Swain and Nwanunobi, 1977; Swain, 1974). One interpretation of these results is that by teaching literacy skills in both languages at the same time, the interfering and competing surface linguistic features cause confusion, and it takes a period of time for this confusion to sort itself out.

The implication for bilingual education is that it is preferable initially to teach literacy-related skills directly in only one language, whether it be the first or second language. Once literacy-related skills are well established in one language, they will transfer readily and rapidly to the other language (provided it is mastered), even possibly without explicit instruction. That this is so is strongly indicated by the results of immersion programs which begin at later grade levels. For example, Cziko (1976) compared the performance on tests of reading comprehension in English and French of a group of early

total immersion students with that of a group of children who began their immersion program at the grade 4 level. The scores of the two groups were equivalent in English. The students who had begun their immersion experience at grade 4 had apparently reached the same outcome as the early partial immersion students, but without the intervening confusion. The results from immersion programs which begin at the grade 7 or 8 level, and discussed below with respect to second language skills, also support this view (e.g., Genesee, 1981; Lapkin et al., 1983). However, in a community or social context where the first language may be less strongly supported as is the case for many language minority children, teaching initially in the first language is likely to compensate for the possibly limited use of the language in its full range of functions and skills. Teaching in the first language first is more likely to lead to full bilingualism among minority language students than leaving the first language in second place (Cummins, 1981b; Swain, 1983b).

Results from other studies of early total French immersion students' English language skills are in line with those from standardized achievement tests. indicating an initial discrepancy in literacy-based skills between immersion and English program students in favour of the latter group, followed in later grades with equivalent performance being noted. For example, the writing skills of grade 3, 4, and 5 immersion students have been examined. Short stories written by grade 3 children were analysed for, among other things, vocabulary use, technical skills (punctuation, spelling and capitalization), grammatical skills, and the ability to write in logical chronological sequence. There were small differences noted between immersion and non-immersion students in each of these areas (Swain, 1975a). Genesee (1974) reports on a study of the writing skills of grade 4 immersion students. Based on teacher ratings, the immersion group lagged behind English program students in spelling, but their stories were considered more original. Ratings were similar for sentence accuracy, vocabulary choice, sentence complexity and variety, and overall organization.

Lapkin (1982) had elementary teachers globally assess compositions written by grade 5 students from both programs. The teachers did not know which program the students were in (also the case in Genesee, 1974 above); they only knew that the compositions were written by grade 5 students. The compositions of the two groups were judged to be equivalent. A further analysis of variety in vocabulary use and length of composition revealed no differences between the groups.

The type of tasks involved in these studies of English writing and achievement represent the context-reduced, cognitively demanding quadrant of Cummins' (1981b) language proficiency model (see Paper 3). But what about tasks that are at the context-embedded end of the contextual support continuum? One group of people to ask this question of are the children's own parents. In a parent survey conducted in British Columbia, McEachern

(1980) asked whether they thought children in primary French immersion programs suffer in their English language development. Of parents who had a child in a French immersion program, an overwhelming 80% answered with an unqualified 'No'. Interestingly, of parents who did not have a child in the immersion program, only 40% responded in this way. In Ontario, a questionnaire distributed to immersion parents included a question about their children's ability to express their thoughts in English. Over 90% of the parents indicated that they perceived no negative effects.

With the same question in mind, Genesee, Tucker and Lambert (1975) undertook a study which examined the communicative effectiveness of total immersion students in kindergarten, grades 1 and 2. They found that the immersion children were more communicatively effective and suggested that this was because their experience in the second language classroom had made the children more sensitive to the communication needs of the listener (see also Lambert and Tucker, 1972).

Thus, there is substantial evidence that children in early total immersion programs, although initially behind their English-educated comparison groups in literacy-related skills, catch up and even surpass their comparison groups once English is introduced into the curriculum. However, the evidence also suggests that no benefit derives from introducing English and French literacy training at the same time. It would appear preferable to learn these skills in one language first. The choice of language must be sensitive to community and societal factors external to the school program. As has been shown, the immersion children at no time show retardation in their oral communicative skills, a fact due in large part to the overwhelming use of English in their environment, including school.

4. Second Language Development

In this section, the results from studies which have examined the second language development of students in immersion programs will be reviewed. The section begins with a discussion of the results associated with students in early total immersion programs and, within this context, a discussion of the 'double standard' that seems apparent according to whether second language learners come from majority or minority language situations. This is followed by a brief review of the early partial and late immersion results. The section concludes with a comparison of the second language abilities of early and late immersion students.

When early immersion programs began, it was believed that by using the second language to communicate with the children, they would pick up the language much as children learning a first language do. Although the theoretical rationales seemed sound and were strongly reinforced by commonly held intuitions that second language learning is relatively easy for children, there was no guarantee that the program would work. Indeed,

some educators were skeptical that learning through a language could be more effective than being taught a language. But the desire to experiment with finding ways to improve students' second language skills prevailed. And with good reason, as the research evidence has demonstrated.

Each and every study that has compared the second language performance of students in early total immersion programs with that of students in core FSL programs (20-40 minutes of daily FSL instruction which focuses on teaching specified vocabulary and grammatical structures) has revealed a significant difference in favour of the immersion student (e.g., Barik and Swain, 1975; Edwards and Casserly, 1976). In fact, it soon became clear that giving the same test to immersion and core FSL students was ill-advised. If the level of difficulty was appropriate for immersion students, then the core FSL students would become frustrated, some even to the point of tears, at being unable to do any part of the test. If the level of difficulty of the test was appropriate for the core FSL students, then the immersion students became bored and quickly lost interest in the task. It can safely be concluded, therefore, that the combination of the increased time in French and the communicative methodology employed in immersion programs vastly improves the second language proficiency of the students.

But what about the second language performance of the early total immersion students relative to native speakers of French? To answer this question we will look first at their receptive (listening and reading) skills and then at their productive (speaking and writing) skills.

The receptive skills of the immersion students have been measured over the years using a variety of listening and reading comprehension tests. The tests have included standardized tests of French achievement, as well as more communicatively oriented tests. In the latter category, for example, are such tests as the *Test de Compréhension Aurale* (TCA) and the *Test de Compréhension Écrit* (TCE) developed by the Bilingual Education Project (1978, 1979) in the Modern Language Centre. In these tests, authentic texts from a variety of communicative domains are heard or read, and the students respond to questions about them. In the TCA students listen, for example, to a news report over the radio, a portion of a soap opera, an advertisement, and an interview. In the TCE students read, for example, a comic strip, a clipping from a newspaper, a recipe, and a poem.

On the standardized tests of French achievement, the results from Ontario (Swain and Lapkin, 1982) show that after six or seven years in a primary immersion program (that is by grade 5 or 6) students perform on the average at about the 50th percentile. It is worthy of note that it took these children of middle class background, with parents supportive of their program and with positive attitudes towards learning French, until grade 5 or 6 to attain an average level of performance. It is appropriate to ask, given these data (see also Cummins, 1981a), whether the expectations that children in bilingual

education programs from minority language backgrounds in the United States reach grade norms after a year or two in the program are not somewhat unrealistic!

On some of the locally-developed comprehension tests, equivalence between immersion and francophone students has been noted as early as grade 2 (Lambert and Tucker, 1972). In Ontario, comparisons with francophones were not made until the grade 5 level. When comparisons have been made, immersion students compare favourably to francophones (e.g., Swain, Lapkin and Andrew, 1981). From these data, therefore, it appears that early immersion students develop native-like skills in their ability to understand spoken and written texts.

The productive skills of the early immersion students have also been examined over the years using a variety of techniques. It is clear from the results that the immersion students do not attain native-like proficiency in their spoken or written French (e.g., Adiv, 1981; Genesee, 1978a; Harley, 1979, 1982; Harley and Swain, 1977, 1978; Spilka, 1976).

For example, in a study designed to provide a description of the verb system as used in the speech of grade 5 immersion children compared to bilingual and monolingual francophones, Harley and Swain (1977) concluded that, in general, the immersion children may be said to be operating with simpler and grammatically less redundant verb systems. They tend to lack forms for which grammatically less complex alternative means of conveying the appropriate meaning exist. The forms and rules that they have mastered appear to be those that are the most generalized in the target verb system (for example, the first conjugation -er verb pattern). In the area of verb syntax, it appears that where French has a more complex system than English, as in the placement of object pronouns, the immersion children tend to opt for a simpler pattern that approximates the one they are already familiar with in their first language.

Numerous other examples could be given of differences between the immersion and francophone students. However, the point here is that the immersion students' communicative abilities (Szamosi, Swain and Lapkin, 1979; Adiv, 1981) outstrip their abilities to express themselves in grammatically accurate ways. One might ask to what extent this affects native-speaker judgements about immersion students, or why their productive capacity is grammatically limited. These questions are dealt with elsewhere (Lepicq, 1980; Harley, 1982; Swain, 1978c) and will not be considered further here. What is of importance to consider is the comparison between the second language productive performance of the immersion students in Canada and that of minority students in the United States. Such a comparison provides an excellent example of what might be labelled the 'linguistic double standard'.

The linguistic double standard is simply that majority language children are praised for learning a second language even if the result is non-native-like in its characteristics, whereas minority language children must demonstrate full native-like competence in the second language to receive the same praise. The reasons for the double standard may be clear, but that does not make it any less of a double standard. Recognition of the double standard should surely make us reappraise our expectations for one, if not both groups.

The results from early partial immersion programs with respect to second language development are as might be expected given the usual relationship between time and level of performance that holds for majority language students studying a second (or foreign) language (Carroll, 1975). The scores of the early partial immersion students tend to fall between those of early total immersion students and core FSL students (e.g., Barik and Swain, 1976: Edwards et al., 1980). Although partial immersion students do not perform as well as total immersion students at the same grade level, they tend to perform as well as total immersion students at lower grade levels who have had similar amounts of contact time with French. For example, a grade 5 partial immersion student and a grade 2 total immersion student who have each accumulated two and a half years of French instruction time, tend to demonstrate equivalent performance levels. By grade 8, the partial immersion students tend to perform as well as total immersion students one grade level below them (Andrew, Lapkin and Swain, 1979). The lower level of linguistic proficiency exhibited by the partial immersion students in the earlier grades may account for their poorer academic achievement in some of the instances noted above.

For example, the grade 6 partial immersion students in one study (Barik and Swain, 1978) did not perform as well as their English-educated peers in science or mathematics. It was also the case that their level of French performance most closely approximated grade 3 and 4 total immersion students. It may therefore be the case that their level of French was not adequate to deal with the more sophisticated level of mathematical and scientific concepts being presented to them in French.

As with the early total and partial immersion students, the late immersion students' second language performance is superior to that of core FSL students at the same grade level. However, it has been noted that unless there is a strong follow-up program to the one or two years of immersion that constitute the program, the advantages gained by students entering an immersion program at the later grade levels with respect to second language skills may dissipate (Lapkin et al., 1983). Indeed the question of the maintenance of second language skills of both early and late immersion students in their follow-up programs at the secondary school level is one that needs to be investigated.

Now that early immersion students are entering and beginning to graduate

44 Merrill Swain

from high school in the Ontario and Quebec programs, it is possible to compare the performance of early and late immersion students. The results of these comparisons emanating from Quebec differ somewhat from those in Ontario. It would appear that the differences can in part be accounted for in terms of program variations, most obviously with respect to the overall amount of time students have been studying in French. These differences in program structures, their associated second language outcomes, and the implications for second language immersion programs will be discussed below.

In Ontario, the lead groups of early total immersion students were tested at the grade 8 level and their performance has been compared with late immersion students also in grade 8 who had been in a one, two or three year immersion program (beginning at the grade 8, 7 or 6 level respectively). The results indicate that the early immersion students outperform the late immersion groups on tests of French listening comprehension, reading comprehension, general French achievement and proficiency (Lapkin et al., 1983; Morrison et al., 1979).

In Montreal, comparisons of the early and late immersion program students from grade 7 through 11 have been made (Adiv, 1980; Adiv and Morcos, 1979; Genesee, 1981). The results indicate that the early total immersion students outperform the late immersion students after one year (grade 7) of immersion education. However, in general, from the end of the second year of the late immersion experience, the performance of early and late immersion students on a variety of second language tests including all four skills of reading, writing, listening and speaking appears to be equivalent. This finding is somewhat unexpected given the results from Ontario, and the presumed advantage of early second language learning.

The differences in results between the Ontario and Montreal programs are an indication of the impact that program design can have on the second language performance of majority language students. In the case of the Ontario programs, the early immersion program maintained a French to English ratio of 80:20 in grades 3 to 5 and 50:50 in grades 6 to 8, whereas the corresponding figures for the Montreal program was 60:40 in grade 3 and 40:60 in grades 4 to 8. This means that the Ontario early immersion students had considerably more in-school contact time in French than did the Montreal students, which could account for their superior second language performance relative to late immersion students. These results argue for the maximum allotment of time to the second language for majority students in order to maintain and further develop their second language skills. This is essential for majority language children because of the limited use they may make of the second language in out-of-school contexts. (Genesee, 1978b; Swain and Lapkin, 1982).

The comparison of early and late immersion students raises the issue of the

relative ease of second language learning by vounger and older learners. Even in the case of the Ontario students where the late immersion students remain behind the early immersion students it is clear that they have made considerable progress towards the proficiency levels exhibited by the early immersion students. The issue of age and second language learning is a much debated topic (see for example Cummins, 1980a; Genesee, 1978c; Krashen, Long and Scarcella, 1979 for reviews), and will not be dealt with in this paper. Suffice it to say that the immersion results suggest that older learners may be more effective than younger ones in some aspects of second language learning, most notably in those aspects associated with literacy-related and literacy-supported language skills. It may be, however, that early immersion students feel more comfortable and at ease in the second language and maintain their facility in the second language to a greater extent over the long run. Furthermore, in the case of late immersion programs for majority children, some students will choose not to learn a second language, since it is only one of many competing interests and since it is recognized that a language takes a great deal of time and energy to learn. Finally, early immersion programs seem to be able to accommodate a wider range of personality types and cognitive styles than late immersion programs (Swain and Burnaby, 1976; Tucker, Hamayan and Genesee, 1976).

In summary, the second language results of the immersion research and evaluation studies indicate that immersion students attain levels of performance that far exceed that of students in core FSL programs, and they develop receptive skills in the second language comparable to francophones of the same age. However, for early immersion students, the attainment of average performance on standardized tests of French achievement can take up to six or seven years, raising the issue that unrealistic expectations are being held for minority language children in bilingual education programs in the United States.

Although immersion students appear to attain native-like-receptive skills, their productive skills continue to remain non-native like. They are, however, quite capable of communicating their ideas in spite of their grammatical weaknesses. It was suggested that this same level of productive skills in the second language among minority students would not be considered acceptable by the educational system. That it is praised within the majority culture when attained by majority language students and denigrated when attained by minority language students, is indicative of a linguistic double standard.

Finally, comparisons between early and late immersion students suggest that late immersion programs can be as effective in developing some aspects of students' second language skills as early immersion programs. However, the advantages in second language performance of the early immersion students can be maintained with an adequate allotment of instruction time in French. The apparently more rapid second language learning exhibited by the late

46 Merrill Swain

immersion students should not be taken as an indication that it is, therefore, the best option. As an option it must be balanced against potential long-term advantages of early bilingualism, and the very likely possibility that early immersion education makes bilingualism a viable goal for a wider spectrum of the population.

5. IQ, Learning Disabilities and Immersion

Many students enrolled in primary immersion education are anglophone students of middle to upper-middle socio-economic backgrounds. However, students with other background characteristics have enrolled in immersion programs, and some studies have been undertaken to determine whether they benefit as much from immersion education as their classmates in immersion programs and/or as much as their peers (children with similar characteristics) in the regular English program. In this section, the results of these studies will be summarized for two groups of children: those with below average IQ, and those with learning disabilities.

A commonly held view is that immersion education is only for children of above average intelligence. The research evidence contradicts this view. There are several ways this issue might be examined. One way is to determine how immersion students who obtain above average IO scores perform relative to immersion students who obtain below average IO scores. It would be expected that above average students would obtain higher scores on second language measures than below average students, given the usual relationship between IO and academic performance. In one study (Genesee, 1976b). grade 4 early immersion and grade 7 late immersion students who were below average, average, and above average IO were administered a battery of French language tests which included measures of literacy-related language skills such as reading and language use, as well as measures of interpersonal communicative skills such as speaking and listening comprehension. It was found that, as expected, the above average students scored better than the average students who, in turn, scored better than the below average students on the tests of literacy-related language skills. However, there was no similar stratification by IQ of performance on the measures of interpersonal communication skills. In other words, the below average students understood as much spoken French as did the above average students, and they were rated as highly as the above average students on all measures of oral production; grammar, pronunciation, vocabulary and fluency of communication. Thus, it seems that the below average students were able to benefit from French immersion as much as the average and above average students in terms of acquiring interpersonal communication skills in the second language. Furthermore, from the English language and academic achievement testing that was carried out with the same samples of students, there was no evidence that the below average students in French immersion were farther behind in English skills development or academic achievement than were the below average students in the regular English program.

There is another way of looking at this issue. If IQ is more important to success in school in an immersion program than it is in a regular English program, then it would be expected that students' IQ would be more highly related to performance on achievement tests in the immersion program than it is in the regular program. Swain (1975b) found, however, that this was not the case; that is, the relationship between IQ and achievement scores was the same for early immersion children and children in the regular English program. The relationship between IQ and tests of French listening comprehension and French reading and language usage was also examined. The same pattern was found as in Genesee's study cited above; that is, that the acquisition of comprehension skills was not related to IQ level, but the acquisition of second language literacy-related skills was.

These studies, then, suggest that IQ does not play a more significant role in the immersion program than in the regular English program as far as success in school is concerned. Furthermore, acquiring interpersonal communicative skills in a second language would appear in this context to be unrelated to IQ. Thus, although there will be differences in performance among students, the below average IQ students are not at any more of a disadvantage in an immersion program than they would be if they were in a regular English program, plus they have an equal opportunity of learning second language communicative skills.

Basically the same conclusion has been reached about children with language learning disabilities. The child with a language learning disability is one who has normal intelligence and no primary emotional, motivational, or physical difficulties, and yet has difficulty acquiring specific basic skills such as reading, spelling, and oral or written language (Bruck, 1979). It has been found in an ongoing research project designed to investigate the suitability of early French immersion for children with language learning disabilities that. 'when compared to a carefully selected group of language disabled children in English programs, the learning disabled children continue to develop facility in their first language; they learn their basic academic skills at the predicted rate; they exhibit no severe behavioural problems, and, perhaps of most importance, they acquire greater competency in French' (Bruck. 1979: 43). In her report of this study, Bruck (1978) points out that many learning disabled children who have followed the core FSL program leave school with almost no knowledge of French because the nature of the teaching method seems to exploit their areas of weakness (memory work, repetition of language out of context, explicit teaching of abstract rules). Thus, if learning disabled children are to learn French in school, immersion is the best method for doing this.

In summary, as with children with below average IQ, there is no evidence which suggests that expectations for learning disabled children in immersion programs should be any different from those of similar children in regular English programs.

6. Social and Psychological Effects

In this final section the social and psychological effects of immersion education will be reviewed. First, the immersion students' perceptions of themselves, English-Canadians, French-Canadians and the broader socio-cultural aspects of Canada will be discussed. This will be followed by a brief section on satisfaction with the program as expressed by student participants and members of the community.

A number of studies have been undertaken in Montreal which examine the immersion students' perception of their own ethnolinguistic group, themselves, and the French-Canadian ethnolinguistic group. In one study, early immersion and English-educated children were asked to rate themselves, English-Canadians and French-Canadians on 13 bipolar adjectives such as strong-weak, friendly-unfriendly (Lambert and Tucker, 1972). The immersion and English comparison groups both made favorable assessments of themselves and of English-Canadians. In the earlier grades, the immersion students made more favourable assessments of French-Canadians than did their English comparison groups. Although this difference in their assessments of French-Canadians had disappeared by grade 5, nevertheless when they were asked directly about their feelings and attitudes, the immersion students were clearly more positive. For example, when asked: 'Suppose you happened to be born into a French-Canadian family, would you be just as happy to be a French-Canadian person as an English-Canadian person?', 84% of the grade 5 immersion children responded with 'just as happy to be French-Canadian', whereas only 48% of the English-educated group responded in this way.

In another study (Cziko, Lambert and Gutter, 1979), grade 5 and 6 immersion and English-educated students were asked to make judgements about the similarity/dissimilarity of pairs of concepts such as 'myself' compared with monolingual English-Canadians, monolingual French-Canadians, bilingual French-Canadians, and bilingual English-Canadians. The results indicated that the early immersion students perceived themselves as more similar to bilingual English-Canadians and bilingual French-Canadians than did the late immersion or English program students. The authors conclude that 'the early immersion experience seems to have reduced the social distance perceived between self and French-Canadians, especially French-Canadians who are bilingual' (p.26).

It is possible that the educational experience of the immersion students might lead to a more sophisticated understanding of the social and cultural aspects of Canadian life. To investigate this question, grade 5 and 6 immersion students were asked to write a composition on the topic of 'Why I like (or do not like) being Canadian' (Swain, 1980). Each composition was subjected to a content analysis and the substantive comments were identified and tabulated. Several interesting findings emerged. First, the immersion students' commentary spanned a much broader perspective in that they gave

on the average two to three times as many reasons than did the English comparison groups. Secondly, three times as many immersion students as English program students commented specifically on the rich and varied cultural and/or linguistic composition of Canada. Thirdly, over 20% of the immersion children, but none of the English-educated children, commented on the possibility in Canada of being able to speak more than one language. In general most of the compositions written by the English students focused on the natural beauty of Canada as opposed to the beauty of linguistic and cultural diversity which was more likely to be mentioned in the compositions of the immersion students.

Whether the immersion students' views are the result of their schooling experience, the influence of their parents, or their experience in the wider community cannot be determined from the studies undertaken. Probably their views reflect the interaction of all three influences. Practically speaking, the source of their views is probably less important than their existence.

Immersion and core FSL students have been asked their views about the French programs in which they are enrolled. Lambert and Tucker (1972) found that relative to core FSL students, grade 4 and 5 immersion students were much more likely to say that they enjoy studying French the way they do, they think their program has just about the right amount of time spent on French—core FSL tended to say that too much time was spent on French—and that they wanted to continue learning French. This study suggests a general endorsement by immersion students of their program and way of learning French.

In a study in which these same immersion children in grade 11 and their parents were interviewed, Cziko et al. (1978) concluded that 'there is a very clear appreciation for the early immersion experience on the part of the early immersion students and their parents who, in the vast majority, say they would choose the immersion option if they had to do it all over' (p.23).

In a comparison of the early and late immersion students in Ontario at the grade 8 level (Lapkin et al., 1983), it was found that the early immersion students were more likely to respond that they would prefer a bilingual high school program than late immersion students. Early immersion students also were likely to say that the amount of time they were currently spending in French was 'about right' or 'a bit too short', whereas the late immersion students were more likely to respond that they would prefer a program with less French in it, and that the amount of time spent in French was 'a bit too long'. Thus, in general, immersion students express satisfaction with their program, with early immersion students being most positive and core FSL students being least positive.

Although parents who have children enrolled in an immersion program express satisfaction with it, the growth of immersion programs has not been

without its tensions. As immersion programs grow in size and number, certain sectors of the community feel threatened (Burns and Olson, 1981). One sector is the English-speaking parents who want their children to attend, or continue to attend, the regular English program in their neighbourhood school. They see the space in their neighbourhood school being swallowed up by increasing numbers of immersion students, and have formed 'concerned parents' organizations to argue against the growth of immersion programs. The tensions created by the pro-immersion and anti-immersion parents have surfaced in communities across Canada, and have recently received nationwide press coverage (e.g., Toronto Globe and Mail January 9, 1982).

The problem would probably not be so serious were it not for the current period of declining enrolment being felt by schools across Canada. During this period of declining enrolment, the only area of growth is in the French immersion programs, thus exacerbating the problems in English schools. The most threatened group, and therefore, predictably, the most loudly outspoken group against French immersion programs are monolingual English-speaking teachers (Burns and Olson, 1981). They consider their own job security to be threatened by immersion programs, and recognize that they themselves could never, even if they wanted to, make the transition to teaching in an immersion program where native-speaking proficiency in French is essential. Thus the current rapid expansion of immersion programs has brought with it concern on the part of English-speaking teachers which is supported by parents of their students in the local community. The resolution of these tensions is yet to come.

To summarize, the psychological and social impact of immersion programs has in no way negatively affected the immersion students' views of themselves or of their own ethnolinguistic group, while at the same time it has closed somewhat the social gap between the perceptions of themselves and French-Canadians. Immersion students and their parents express satisfaction with their program. However, conditions of declining enrolment in the wider society have resulted in a threat to job security for teachers, and a threat of school closings in their neighbourhood for parents, leading to inevitable tensions in the school and in the community. Immersion education may become a scapegoat for these groups as a result of its unqualified success within the Canadian context in improving the second language proficiency of English-speaking students.

7. Conclusions

The results of the research and evaluation studies associated with immersion education for majority language children in Canada indicate that the goals of the program have been met. The students have achieved high levels of proficiency in the second language while developing and maintaining normal levels of first language development. This degree of bilingualism has been attained with no long-term deficit observed in achievement in academic

subjects. The immersion students appreciate the program in which they have participated, and express positive attitudes toward the target language group while maintaining a healthy self-identity and appreciation for their own linguistic and cultural membership.

The results also highlight several important principles related to the schooling of majority and minority children:

- (1) The language of tests is an important consideration when testing for knowledge of subject content. Students' knowledge may be underrated if their proficiency in the language of the test has not reached a 'threshold' level. Even though students may have been taught the subject content in one language, this does not necessarily imply that testing should occur in that language.
- (2) Teaching initial literacy in two languages at the same time may lead to slower rates of progress than first developing literacy-related skills in one language.
- (3) Communicative effectiveness in the first or second language does not imply grade level performance on literacy-based academic tasks. It is, however, an important precursor.
- (4) The ability to function in context-reduced cognitively demanding tasks in the second language is a gradual learning process extending over a number of years indicated by the fact that immersion students take up to six or seven years to demonstrate average levels of achievement in the second language relative to native speakers of the language.
- (5) Developing the ability to function in context-reduced cognitively demanding tasks in the first language underlies the ability to do the same in the second language. Thus, students who begin their immersion program at a later age than early immersion students make more rapid progress in literacy-related aspects of the second language.

The results of immersion education for English-speaking Canadians are impressive. In order to achieve similar goals for minority language children, their first language will need to play as strong a role cognitively, psychologically, and culturally as it does for immersion students.

Notes

 This paper is a slightly revised version of an article of the same title appearing in Studies on Immersion Education: A Collection for U.S. Educators. Sacramento: California State Department of Education, 1984. Without the support of California State Department's Office of Bilingual Bicultural Education and its staff, this paper would not have been written.

5. SECOND LANGUAGE ACQUISITION IN AN IMMERSION CONTEXT

BIRGIT HARLEY

1. Introduction

As part of the evaluation of French immersion programs in Ontario over the past ten years or so (see Paper 4), a number of detailed empirical studies of second language acquisition have been conducted. Among the issues that have been investigated are: How systematic is the acquisition of L2 grammar by students in an immersion program and how much do they acquire? What are the reactions of native speakers of French to immersion L2 speech? Are there age-related differences in L2 acquisition between early and late immersion students?

In this paper, the research focusing on these issues is summarized, and potential implications for second language teaching are discussed. The fact that French is the target language of the students involved means that the actual forms acquired and errors made are not directly relevant to the teacher of English as a second language. Rather, the significance of these studies for teachers of English and other languages lies in the general principles of second language acquisition which they exemplify. In any L2 program, there is necessarily concern to know how much account to take of the L1 background of students, and what kinds of L2 structures will be particularly problematical to acquire. Likewise, the issue of how age-related factors affect the acquisition of French in an immersion program is one which has wider implications for curriculum planning in other second language programs. At the same time, an analysis of how native French speakers react to the L2 speech patterns of immersion students provides clues as to what kinds of L2 errors teachers in general should be most concerned about.

2. L2 Development in Early Total Immersion

An important characteristic of French immersion programs is the emphasis that is placed on communicative use of the second language. From the outset in kindergarten of an early total immersion program, the (usually native-speaking) teacher uses French both for classroom management and to express a range of semantic functions in teaching curriculum content. This means that students are soon exposed to a variety of L2 forms in the teacher's speech, which are not introduced in any pre-determined order. Do the learners nonetheless have some kind of 'built-in syllabus' (Corder, 1967) in acquiring the French grammatical system which is similar for all students?

54 Birgit Harley

While the teacher is likely also to be competent in the learners' shared mother tongue, English, s/he does not speak English to the students; however, the use of English by students among themselves in class and in speaking to the teacher is accepted until about midway through the second year of the program, and English remains the dominant language of communication for the students beyond the immersion class and outside school. Under these circumstances, how significant is first language transfer in the L2 speech of immersion students?

Given the classroom setting of immersion education and the relative isolation of most students from native speakers of French other than the teacher, the immersion students are not expected to develop entirely native-like skills within the context of the program itself, although the expectation has been expressed that they should reach a high level of L2 proficiency which will permit them, for example, to participate easily in conversations, to take higher education in French, and to accept employment in the second language (Ontario Ministry of Education, 1974). Do the L2 skills of immersion students continue to develop to higher levels of proficiency as they progress through the school system? Or do they 'fossilize' (Selinker, 1972) at some stage? If so, what aspects of their language appear subject to fossilization and in what ways does this limit their ability to communicate in the second language?

Such questions, all related to the nature of L2 development in an immersion program, have arisen in several different studies investigating features of the L2 speech of early total immersion students.

(a) Systematicity in Immersion L2 Speech and the Involvement of L1 Transfer

According to hypotheses originally outlined by Corder (1967), Nemser (1971), Selinker (1972) and others, the speech that an adult learner produces in the attempt to express meaning in a second language can be characterized at any specific point in time as a system in its own right, separate from both the L1 of the learner and the L2 as spoken by native speakers. In Selinker's terms, this 'interlanguage', when seen in relation to the learner's L1 and the target L2, will manifest certain systematic phenomena including L1 transfer and 'overgeneralization' of target language rules.

When they analysed the L2 speech produced in meaningful conversation by seven-year-old children in grade 1 of an early total immersion program, Selinker, Swain and Dumas (1975) found the interlanguage hypothesis relevant for these young students too. They noted examples of language transfer errors where the students had apparently applied native English rules to their production of utterances in French: for example, Le sac a un trou dans le (instead of Il y a un trou dans le sac) based on English 'The bag has a hole in it', or Le chat toujours mordre (instead of Le chat mord toujours)

based on English 'The cat always bites'. At the same time, other errors could be categorized as overgeneralization of target language rules: for example, Il a couré ('He ran') instead of Il a couru, representing an overgeneralization of the widespread past participle inflection -é of the first verb conjugation in French. Selinker et al. conclude that the immersion students have a systematic interlanguage in the sense that the kinds of errors they make imply consistent use of similar learning strategies.

In another approach to the issue of systematicity, Swain (1976) investigated changes in errors over time by examining the production of French personal pronouns on an imitation task administered to immersion students in grades 1, 2 and 3. Viewing errors from this perspective, Swain found that they were not random, but that few of them could be exclusively related to a single cause. For example, with respect to gender errors, she noted that in grades 1 and 2 they involved mainly the substitution of the masculine pronoun il for the feminine pronoun elle, while in grade 3 a new error involved the substitution of the feminine pronoun la for the masculine pronoun le. These two different errors clearly could not be attributed to the same underlying cause. Swain posits several sources for each error and concludes that 'changes are due to a complex interaction of the influence of the native language with the influence of difficulties inherent in the second language itself' (Swain, 1976: 355).

Subsequent studies of immersion speech have investigated the question of systematicity by concentrating not only on the L2 errors the students make but also more generally on analysing how they express meaningful distinctions in their efforts to speak the L2. These studies, focusing on the verb (e.g. Harley and Swain, 1977, 1978) and personal pronoun (Harley, 1980) systems, serve to confirm the relevance to the immersion context of the notion of interlanguage as a system describable in its own terms.

Harley and Swain (1978), for example, found five 11-year-old immersion students (randomly selected from a grade 5 class) operating in a naturalistic interview with a largely shared verb system that was simpler and less redundant than that of the target language, French, and similar to the English verb system in certain fundamental respects. Basic semantic distinctions in time were usually expressed in the verb; the passé composé (in the form of AVOIR + past participle) generally being used to express past actions, and the periphrastic future (ALLER + infinitive) to express events in the future, with the present serving to express present relevant time. Such 'deictic' time distinctions, it may be noted, are regularly expressed in the verb in both the L2, French, and the students' L1, English. Other more 'marked' distinctions, less regularly made in the target French verb system and not expressed, or realized in different ways, in the English verb system, rarely appeared in the immersion students' speech. The imparfait, for example, which in French expresses habitual or durative aspect in the past, was limited almost exclusively by the immersion students to common stative verbs of inherent duration such as AVOIR and ÊTRE, and not used with actions in contexts where native speakers used this form. Note that the imparfait is restricted to the past in French, and that it differs both semantically and formally from English progressive aspect (e.g. 'He was walking', 'She is trying'), with which it is often compared.

Similar observations can be made about the students' use of personal pronouns (Harley, 1980) by grade 5, they were making a number of the basic semantic and grammatical distinctions of the target French pronoun system. Certain distinctions, however, tended to be made only in ways that were congruent with English. For example, the students rarely used atonic object pronouns such as me, te, se, le, la before the verb, either omitting them altogether, or placing them erroneously after the verb (as in English), or avoiding their use in the third person by selecting instead the demonstrative pronoun ca (which in French, as in English, occurs after the verb).

The striking similarity in the kinds of distinctions that the immersion students were able to make (or not able to make) in the verb and pronoun systems does not mean that their L2 errors were identical. Harley and Swain (1977) describe how the five immersion students, who had apparently not acquired the conditional verb form in French, attempted to express the notion of 'hypothetical' in a variety of different forms: simple future, periphrastic future, imparfait, VOULOIR + infinitive, or the adverb peut-être + verb form.

We certainly do not know at this point whether there is a hierarchy of ways of expressing particular notions (such as the hypothetical) that immersion students regularly progress through on their way to target L2 usage. It seems highly unlikely, however, that each student follows exactly the same path. What the study of grammatical subsystems in immersion L2 speech indicates, in a more general way, is that in any particular semantic domain, there is a distinct tendency for certain items to appear early and to be overused relative to native speakers of the L2. Often the items that appear early are those unmarked forms that are of most general utility in the target L2, and are the same items that appear early among L1 learners of French. Thus we are not surprised to find present tense forms in past and future contexts, verb forms regularized to the prevailing pattern of the first conjugation, singular verb forms in contexts for the plural and, once it has been acquired, the aspectually more neutral passé composé in contexts for the imparfait (Harley and Swain, 1978; see also Harley, 1982).

However, there are also occasions when more specific marked forms in terms of the target language appear to be overgeneralized by the immersion students at the expense of more general L2 forms. In addition to Swain's (1976) example cited above of the use of feminine pronoun *la* instead of the less marked masculine *le*, Harley (1982) has noted the extensive use by two

grade 1 immersion students of a form [e] which is often inserted between subject and verb stem. Occasionally this produces what appear to be surprisingly accurate 'difficult' constructions for a beginning learner of French, such as Elle est tombée. J'ai dit, J'ai six ans. It is only by studying the incidence of lel throughout these students' verb systems that we can see that its function in their interlanguage is very different from that of the target L2 system. Thus, for these students, Elle est tombée and J'ai dit are likely also to mean 'She is falling' and 'I say' in the present, while *Il est six*, meaning 'He is six', will be the form appearing in the third person instead of Il a six ans (literally 'He has six years'). Explanations of these phenomena have to take account at the very least of the confusing homophony (or near-homophony) of the forms ai, es, and est in the verbs AVOIR and ETRE in French, the different semantic contexts in which English and French use auxiliaries, and the only partial congruence of the lexical verbs BE and ÊTRE. HAVE and AVOIR in the two languages. What is significant is that the apparently correct use of certain target L2 constructions does not necessarily mean that a target language rule has been acquired. The same students who say Elle est allée (with past meaning 'She went') in grade 1 may well later be found producing incorrect forms such as Elle a allé when they have acquired the more general rule for past tense formation (AVOIR + past participle). Such overgeneralization of the more usual auxiliary AVOIR appears in the L2 speech of grade 5 immersion students (Harley and Swain, 1978).

In short, the L2 development of the immersion students is systematic in the sense that there is an overall tendency to acquire more general L2 rules before more specific ones, and to construct interlanguage forms involving both L1 transfer and incorrect generalizations from the target L2. At times. these two main (but not necessarily only) sources of error may interact in complex ways. At the same time, by focusing on how the learner's interlanguage is organized as a more or less consistent system we are able to see the involvement of the L1 not only in the errors that are made but in the avoidance, or non-use, of some target L2 rules (Schachter, 1974). From the perspective of the language teacher, it seems clear that a thorough description of the target L2 system and, wherever possible, of the relevant systems in the learners' L1, can be of considerable help in anticipating the problems they are likely to encounter. In assessing the students' L2 progress at any particular point in time, it is important to know whether the errors they make are localized or system-wide in nature, and how it is that the learners are expressing, or failing to express, particular notions in the target language. This diagnostic type of information should help teachers to plan effective ways of assisting the students' continued L2 development.

(b) The Eventual Attainment of Immersion Students

The above studies of the speech of early total immersion students at the grade 5 level, and other research on their spoken language skills at the grade 5 and 6 levels (e.g. Harley, 1979; Lepicq, 1980), indicate that, relative to native

speakers, immersion students after several years in the program are still having trouble with productive skills in some areas of the target L2, even though their performance on comprehension tasks appears almost nativelike (Swain and Lapkin, 1982), Similarly, among twelve students in grades 9 and 10 of an early partial immersion program which had begun in grade 1. Harley (1982) found some non-native-like speech patterns. There continued to be, for example, minimal use of the imparfait and conditional verb forms in contexts where they were quite regularly used by native speakers of French, In addition, several students were making specific local errors, such as the use of mis (past participle of METTRE, 'to put') instead of mets in a present tense context, which suggested that certain errors may in the long run have taken on a classroom dialectal status (see also Swain, 1974). It would be premature, however, to claim that the errors that the students make have fossilized in the sense that they have remained over a long period of time and are resistant to change. We do not know how long the partial immersion students have been making this particular error, nor what limits to further development there may be, should graduates of the program have an opportunity to live in a French-speaking community for an extended period of time.

Comparisons across time of immersion speech patterns (e.g. Harley, 1979; Swain, 1976) indicate that there is progress from one grade level to another, but that increments do not necessarily appear in statistics even when a significant step forward has occurred in the interlanguage of the students (see also Huebner, 1979). For example, Harley (1979) found that in free speech, grade 5 early total immersion students were doing better than grade 2 students in one relatively important area of gender assignment: the use of feminine gender with female referents. However, the overall error rate in gender assignment of the grade 5 students (20.9 per cent) appeared if anything to be greater than that of the grade 2 students, who had an error rate of 16.9 per cent.

3. Reactions of Native Speakers to Immersion French

A question of considerable relevance to educators is, of course, how seriously the errors in gender that the immersion students continue to make (or indeed errors in any other area of the L2) affect their ability to communicate with native French speakers. A recent study pertinent to this issue is that conducted by Lepicq (1980). Lepicq's study involved asking native French speakers in Quebec to judge the acceptability of the French used by eight early total immersion students in grade 6 (aged 11-12). Each of the judges was first asked to listen to a 15-minute extract from a recorded interview with one student, and then to rate the student on a number of dimensions such as: effort to communicate, self-confidence, manner of speaking, comprehensibility, grammar, rate of speech. Using a five-point rating scale, Lepicq found that the native-speaker ratings of the immersion students were generally favourable: for example, the lowest average

interview rating for any one student was 3.64 out of the maximum 5.00. The raters included both adults and 11 to 12-year-old children, bilingual judges and those who had minimal knowledge of English (monolinguals). Lepicq found that the bilinguals tended to give higher ratings than the monolinguals and that the child judges were generally more tolerant than the adults. She noted that the judges were more favourably disposed towards those immersion students who appeared to be making an effort to find ways around communication difficulties by using circumlocutions in French, and more severe on those who tended to mix in English words when they were at a loss for a French lexical item. A clear implication here for teachers is to encourage students to use circumlocution in the L2 and to avoid relapsing into English when they lack an item of vocabulary.

The judges were also asked to rate the severity of some common types of immersion speech errors recorded in individual sentence contexts. Of the six types of error recorded, the judges rated lexical errors in the verb as, on average, most severe, followed in descending order by errors in word order (such as Je toujours joue, Le prof donne vous un zéro), lexical errors in nouns, omission of pronoun complements, verb errors in past participles and infinitives, and, finally, gender errors, which were on average the least severely rated.² The main criterion in the view of the judges was how comprehensible the sentence was. An error that made it difficult for them to comprehend a sentence tended to be judged more severely than an error which had little or no effect on meaning. Thus, for example, in spite of the general trend to rate lexical verb errors most severely, a specific word order error was rated as more serious than three out of the four lexical verb errors. mainly because the sentence in question (Je seulement lis un roman si je n'ai rien à faire) was perceived as particularly hard to understand. Lepicq concludes that, in general, it is more important for teachers to correct errors that tend to impede communication, such as lexical and word order errors. than it is to correct those types of grammatical errors where meaning may be little affected. At the same time, she points out that the gravity of an error is partly dependent on the context in which it is found.

Lepicq's study focuses on immersion students who are 11-12 years old, and she suggests that the positive evaluations of the native French-speaking judges may have been partly due to the fact that the subjects were children. Hence an interesting area for further research would be to investigate the acceptability to native speakers of the L2 speech of older immersion students.

4. The Relationship between Age and L2 Acquisition in an Immersion Context

The analysis of L2 acquisition in an immersion context has thus far focused on early immersion programs beginning in kindergarten or grade 1. An important further question is how L2 acquisition in these programs is affected by the starting age of the learners.

This issue was the topic of a study in which the oral communicative control of the French verb system by early and late immersion students was compared (Harley, 1982). Three main questions were investigated: (a) after an equivalent initial number of hours of in-school exposure to French, would older students who had entered a late immersion program around adolescence demonstrate greater oral communicative control of the French verb system than early total immersion students who had started in kindergarten? An initial advantage for older learners on academic, noncommunicative types of tasks had previously been found in a variety of L2 learning environments (for a summary of studies, see Krashen, Long and Scarcella, 1979), (b) When early immersion students reached the same age as the late immersion students at the secondary level, would their eventual attainment be more native-like than that of the late immersion students? This might be anticipated owing to the much greater amount of in-school exposure to French that the early immersion students would have had. (c) Was there any evidence of differences in process of acquisition between the vounger early immersion and older late immersion students? Previous studies had found no evidence of differences in L2 acquisition process between learners of different ages (e.g. Cook, 1973; Fathman, 1979). The above questions were investigated by means of an oral interview so designed as to be appropriate in content for young children in early immersion as well as adolescents in late immersion.

The first question was examined by comparing the interview performance of two matched groups of twelve early total immersion students and twelve late immersion students at a time when each group had had approximately 1,000 hours of exposure to French. At this point the early immersion students were about seven years old near the end of grade 1 where they had been receiving 100 per cent of their instruction in French, while the late immersion students were about 15½ years old at the secondary school level. The latter group had begun studying French in 20–30 minute daily periods in grade 6 (age 11–12), followed by immersion for 55–70 per cent of the day in grade 8 when they were about 13 years of age. After grade 8, a somewhat reduced portion of the day had been devoted to French immersion.

Comparison of the use of French verbs by the two groups revealed that the older late immersion students were ahead in some, but not all, areas of the verb system. Their advantage over the early immersion students lay in the range of verb vocabulary that they used, and in essentially syntactic areas of the verb system such as the marking of plural number agreement in the verb and the placement of pronoun complements in Object-Verb word order. On the other hand, the grade 1 students were doing as well as the older late immersion students in the area of deictic time distinctions (the expression of past, present and future relative to the time of speaking), and both groups had made equally little progress in using verb distinctions to express aspect in the past or hypothetical modality. In interpreting these findings, it was argued that both maturational and environmental factors had influenced the

results. For example, L2 input in the form of the audiolingual texts that the late immersion students had been using, together with their greater exposure to written text in the L2, appeared to have aided them in precisely those syntactic areas of French where they displayed an advantage over the grade 1 students. Note that number and person distinctions in the French verb are more regularly made in writing than in speaking, and in constructions such as Il l'a fait, the object pronoun is more salient in written French than in standard (European) spoken French. The kind of L2 input that the late immersion students had been receiving was, of course, partly dependent on their greater cognitive maturity relative to the early immersion students who had only recently begun to read.

To investigate the second question concerning the eventual attainment of early immersion students, a group of twelve early partial immersion students was matched with the late immersion group and also interviewed at approximately age 15½. These partial immersion students who, since beginning in grade 1, had had over three times as many hours of French in school as the late immersion students, were found to be superior to the late immersion groups in the range of verb vocabulary they used and in their ability to make use of past and future time distinctions. On other features of the verb system, however, they did not appear in the interview setting to be any further ahead than the late immersion students, although they did surpass the latter on a story repetition task involving the use of a variety of verbs and verb forms. The fact that the early partial immersion students were ahead in the communicatively vital area of verb vocabulary (Lepico, 1980) suggests that their speech might also be rated as more acceptable by native speakers. It is planned to test this hypothesis in further research by having native speakers rate the interviews with the two groups.

One interpretation of the partial immersion students' lack of advantage on some features of the French verb system is that having mastered the system sufficiently well as to be able to make themselves understood to their classmates and teachers, there was no strong motivation to make further rapid development toward native speaker norms. Additionally, it may be the case that the partial immersion students lacked sufficient focused input in some areas of the verb system (e.g. number, aspect and modality) where the target L2 distinctions may not have naturally occurred with enough frequency or saliency in their content-oriented program. A promising area for further research would therefore be to experiment at various grade levels with materials designed to focus specifically on those distinctions that the immersion students had not yet acquired. Such materials would also be designed to provide adequate opportunities for meaningful productive use of such distinctions. That these materials should be communicatively oriented is suggested by a study (Bialystok, 1982) in which it was found that explicit L2 knowledge based on formal instruction did not necessarily lead to an ability on the part of learners to use the relevant L2 features on a communicative task.

Further research into the eventual in-school attainment of early and late immersion students is currently being conducted in the context of a Modern Language Centre project entitled 'Second language maintenance at the secondary level'. The purpose of this project is to evaluate the L2 speaking and writing skills of grade 9 and 10 students from early total immersion programs and compare them with the skills of similar-aged students in late immersion or extended French programs where intensive exposure to French first occurred in grade 6 or 7. The evaluation focuses on the students' ability to carry out communicative L2 tasks and scoring is based on a wide range of features judged to be relevant to successful communication, such as vocabulary use, grammar, the ability to transmit information, appropriateness of register, and use of communication strategies.

The question of whether there were differences in the process of L2 acquisition between the grade 1 early immersion students and the older later immersion students studied by Harley (1982) was investigated with reference to a subsample of six students from each group. The linguistic output of these students suggested that there were strong similarities in the course of L2 development in the two groups. Within the domain of time distinctions, for example, the relative accuracy of different tenses was similar for the older and younger students, almost all of them being most accurate in their use of present forms, and more accurate in their use of the passé composé (conjugated with AVOIR) than in their use of the periphrastic future. However, apparently affected by the L2 classroom input they had received. the accuracy order of periphrastic future and third person plural distinctions was not the same for the two groups, the early immersion students using the future more accurately, while the late immersion students were more accurate in making third person plural distinctions such as viennent, sont. ont fait.

Major similarities were noted in the kinds of errors the two groups of students made, although some types of error were more characteristic of one group than the other, apparently again influenced by the nature of their classroom input. For example, the higher frequency of errors such as [že] (i'ai?) instead of ie, [ile] (il est?) instead of il by the early immersion students indicates a segmentation problem that is more likely to occur in the largely oral context of the initial years of an early immersion program than in the late immersion program where written materials would have helped to clarify word boundaries. On the other hand, the occasional rather stilted use of lexical items such as PLACER instead of the more common METTRE among the late immersion students and of formal nous + -ons forms instead of the more colloquial on + verb stem to express the notion of first person plural suggests a non-native-like influence from written materials in the late immersion program which was absent in the speech of the early immersion students. Such differences attributable to input do not necessarily indicate that the two age groups have approached the learning task in different ways, but rather that their data base has been different. More suggestive of a difference in approach, however, was the finding that relative oral L2 proficiency among the late immersion students was positively correlated with IQ scores, while no significant correlation between interview performance and IQ scores was found among either the grade 1 early total immersion students or among the older early partial immersion students. This suggests that the late immersion program may have fostered a more academic approach to L2 acquisition than the early immersion programs where the kind of skills involved in performance on an IQ test appear to have been less important for relative success in oral communicative use of the L2 verb system.

It is interesting to compare these findings at the grade 1 level with those of a previous study conducted by Swain and Burnaby (1976), who examined the relationship between personality traits in kindergarten (as rated by teachers) and performance on French tests in kindergarten, and grades 1 and 2. Swain and Burnaby found that the traits of sociability and talkativeness, often thought to be associated with L2 learning ability, were not positively correlated with the students' L2 test performance, but that two traits, 'quickness in grasping new concepts' and 'perfectionist tendencies', often were. Not even these two traits, however, were related to oral productive skills on a communicative conversational task, a finding which may be considered consistent with the lack of relationship found between grade 1 students' IQ scores and interview performance in the study by Harley (1982).

5. Conclusions and Implications

The analysis of L2 acquisition in the context of French immersion programs has focused largely on productive oral grammatical skills. It is apparent from the research that the development of grammatical proficiency in these programs is sensitive to subtle influences both from the L1 of the learners and from the L2 input they receive in class.

Clearly it would be helpful to teachers in either late or early immersion programs to have the kind of descriptive information that makes clear the inherent difficulties of the target L2 grammatical system as well as showing where there are differences from the students' L1 that may cause problems. At the same time, teachers need diagnostic tools with which to monitor their students' interlanguage development so that they can plan effective ways of building on their existing skills. Carefully constructed communicative teaching units which focus on particularly problematic L2 distinctions could serve as a useful supplement to existing materials.

The acceptability study conducted by Lepicq suggests at the same time that some errors may be less important to overcome than others, in that native speakers appear quite tolerant of those errors that have little effect on comprehensibility.

64 Birgit Harley

The acceptability of immersion L2 speech depends not only on the students' competence in morphology and syntax, however, but on other skills such as phonology, strategic competence (Canale and Swain, 1980) in maintaining the conversation in French despite gaps in their L2 knowledge, and the ability to vary their output in accordance with the sociolinguistic demands of a situation. Such aspects of L2 acquisition in the immersion context are now beginning to be investigated with respect to speech and writing in both early and late immersion programs. A further interesting area of research that remains to be studied in detail in the immersion context is the development of L2 comprehension skills.

Notes

- 1. With their program of 50 per cent French and 50 per cent English since grade 1, these 15-year-old partial immersion students had had roughly the same number of hours of inschool exposure to French as the early total immersion students in grade 5.
- 2. Note that the gender errors included in this study of error gravity all referred to articles and inanimate nouns. It could be that other gender errors, for example in pronouns referring to human beings, would be judged more severely.

6. CAN WE TEACH OUR STUDENTS HOW TO LEARN?

MARIA FRÖHLICH AND TAHEREH PARIRAKHT

1. Introduction

Most second language teachers have two experiences in common: on the one hand, they encounter students who are 'an absolute joy to teach', and who 'seem to pick up the new language with amazing ease' (Stern, 1975); on the other hand, they often encounter the opposite type of student, namely those for whom the second language learning task is fraught with a multitude of seemingly insurmountable problems and difficulties.

Among concerned language teachers the question of how these poor language learners can be helped is frequently raised. One possible approach is to examine how good learners succeed in learning one or more languages. It has been suggested that language learning strategies and techniques, as developed by successful language learners, should be identified so that this knowledge could then be applied to the unsuccessful learner in helping him/her 'how to learn' (Rubin, 1975; Stern, 1975).

To follow this line of enquiry three studies were carried out in the Modern Language Centre between 1975 and 1982. The first one adopted a case study approach employing semi-structured interviews as the method of enquiry. The second and third studies followed a formal experimental design. This paper will present the main aspects of all three studies and discuss the pedagogical implications of their results.

2. Interview Study

The first study (Fröhlich, 1976) formed part of a two-year investigation entitled *The Good Language Learner* (Naiman *et al.*, 1978). It was designed to investigate the kinds of strategies and techniques successful adult learners employed, as well as the general learning conditions under which they acquired the new language and other factors contributing to their success.

The study evolved from theoretical discussions of what it means to know and learn a language (Stern, 1975) and the limited number of inventories of language learning strategies available at that time (e.g., Rubin, 1975; Stern, 1975). These inventories had been derived from theoretical considerations of language learning and from classroom observation. Very few studies had employed interview techniques as a means of collecting information (e.g., Hosenfeld, 1976; Wesche, 1975). For the purposes of this study, semi-

structured interviews appeared to be the most appropriate method of investigation.

Detailed interviews were conducted with 32 'good language learners' who were either personally known to the interviewers or had been recommended to them as highly proficient in one or more foreign languages¹. Most of the subjects came from the immediate university environment. Among them were a few who were, or had been, involved in second language teaching. Almost all interviewees were born in North America and spoke English as their first language. The subjects were asked to describe the history of their language learning experiences, including the number of languages they had learned or attempted to learn, the age at which the learning took place, the type of learning situation in which they had found themselves, the factors to which they attributed their success in language learning, and the strategies and techniques they had developed and used.

It is still widely believed that our language learning ability tends to atrophy with age, and that consequently younger learners acquire a second language more efficiently than older learners. There now exists considerable research evidence which contradicts this commonly held opinion (e.g., Cummins, 1981a; Ervin-Tripp, 1974; Genesee, 1978c; Snow and Hoefnagel-Höhle, 1978; see also Paper 5). The reports of our interviewees added further evidence. Of the total number of languages in which a high proficiency level had been achieved, 41 per cent were begun later than the normal high school age.

One of the factors entering the complex interplay of variables influencing achievement in second language learning is the learning situation. For the purposes of our study we differentiated between two basic types of learning situations: the formal setting, which generally refers to classroom learning under the direction of a teacher, and the informal setting, in which the language is acquired outside the classroom, by 'immersing' oneself in the target language. The majority of interviewees had started learning another language in a formal setting, usually in school, and had continued at university. However, most of them had realized the need to spend more time in a country in which the target language was spoken. A combination of the two learning settings, either simultaneously or in sequence, was considered to be an important factor in contributing to successful L2 acquisition. By exposing themselves to different learning situations, learners increase their opportunity to acquire many different aspects of the target language and a variety of language skills (see also Krashen, 1976; Krashen and Seliger, 1975).

In the experience of most of the interviewees, the formal instruction they had received focused on grammar, and on reading and writing skills. There was almost no opportunity to practise listening and speaking skills in communicative situations. It was for this reason that the interviewees felt it was absolutely essential to spend some time in the country in which the target

language was spoken, in order to develop those aspects of their competence in the second language which had been neglected in the formal learning setting.

When asked to judge in retrospect to what they attributed their success in language learning, all interviewees mentioned a combination of factors. Ranked first was motivation, followed by 'immersion' into the target language community and a positive attitude towards languages per se or towards the specific language being studied. Among the personality characteristics mentioned by the informants, sociability was regarded as an important factor in learning another language. Lack of self-confidence and inhibition, on the other hand, were named as characteristics having a negative effect on the learning process (see also Brown, 1973).

Although several interviewees indicated that being extroverted facilitated the acquisition of oral skills, it has to be emphasized that not all of our successful language learners considered themselves to be extroverts; nor did they experience language learning as a constant emotional 'high'. On the contrary, feelings of frustration and impatience at their slow progress, also of embarrassment when having to produce 'odd' new sounds were commonly reported. It was further emphasized that learners have to accept their own fallibility, that is, the fact that they are bound to make mistakes. One informant commented as follows:

I am not particularly extroverted; but when it comes to learning a language I think you've got to have a sense of humour, you've got to be able to laugh at your own mistakes, you cannot take yourself seriously.

Persistence and realistic expectations appeared to be the key for coping with these affective demands. Examples of the kind of advice given by many interviewees are as follows:

Persist! There's lots of plateaus . . . Just keep going . . . Be realistic! Take them (the feelings of frustration, etc.) with a pinch of salt and learn a little more of the language.

(Examples from Fröhlich, 1976)

Another factor considered to affect second language learning is aptitude (e.g., Diller, 1981). Although the interviewees were not given any aptitude tests, it was nevertheless of value to tap their own feelings and find out whether they thought they had a gift for languages. The responses varied considerably. About two-thirds of the interviewees ranked their aptitude from 'average' to 'strong'. A few did not know how they would assess their aptitude. One subject pointed out that the crucial factors in language learning were not the possession of aptitude, or 'a gift for language', but personal determination, a willingness to apply oneself to the task and, above all, a strong motivation.

In this context the response of one of the adults interviewed was of particular interest. This subject was a real polyglot. In the course of his interesting life he had learned—or come into contact with—32 languages and had achieved an average-to-high level of proficiency in six of them. This interviewee claimed that he did not have a gift for languages but that he gradually developed a skill at language learning. From the very beginning he would attempt to learn as much as possible about the structure and phonology of the language and, whenever possible, seek out contact with native speakers.

One of the main objectives of the interview study was to identify strategies and techniques which the successful learners had employed. In the course of their language learning careers, all participants in our study had developed strategies and techniques which suited their individual needs and personalities. These strategies and techniques had many points in common, but there were also many differences. Those features which characterized the overall approach of all interviewees can be categorized into five main strategies. Each individual learner implemented these strategies in different ways. The five strategies can be described as 'active task approach', 'awareness of language as a system', 'awareness of language as a means of communication', 'management of affective demands', and 'monitoring of L2 performance'. Explanations and examples for each of these strategies are presented below.

Active Task Approach2

The good language learners (GLLs) actively involved themselves in the language learning task. For some this meant that they accepted the learning situation in which they found themselves. Others changed it to make it more productive and suitable to their needs, for example, by taking different types of language course, or supplementing formal instruction with native speaker contacts.

Many GLLs also engaged in a number of practice activities, either in order to overcome individual problems, or simply to supplement the activities offered in the formal language program. One subject actively pursued the learning of French outside the intensive language course he was taking by reading books and newspapers, and listening to French tapes while driving to work. Another subject, who had difficulty with pronunciation tried to 'isolate behaviourally certain sounds'. She would 'look at people's mouths' and 'then repeat it [the sound] over and over again'. Others developed the habit of soliloquizing, either silently or aloud. And still others found ways of changing the usual purpose of an activity in order to focus on L2 learning. Thus, for example, one subject who was learning French listened to the news first in English and then on the French radio or TV station. Being familiar with the main points of the news enabled her to concentrate on the language itself rather than on the content. In order to acquire colloquial German, another subject worked as a truck driver in Germany: 'I used the day more as a language course'.

The different practice techniques developed by the individual interviewees were frequently quite conventional, such as memorizing vocabulary and drilling grammatical structures. However, the main point illustrated by these examples is that the GLLs were not sitting back passively waiting for the teacher to impose the learning on them. They accepted the responsibility for their progress themselves. If they encountered problems and difficulties they actively sought solutions instead of blaming the teacher and failing to learn anything further.

Awareness of Language as a System

The GLLs developed or exploited an awareness of language as a system. In dealing with language as a system, they explored two main strategies:

- (a) They made effective cross-lingual comparisons between languages which were related, i.e. English, French, German. Although this technique may lead to errors in comprehension and production, it is better—according to one subject—to accept the possibility of error rather than to approach the new language 'like a blank wall'. The same subject advised: 'Try to find everything you can that is related to what you already know, especially in lexical items'.
- (b) They analysed the target language and made inferences about it, and they attempted to make intelligent (not wild) guesses by using structural cues. For example, when learning English as a second language, the knowledge of prefixes and suffixes is extremely useful for the comprehension as well as production of vocabulary. Thus, if the learners know that the suffix -or/er indicates an agent, then they can create nouns from verbs (e.g. write writer, operate operator, etc.) even though they may not have encountered these nouns before.

Awareness of Language as a Means of Communication

The GLLs developed and exploited an awareness of language not only as a system but, equally important, as a means of communication (i.e. for conveying and receiving messages) and social interaction (i.e. by using language appropriately in different social situations).

- (a) In the earlier stages, the GLLs often emphasized fluency over accuracy. They concentrated on speech flow rather than on error-free production: 'The main thing is that you overcome the inertia and use the word and it is not important if you use it absolutely correctly'. In order to express meaning one may have to simplify the language and use circumlocutions.
- (b) GLLs sought out situations in which they had to communicate in speech or writing with members of the target language community.

- 70 Maria Fröhlich and Tahereh Parihakht
- (c) Some displayed critical sensitivity to language use in order not to offend native speakers. One interviewee, for example, memorized courtesy phrases before going to the foreign country.

Management of Affective Demands

The GLLs realized that they had to learn how to cope with the affective demands made upon them by learning another language, and they succeeded in doing so. One subject overcame her inhibitions about speaking by deliberately getting herself into situations where she simply had to use the target language. Others tried to find friends or children who spoke the L2, because friends and children were considered to be more patient and tolerant of mistakes, and more helpful than teachers or strangers.

Monitoring of L2 Performance

The GLLs constantly revised their second language at every stage of learning. They monitored their language by asking for corrections and by looking for necessary adjustments as they were learning new material. They were constantly on the alert, e.g. 'I was on the look-out for clues'; 'I generated sentences . . . If they weren't correct, people around me told me how to say it'.

Discussion of Interview Study

In summarizing the results of the interview study, four major points emerge:

- (a) The case studies of successful language learners demonstrated the uniqueness and individuality of each language learning career. At the same time they identified many common experiences and characteristics. Metaphorically speaking, the five superordinate strategies enabled us to sketch an outline of the good language learner. This outline may then be completed in different colours and with a variety of details. The various possibilities for combining detail and colour reflect the individuality of each learning career and the multitude of ways which can lead to success.
- (b) The interviews produced a realistic picture of what it means to learn another language. The path to success can, at times, be rather steep and thorny. Too many of our students expect immediate success, perhaps lulled into a false sense of security by the seeming ease with which they acquired their mother tongue. As a result, they may easily get frustrated and give up. It may prove useful to discuss with learners their expectations and attitudes towards language learning at the beginning of a language course and, perhaps, report on the experiences of successful language learners. Depending on the learners' proficiency level in the L2, this may have to be done in their first language.

- (c) The interviews further pointed to a complex interplay of factors potentially affecting success in language learning: learner factors such as age, aptitude, motivation, the learning situation and the social context, and the learning processes, for example learning strategies and techniques. In recent years, research has begun to shed light on some of these relationships (e.g., Bialystok, 1982, 1983a; Diller, 1981; Gardner et al., 1976; Stern and Cummins, 1981; Swain and Lapkin, 1982; Tarone 1977).
- (d) Finally, the case studies emphasized the importance of learning strategies and techniques. Good language learners appear to develop these as the need arises; poor learners, however, may require help in finding appropriate ways of approaching the new language and in developing different means to help them overcome specific problems. Subsequent interviews with adolescents studying French as a second language in the regular high school system strongly suggested that it would be useful for teachers and students to discuss different ways of learning. Hopefully, this might 'change classroom language learning from a fairly mechanical routine into a more deliberate cooperative undertaking. Different approaches to learning could be planned and tried out in a more conscious way than has been customary' (Naiman et al., 1978: 103).

3. Strategies for Oral Communication

In view of the potential significance of strategies in the learning process as suggested by the case studies of good language learners, two further studies were conducted between 1979 and 1982. Whereas the interview study elicited introspective and retrospective information about language learning experiences and was thus open to criticism with respect to validity, the following two studies were more tightly controlled and experimentally designed. Both studies addressed themselves, among other aspects, to the following questions: (a) What types of communication strategies do L2 learners employ when attempting to communicate the meaning of items for which appropriate target language vocabulary is lacking? (b) What are the effects of proficiency on the use of communication strategies?

Communication strategies (CS) may be resorted to when communication breaks down, due for example to memory lapses, insufficient structural or lexical knowledge, or little shared knowledge between interlocutors. Although the use of communication strategies occurs naturally in the first language, second language learners may not necessarily transfer these compensatory measures to the second language, possibly due to linguistic and affective constraints. They may prefer to avoid communication altogether, instead of attempting to express an idea with faulty language (see, for example, Tarone, 1977). When appropriate target language vocabulary is

lacking, speakers have to resort to other sources of information in order to compensate for the gaps in their linguistic knowledge. These sources may be knowledge of another language, general knowledge of the world and of the specific physical context, or knowledge of other features of the target language. The strategy of utilizing other sources of information to derive linguistic hypotheses and make 'intelligent guesses' has been referred to as 'inferencing' (Carton, 1971; Bialystok, 1983a). Inferencing can enable the learners to guess the meaning of unknown words when reading a text (Bialystok, 1983a); it can also facilitate their language production by creating words which conform to structural regularities in the target language. These guesses may or may not be correct, but even if they are incorrect, these ventures at communication will most likely elicit feedback and learning will progress.

4. The Picture Reconstruction Study

The study by Bialystok and Fröhlich (1980) on oral communication strategies was conducted with a total of 30 subjects: 16 grade twelve students studying French as a second language in a regular 'core' program' at two different levels of proficiency; and 14 adults enrolled in the intensive Civil Service French Language Training Program in Toronto⁴, these being the most advanced learners.

In order to elicit the use of communication strategies when appropriate target language vocabulary was lacking, a task was designed which provided an incentive for the learner to attempt and not avoid communication. This task stimulated one of the aspects of 'real' communication, that is, the situation where one of the interlocutors is a monolingual speaker of the target language.

In the task developed for the study, the subject was asked to describe a picture in such a way that the interlocutor (who could not see the picture) would be able to reconstruct it accurately with the help of cut-out objects which were placed on a felt board. The picture depicted a Christmas scene with a girl hanging up a stocking over the fireplace. The objects to be described were two lighted candles, a clock, fireplace implements (shovel, tongs, bellows), a stool, a stocking, and a hair ribbon. In addition to the objects shown in the picture the experimenter also had a number of distractor items available.

During the task, which was administered individually, the experimenter reacted non-verbally to all descriptive attempts on the part of the subject by selecting either the appropriate object, an incorrect item, or no object at all, depending upon the comprehensibility of the subject's instructions.

Most participants did not know the appropriate lexical term for the selected target items. Thus the task demands were more or less equivalent for all

subjects, although the subjects differed in proficiency. There were almost no unknown items which the subjects did not attempt to describe. The task was sufficiently interesting and stimulating for all participants to attempt communication.

The language elicited through the picture reconstruction task was analysed in terms of the types of strategies employed by the learners to communicate the meaning of the target items. The CS described below⁵ were conceived within a framework which distinguishes three sources of information that can be exploited for inferencing. They are as follows:

- I. Native language (L1)
- II. Target language (L2)
- III. Paralinguistic features

L1-based strategies included language switch, foreignizing, and transliteration. Language switch refers to the insertion of a word or phrase in a language other than the target language, usually the learner's native language, for example:

1. Il y a deux candles sur la cheminée.

(There are two candles on the fireplace).

Foreignizing native language items is the creation of non-existent or contextually inappropriate target language words by applying L2 morphology and/or phonology to L1 lexical items, for example:

- 2. Il y a deux /kadel/ sur la cheminée.
- 3. Il v a une cloche sur la cheminée.

In example 2 above, the learner attempts to create a French word from the English word 'candle' by making it sound French. In example 3, cloche is formed by applying a French pronunciation to the English word 'clock'. The result is a word which exists in French (church bell) but is incorrect in the context. It is possible that the informant knew that a word cloche exists in French but was uncertain of its meaning, and since it seemed to be derived through a phonetic manipulation of English, s/he tried it out in the context.

Transliteration reflects the use of L2 lexicon and structure to create a (usually non-existent) translation of an L1 item or phrase, such as *place de feu* for English 'fireplace' or *pièce de temps* for 'timepiece'. Although foreignizing and transliteration strategies incorporate elements of the target language, they originate in native language knowledge.

L2-based strategies included semantic contiguity, description, and word coinage. Semantic contiguity is defined as the use of a single lexical item which shares certain semantic features with the target item. In our task, for example, tabouret (stool) was frequently replaced by chaise (chair), and horloge (clock) by montre (watch). In these cases the learner was selecting a word which more or less approximated the unknown concept.

Description has three subclassifications which indicate the information which

has been incorporated into the description. These three are general physical properties, specific features, and interactional/functional characteristics. The general physical properties refer to universal features of objects, that is, colour, size, material and spatial dimension, the latter including the concept of shape, such as 'It is round', as well as location within space, e.g., 'It is something that hangs on the wall'. Specific distinguishing features are usually marked by the surface structure has, e.g., 'It has four legs'. Interactional descriptions indicate the functions of an object and the actions that can be performed with it.

These different types of description are usually used in combination and often accompany semantic contiguity. Thus 'tabouret', for example, could be described as *Une petite chaise de bois, pour reposer les jambes quand on est fatigué; elle n'a pas de dos* (A small chair made of wood, on which to rest your legs when you are tired; it does not have a back). This description combines semantic contiguity (*une chaise*), size (*petite*), material (*de bois*), function (*pour reposer les jambes*...), and a specific feature (*elle n'a pas de dos*).

Word coinage, the last of the L2-based strategies, is the creation of an L2 lexical item by selecting a conceptual feature of the target item and incorporating it into the L2 morphological system. For example, 'clock' was referred to as 'heurot', the noun suffix -ot being attached to heure meaning 'time'. This strategy usually produces items which do not exist in the target language or, if they do, have a contextually inappropriate meaning. Thus the noun souffleuse, which was given to denote 'bellows', can be categorized as an attempt on the learner's part to create a noun from souffler, 'to blow'. This coined word does exist in French but means 'prompter in a theatre'. Such coincidences may fail to help, or even impede, communication.

The third type of communication strategy employed during the picture reconstruction task was paralinguistic. Gestures or sounds occasionally accompanied an utterance or were used to substitute for a verbal reference to a target item. No systematic analysis was performed on these strategies. The oral communication strategies are summarized in Appendix A (p. 80).

As previously mentioned, the above strategies frequently occurred in combination. In other words, to achieve the desired communicative effect, that is comprehension of the target item being talked about, the speakers applied the principle of cumulative information—the more information offered about an item, the greater the chance of being understood.

Not all the strategies listed are equally effective for this specific communicative task, particularly L1-based strategies. When using these strategies, the speakers operate on the assumption that the interlocutor may have some knowledge of their mother tongue. As the analysis of the proficiency data for the high school students showed, the more proficient

group used fewer L1-based strategies than did the less proficient group. However, L2 proficiency did not determine the selection of specific strategies (for more details on the effect of proficiency on CS use, see Bialystok, 1983b).

Discussion of the Picture Reconstruction Study

Irrespective of the question of effectiveness of different strategies for communication, the picture reconstruction study has important pedagogical implications. Most of the students whether of high or low proficiency succeeded in fulfilling the task requirements, despite frequent initial negative expectations. The subjects were often surprised and then, of course, pleased about their success. They also expressed a wish for tasks like the picture reconstruction task to be used as classroom exercises. Too frequently the emphasis in classroom interaction is on accuracy of the linguistic code with few (if any) activities which challenge the student to resort to every possible means of conveying information, that is to communicate. Tasks of the type used in this study provide the opportunity for unpredictable and unpremeditated language use, and for purposeful listening—the listener has to use the information given and do something with it. If the listener does not know the picture in advance a genuine information gap between the interactants is created, as is usually the case in authentic communicative situations outside the classroom. Thus the learner is getting practice in developing fluency in the communicative processes involved in real language use (cf. Johnson, 1982: 147ff.). At the same time, the learners' level of interest and their motivation to communicate is likely to increase, an effect which would be pedagogically very desirable.

5. The Concept-identification Study

The third study (Paribakht, 1982, 1983) investigated a number of aspects of the use of communication strategies by non-native and native speakers of English. Apart from looking at the types of CS employed for communication, this study, among other factors, also examined the relationship between the speakers' use of CS and their level of target language proficiency.

The study was conducted with three groups of 20 subjects each: two groups of Persian ESL students at two distinct levels of proficiency, and a group of native speakers of English as the comparison group. The grammatical proficiency level of the students was measured by the Michigan Test of English Language Proficiency. The oral proficiency levels of the learner groups were then determined by the IEA (International Educational Achievement) Test of Proficiency in English as a Foreign Language.

The communicative task designed for the study was a concept-identification task comprising both abstract and concrete concepts. Abstract concepts were

included in order to obtain a more comprehensive picture of the types of CS used than Bialystok and Fröhlich's study allowed. Examples of the concepts selected for this study are as follows:

Concrete nouns Abstract nouns Abacus Fate Hammock Martyrdom Flattery Lantern Scarecrow Success Seesaw Honesty Pride Funnel Thimble Courage Pomegranate **Faithfulness** Justice Dust-pan Palanguin Patience

In order to make the experimental task as communicative as possible, each subject had a different native-speaker interlocutor who did not know in advance which target item the learner was attempting to communicate. Thus there was an information gap between interlocutors as is usually the case in genuine communicative situations. Furthermore, the task allowed a natural interaction between the subjects and their interlocutors, which is an important aspect of communication. The conversation between the subjects and their interlocutors continued until the native speakers either identified the target concept, or the subject gave up.

Not all of the communication strategies elicited could be adequately described using existing typologies (e.g., Tarone, 1977; Bialystok and Fröhlich, 1980). This was due to the nature of the target items (both concrete and abstract nouns), the nature of the task, and the diversity of subject groups. Therefore, a more comprehensive and detailed taxonomy had to be developed drawing on previous work, but essentially deriving from the new data.

The strategies were classified into four major communicative approaches on the basis of the type of knowledge utilized by the speakers in performing them. They are as follows:

- I. Linguistic approach
- II. Contextual approach
- III. Conceptual approach
- IV. Mime

The linguistic approach exploits the semantic features of the target item, and reflects the speaker's formal analysis of meaning. This approach can be divided into three categories—semantic contiguity, circumlocution, and metalinguistic clues. As in Bialystok and Fröhlich's study, the strategies under 'semantic contiguity' exploit items which are semantically related to the target item, by referring to a superordinate noun (example 4 below) or by

expressing a positive or negative comparison (examples 5 and 6):

- 4. This is a receptacle (decanter)
- 5. It is like the victory (success)
- 6. It's not a same as computer (abacus)6

Circumlocution basically corresponds to what was referred to as 'description' in the picture reconstruction study. It is an attempt to describe the characteristics of a concept. However, a much greater number of subcategories were differentiated than was possible in the previous study. Thus, in addition to physical descriptions, for example, reference can be made to locational and historical properties of the target concept. Examples 7 and 8 illustrate these strategies:

- 7. It was used maybe in Arab countries (palanquin)
- 8. They used to use, wear around their neck in, in the time of Henry VIII. I think (ruff)

In using the strategy of metalinguistic clues, the speaker gives metalinguistic information on the target item, as in the following attempt to communicate the abstract concept 'martyrdom':

9. It's actually a noun with the suffix (martyrdom)

The strategies falling under the second approach provide contextual information about the target item rather than referring to its semantic features. Examples of this approach are the use of linguistic context and of target language idioms and proverbs as in examples 10 and 11 respectively:

- 10. When you sweep the floor, you gather up the dust with . . . (dust pan)
- 11. It comes before a fall (pride)

The third approach, categorized as conceptual, exploits the speaker's knowledge of the world and of particular situations. This knowledge may be affected by the speaker's social and/or cultural background. One of the three strategies identified within this category is that of exemplification. Exemplification is the speaker's reference to examples, such as people, places and events, that correspond to the target concept, as in example 12:

12. A soldier in a war definitely needs it (courage)

The final approach, mime, closely corresponds to the paralinguistic features mentioned by Bialystok and Fröhlich. As mentioned previously, mime may be used to replace verbal output or simply to accompany it.

All four approaches were employed to communicate both concrete and abstract concepts. However, several of the constituent strategies were specific to either concrete or abstract nouns (see Appendix B. p.81 for a summary of the CS types; for a detailed presentation and illustration of all the communication strategies, see Paribakht, 1982).

Discussion of the Concept-identification study

The communication strategies identified in the concept-identification study reveal that for solving communication problems speakers do not only rely on their knowledge of the second language but also utilize other knowledge sources, such as contextual, world, and paralinguistic knowledge.

The learners in this study used both L1-based and L2-based strategies, although the more advanced learners tended to abandon the former strategies and adopted more of the latter type. As the analysis of the data showed, however, the differences among groups in terms of the types of CS they used were minimal. Subject groups, including native speakers, adopted essentially the same types of strategies and communicative approaches.

The results further suggest that native speakers and advanced learners, who have developed adequate levels of linguistic and cultural knowledge in the L2, may not encounter communication problems as frequently as low-proficiency learners and consequently may not have to use CS as often. However, when such problems arise, they appeal to the same strategies and draw upon similar knowledge sources in finding a solution.

Although speakers of different L2 proficiency levels draw upon similar knowledge sources to solve their communication problems, they use different proportions of these sources to do so (for more details, see Paribakht, 1982). To overcome lexical difficulties at the earlier stages of L2 learning, learners draw more often on knowledge sources such as world and paralinguistic knowledge in order to compensate for the limitations of their more specific L2 knowledge than they do at more advanced levels of proficiency.

The Paribakht study suggests that all adult speakers share a certain ability referred to as 'strategic competence'. This is consistent with the position put forward by Canale and Swain (1980), in which the authors refer to strategic ability as one of the components of communicative competence. Strategic competence seems to develop in the speaker's first language. The subjects in the concept-identification study were able to transfer their strategic ability to the communicative situation created for the purpose of the experiment. It is possible that learners are able to transfer their strategic competence to all situations in which they feel motivated to communicate and in which there is a reason for the sharing of information. These conditions are frequently not met in typical classroom practice, for example when the students are engaged in question-and-answer work on a text that everyone has read or a picture that everyone can see.

The results of the concept-identification study suggest criteria for the design, sequencing and presentation of materials in the ESL classroom (see Paribakht, 1982 for more detailed discussion). Since the communication strategies derived from this study were based on the type of knowledge utilized by the speakers, it was possible to identify the semantic, as well as the

typical syntactic patterns, required for their implementation. These linguistic manifestations of CS can serve as a basis for developing teaching materials with the aim of preparing second language learners for survival in different communicative situations. An appropriate sequence for the presentation of such material can be based on the frequency of their use in the negotiation of meaning by L2 learners and native speakers.

6. General Conclusions

In this paper we have discussed three studies on strategies: one case study focusing on general learning strategies of successful second language learners, and two experimental studies investigating specific communication strategies used in the absence of appropriate target language vocabulary. All the studies point to the significance of strategies or 'strategic competence' (Canale and Swain, 1980) in the process of second language learning.

It is important for learners to realize that they can and should play a very active role, that they have many resources which they can bring to the often difficult task of acquiring another language. To increase learners' awareness about the contributions they can make may be one of the tasks a second language teacher should undertake. This may be particularly important in so-called 'foreign' language situations, i.e., where the target language is not spoken in the community and as a result strategic competence cannot be utilized outside the classroom. In such cases the teacher has to create life-like situations and simulate the conditions the learners might meet outside the classroom.

During informal observation in 'foreign' language classes it has been noticed that learners often seem unwilling to avail themselves of opportunities to inference, to produce improvised language and to use a variety of strategies, and are perhaps more inhibited than they would be in real communicative situations outside the classroom. In accordance with the views expressed in the literature on communicative language teaching we suggest that all language classes (second as well as foreign) should provide opportunities for the development of all types of skills, and for the use of communicative strategies. The use of strategies such as circumlocution or word coinage does not mean that learners should never strive towards accurate lexical knowledge, but rather that they should develop resourcefulness in the use of appropriate survival techniques when their target language proficiency breaks down.

From a research point of view, we believe that there is still need for further studies on the learning techniques employed by students, particularly on their use of communication strategies. Most investigations in this area have involved the use of single lexical items. Learner strategies should also be examined in relation to other dimensions of language, such as syntax and sociolinguistic appropriateness. Furthermore, because of the interactional

nature of communication, the study of communicative strategies has to consider both productive and receptive strategies. Finally, in view of the fact that communication occurs both in the written and the spoken medium, future research should also examine the effect of modality differences on the use of learner strategies.

Notes

- 1. No proficiency tests were given to the subjects. Instead, in the course of the interview, they were presented with a chart describing various proficiency levels in the four skills of speaking, listening comprehension, reading and writing and were asked to rate their proficiency levels accordingly.
- 2. For more detail on the strategies and techniques see Naiman et al., 1978: 13-16.
- 3. In the core French program in Ontario, French language is the subject of instruction. At the grade 12 level students obtain approximately 120 minutes of instruction per week.
- 4. The Civil Service French Language Training Program is a federally funded intensive program for civil servants whose positions within the government offices have been declared bilingual. There are programs available for both francophone and anglophone civil servants.
- 5. Description of strategies taken from Bialystok and Fröhlich, 1980.
- 6. All examples are direct quotations.

Appendix A

Summary of Oral Communication Strategies (Bialystok and Fröhlich, 1980)

- I. L1/Other-based strategies
 - 1. Language switch
 - 2. Foreignizing
 - 3. Transliteration
- II. L2-based strategies
 - 1. Semantic contiguity
 - 2. Descriptions with reference to:
 - (a) General properties:
 - (i) Colour
 - (ii) Size
 - (iii) Spatial dimension
 - (iv) Material
 - (b) Specific features
 - (c) Interactional/functional characteristics
 - 3. Word coinage
- III. Paralinguistic strategies
 - 1. Gestures
 - 2. Sound representations

Appendix B

Summary of Communicative Strategy Types (Paribakht, 1982)

Note: The description of each category is accompanied by an indication of the related item type (i.e., CN = Concrete nouns, AN = Abstract nouns).

- I. Linguistic approach (CN + AN)
 - A. Semantic contiguity (CN + AN)
 - 1. Superordinate (CN + AN)
 - 2. Comparison (CN + AN)
 - (a) Positive comparison (CN + AN)
 - (i) Analogy (CN + AN)
 - (ii) Synonymy (CN+AN)
 - (b) Negative comparison (CN + AN)
 - (i) Contrast and opposition (CN + AN)
 - (ii) Antonymy (AN)
 - B. Circumlocution (CN + AN)
 - 1. Physical description (CN)
 - (a) Size
 - (b) Shape
 - (c) Colour
 - (d) Material
 - 2. Constituent features (CN + AN)
 - (a) Features
 - (b) Elaborated features
 - 3. Locational property (CN)
 - 4. Historical property (CN)
 - 5. Other features (CN + AN)
 - 6. Functional description (CN)
 - C. Metalinguistic clues (CN + AN)
- II. Contextual approach (CN + AN)
 - A. Linguistic context (CN + AN)
 - B. Use of target language idioms and proverbs (AN)
 - C. Transliteration of L1 idioms and proverbs (CN + AN)
 - D. Idiomatic transfer (CN + AN)
- III. Conceptual approach (CN + AN)
 - A. Demonstration (CN + AN)
 - B. Exemplification (CN + AN)
 - C. Metonymy (AN)
- IV. Mime (CN + AN)
 - A. Replacing verbal output (CN + AN)
 - B. Accompanying verbal output (CN)

7. MODULE MAKING RESEARCH

PATRICK ALLEN, JOAN HOWARD, REBECCA ULLMANN

1. Introduction

Modulemaking research began in the Modern Language Centre with the establishment of the French as a second language (FSL) modules project in 1969. During the fourteen years of its existence this project has established a set of procedures for the construction and evaluation of modular second language teaching materials, and has published 25 modules for use in elementary and secondary FSL programs. Ten years later, in 1979, the English as a second language (ESL) modules project was established with the aim of providing supplementary subject-related materials for use in Ontario high schools. So far this project has published four modules, with four at the first draft stage and another two in preparation. As is to be expected, FSL modules and ESL modules have a great deal in common, but they also provide some significant points of contrast. The purpose of this paper is to describe the two projects in order to provide a basis for comparison, and to summarize what we have learned as a result of our experience in modulemaking during the past fourteen years.

2. FSL modules

An overview of the Project

The concept of FSL modules grew out of a concern with the trend in second language curriculum development during the 1960s towards large sequential programs based on the audiolingual approach. These programs stressed the development of grammatical competence and tended to overlook the need for substantive content. Their methodology was aimed at developing automatic responses primarily through the use of language in drills, and their format was rigid due to an interlocking and fixed sequential structure.

The FSL modules project suggested an alternative, modular, approach to L2 curriculum design. Instead of large sequential programs, it advocated the development of small independent sets of materials, each one with a well-defined aim, which would provide flexibility in program organization and respond to individual student and teacher needs. The project also emphasized the importance of substantive content which would reflect the concerns and interests of second language learners and lead to meaningful language use within the classroom setting. The approach suggested by FSL modules implied that a focus on language form was a necessary but not a

sufficient condition for L2 learning. Worthwhile content and interesting communicative activities were also seen as essential for the curriculum. Without these aspects, we believed, second language programs would not succeed in making a long-lasting educational impact.

The specific purpose of the project was to provide immediate assistance to teachers by preparing supplementary materials for current French as second language programs. Although the modules have been used in immersion and extended French programs, they were primarily intended for core French programs in which French is taught within a limited time frame: 20-40 minutes at the elementary level, 40-75 minutes at the secondary level. It was also the intention of the researchers to encourage an interest in alternative methodological approaches which could lead to more authentic communication within the L2 classroom setting. In addition, the project set out to demonstrate procedures for materials development that stressed the need for research on the information contained in the curriculum, and for the evaluation of the materials prior to publication.

A large-scale study of FSL teachers at the outset of the project indicated a growing need for materials containing authentic contemporary information about 'la francophonie au Canada', in a format which was readily usable by students and teachers in the classroom. This survey determined the direction the project was to follow with regard to topic selection, thematic development and module format.

A Broadened Curriculum Framework

The concern of the FSL modules project for more substantive content and more authentic communication in the classroom has led to the development of a comprehensive curriculum framework which proposes a broader context for L2 teaching and learning. The need for a broader pedagogical context and for more emphasis on natural communication is reflected in the current literature on second language pedagogy (Brumfit and Johnson, 1979; Canale and Swain, 1980; Krashen, 1982) and in the effort to achieve more effective communication via new syllabuses and methodological approaches (Wilkins, 1976; Breen and Candlin, 1980; Johnson, 1982). The proposed framework is based on the view that a major potential for achieving communication in the L2 classroom is overlooked if one focuses too exclusively on the formal language domain. A more multi-dimensional concept of the curriculum is needed. A brief summary of the framework is given below. More details are to be found in Ullmann (1982b) and Stern (1982).

In the FSL curriculum framework we have defined 'curriculum' and 'syllabus' as distinct concepts. 'Curriculum' is used as a general term for the entire organized teaching plan of a subject, while 'syllabus' refers to a sub-area or smaller division of the curriculum. A curriculum, therefore, can consist of a number of syllabuses, as indicated in Figure 7.1.

Content of L2 curriculum	Objectives of a second language curriculum				Teaching strategies
	Proficiency	Knowledge	Affect	Transfer	
Language syllabus					Formal study and practice
Communicative activity syllabus					Functional activities (communicative)
Culture syllabus					Formal study (knowledge about) Functional activities (experiences)
General language education syllabus					Spontaneous or planned
	Key: Major Minor	/// 4		<u> </u>	or pearmed

Figure 7.1: A curriculum framework for second language acquisition.

The content of the L2 curriculum framework seen in Figure 7.1 is expressed as four syllabuses: a language syllabus which deals with the descriptive aspects of language including grammar, speech acts, notions and functions; a communicative activity syllabus which parallels the descriptive language syllabus and provides opportunities for natural, unanalysed language use; a culture syllabus which provides an authentic context for the communication of ideas and information within the second language learning setting; and a general language education syllabus which provides a place for the discussion of important aspects of language and language learning as an integral part of the second language curriculum.

Each syllabus mentioned above is characterized by four major objectives with varying degrees of emphasis. These objectives or 'student learning outcomes' are referred to as proficiency (understanding of and ability to communicate in the L2), knowledge (specific experience with and knowledge of a target language and its people), affect (positive attitudes towards the L2 and towards learning the second language), and transfer (general knowledge about language and language learning, the ability to apply L2 learning strategies in new settings, and the ability to apply knowledge, attitudes and skills learned in the L2 setting to other subject areas of the curriculum). In Figure 7.1 these objectives are arranged from the most language specific to the most general. Proficiency, knowledge and affective objectives apply to the specific target language setting. Transfer has a high degree of generalizability to other language learning situations and to settings outside the domain of language. Affect is concerned with the positive attitudes and values one wishes to see develop in second language students. This objective can be applied to all areas of the curriculum.

The four syllabuses are considered as closely integrated entities which together form the basis for an expanded L2 curriculum framework. Likewise, the objectives which have been presented separately for discussion should be thought of as being integrated in the language teaching process.

The four objectives relate to the content syllabuses in terms of a varying focus. Thus, while the proficiency objective forms the major focus of the language syllabus it is also an appropriate objective for other syllabuses in the framework, although in these cases it may have a lower priority. Equally, while in our view knowledge is the central objective of the culture syllabus, affect, transfer and proficiency are also relevant, although they do not constitute a major focus. The use of dark shading in Figure 7.1 illustrates the variable focus aspect of the FSL curriculum model.

We believe that the multi-dimensional second language curriculum framework described here has considerable potential. Taken as a whole, the framework can provide more flexibility for the L2 curriculum and a greater variety of second language learning experiences for the student. In addition, each syllabus can provide clearly stated objectives to guide the development of an enriched methodology. For example, the language syllabus as defined in our framework implies the use of more formal study and practice strategies, whereas the communicative activity syllabus suggests a more functional or experiential approach to L2 teaching. It is hoped that an enriched syllabus content and methodology will in turn be reflected in improved language teaching materials.

Application of the Curriculum Framework

The multi-dimensional framework has been used by the FSL modules project in its attempts to broaden the L2 curriculum base. During the past fourteen years the project has developed a number of prototype modules which relate in particular to the culture and communicative activity syllabuses discussed above. The modules make explicit the types of materials and methods implied by these syllabuses. Since the language syllabus is the most highly developed aspect of FSL curriculum planning it is not surprising that the majority of FSL programs and curricula currently being used promote the development of grammatical competence. However, as indicated in the current literature (for an overview see Canale and Swain, 1980) grammatical competence does not necessarily lead to communicative competence on the part of the learner. It is now more generally accepted that curriculum content should be of interest to students and should be perceived as being relevant and worthwhile. Furthermore, it is claimed that such input should be manner which makes the content 'comprehensible' to students (Krashen, 1982).

The FSL modules project proposes that the criteria of relevance, usefulness and comprehensibility can be met, at least in part, by a study of the culture of the target language group. Culture teaching is an important area of the second language curriculum which is too often overlooked as a source of 'comprehensible input' in actual classroom practice. Culture can provide a forum for a great deal of communicative language development. It can provide an area for the emotional and intellectual student involvement which

is needed to stimulate language learning (Nemetz-Robinson, 1981). Similarly, activities which are inherently worthwhile can be educationally stimulating and can promote the development of communication in the L2 classroom. The FSL project has, therefore, developed learning materials which focus on culture and communicative activities. In essence, the project adopts a thematic and activity approach to promote the development of communicative competence on the part of the student. All the modules produced by the project have been based on the careful documentation of linguistic and substantive content, and all have been systematically evaluated. Extensive research is carried out to ensure the accuracy and authenticity of the information in the modules. Wherever possible first-hand information and original sources are used.

We have always assumed that systematic evaluation of the materials prior to publication is an essential part of module development. Certain aspects of the formative evaluation procedures used by the project relate to the framework and guidelines for materials evaluation discussed in the *Handbook of Curriculum Evaluation* (Lewy, 1977), and have been refined by the project as a result of practical experience over a number of years. A developers' questionnaire assists the researchers in deciding on testable objectives and on an appropriate evaluation scheme for each module. This is followed by pilot trials during the draft stage of module development. The pilot trials may be conducted by members of project staff or by volunteer test-teachers. Teacher and student questionnaires are often used at this stage although, in the case of some modules, the pilot trials may suffice.

Once the revisions suggested by the pilot trials have been made, the module is sent out for test-teaching in schools throughout Ontario. The instruments adapted to the module during the pilot phase serve as a basis for evaluation at this stage. Teachers and students are asked to rate the components, content and activities of the module in terms of their appropriateness, usefulness, interest, and degree of difficulty. Teachers also provide information about classroom characteristics and the activities carried out during the teaching of the module.

The extensive evaluation procedures used on the project help us to determine how adaptable the modules are to various teaching situations, and indicate whether the modules are providing adequate comprehensible input which will stimulate a genuine desire to communicate. The results of the evaluation are incorporated in the final version of the materials prior to publication.

Prototype FSL Modules

(a) The culture focus

The FSL modules project has developed many materials which focus on aspects of French-Canadian culture. One such module is René Lévesque et le

séparatisme. This culture module for senior FSL students is organized in a way which is consistent with the principles suggested by McNeil (1981) in his discussion of horizontal curriculum organization. Since the module aims to integrate Canadian studies with French instruction, the treatment of content is interdisciplinary and crosses subject-matter boundaries. The module uses contemporary and historical information to promote discussion on issues which are perceived by senior students to be socially relevant and of direct personal concern. Information about English-French relations in Canada. Ouebec separatism, and the nature of Canadian unity is made available in the module in a print and multi-media format. The essence of René Lévesque as the 'porte-parole' of the separatist movement in Quebec is captured through authentic visuals, taped speeches, and written texts. The evolution of Lévesque's viewpoint is presented along with the development of contemporary Ouebec separatism through filmstrip and synchronized tape. This approach personalizes the complex issues raised by the separatist movement and makes the content of the module more accessible to the learner. Original documents in a student handbook present alternative views for students to consider as they explore the issues. The handbook also provides a brief historical overview against which students can examine the contemporary social and political situation in Canada.

The materials in the module are challenging because they contain no readymade answers. Their open-ended quality is conducive to question and debate. Students are required to search for meaningful answers through informed discussion and reflection. For example, the following questions are used in the module to explore the Canadian conscription crisis of 1917:

Etes-vous d'accord avec la position d'Henri Bourassa selon laquelle la première guerre mondiale était la guerre de la Grande-Bretagne et non pas celle du Canada? Pensez-vous qu'un citoyen soit dans l'obligation de servir son pays en temps de guerre? Jusqu'à quel point pensez-vous que ceci était bien fondé en 1917?

It is evident that this cultural module provides a forum for a great deal of communicative language development. It helps create a classroom learning environment in which the target language is used to share ideas and to investigate current political concepts and issues. As a result it provides an infusion of up-to-date content material into FSL instruction at the senior level.

(b) The communicative activity focus

It is well-known that ice hockey is one of Canada's most popular pastimes. Youngsters are familiar with all aspects of the game and can often recount interesting and very detailed information about their favorite teams and players. Le Hockey, an FSL module for junior grades, builds upon the knowledge which students already have about the sport. This communicative activity module consists of two language games: a card game and a picture recognition game. It also contains a simulated hockey broadcast on tape.

Students practice newly acquired French vocabulary and structures within the context of the language games. For example, the card game simulates the challenge of the real hockey experience. To succeed (i.e., to score a goal) students must understand and use 32 specific items of vocabulary and structure. Students master these items readily, in part because the card game is well illustrated, and in part because the students are highly motivated. They feel challenged by the game. French becomes an important tool for their success. Language is used extensively throughout the activity. Students request information, express joy, indicate dismay, give explanations and provide advice—all within the context of this communicative activity.

Language learning is reinforced by a picture recognition game which helps the students to use and refine the French they have already encountered when playing the card game. It consists of a series of pictures arranged on a grid. The teacher selects a vertical or horizontal line from the grid and reads aloud a series of descriptive sentences which correspond to the line, without pausing. The teacher imitates the intonation of a play-by-play hockey broadcast as closely as possible. Students must indicate the sequence of pictures which corresponds to the line read aloud by the teacher. Teachers may vary the level of language difficulty for each line by adjusting the complexity and length of the French sentences.

Le Hockey as a prototype of communicative activity materials demonstrates that real communication is possible at an early stage in language learning even though instructional time may be limited. The success of these materials reinforces the importance of exploring more fully the implications of an experiential and activity approach. The materials also demonstrate how effective it can be to enrich the themes and content of L2 teaching by taking into account the personal interest of individuals, and by utilizing the knowledge that students themselves bring to class.

3. ESL modules

Theoretical Background

As we have already indicated, ESL modules have a great deal in common with the French modules project described in section 2. The need for ESL modules arises from the fact that, as a result of increasing immigration, there are a large number of students in the Ontario school system who require special training in English as a second language. These students must learn the rules of English grammar and, at the same time, they must develop a set of communicative skills in order to complete the work required in other areas of the school curriculum. Furthermore, as the number of special ESL classes in the province declines as a result of budget cuts, ESL students are being integrated earlier into regular subject area classes. The responsibility then falls on the classroom teacher or subject area specialist to assist these students in coping not only with the requisite content material but also with the difficulties of English language use. Given this situation, there is a need

for supplementary ESL materials which will provide training in English language skills in the context of other school subjects. Bearing in mind the variety of problems faced by teachers, and also the need for maximum flexibility in the planning of courses, we decided that a modular format would constitute the best approach. An advantage of adopting the modular format was that we would be able to benefit from the experience of the French modules project, which was already established in the Modern Language Centre.

A major influence in the development of ESL modules has been the Council of Europe approach to communicative language teaching, represented by the work of Wilkins (1976, 1981), van Ek (1975), Trim et al. (1980) and others. According to Wilkins, it is possible to classify curriculum types according to the priority which is given to different criteria. A grammatical curriculum is one which accords highest priority to formal linguistic criteria and which sees the structure of language teaching as being principally provided by an ordered sequence of grammatical categories'. A functional/notional curriculum, on the other hand, 'would seek to change the balance of priorities by placing emphasis on the meanings expressed or the functions performed through language' (Wilkins, 1981:83). In a grammatical curriculum the basic unit of instruction is the sentence with its constituents noun phrase, verb phrase, determiner, auxiliary, adverbial, etc. In the functional/notional approach proposed by Wilkins, the teaching objectives are expressed not in formal grammatical categories but in terms of the language user's thoughts, attitudes and intentions. Many of these intentions are expressed by communicative functions such as ordering, requesting, instructing, advising, qualifying and inviting. Other intentions are expressed by semantico-grammatical categories, or notions (e.g., the concepts of time, quantity, location) or by modal meanings such as probability, certainty and possibility.

Whereas in the audiolingual method the first step had been to select and arrange the learning items structurally, and then to devise a means of presenting them through contextualization, in a functional/notional curriculum this process is reversed. First the situations in which the target language is to be used are defined, then the concepts and functions which the performer is most likely to employ in these contexts are identified. Finally, the grammatical, lexical and phonological forms which are typically used by native speakers to express such concepts and functions are specified. Because there is no one-to-one correspondence between language forms and the concepts they express, the resulting materials are functionally systematic but grammatically diversified. From the communicative, language-as-use point of view this is regarded as appropriate, since in the classroom—as in real life—'what people want to do through language is more important than the mastery of language as an unapplied system' (Wilkins, 1976:42).

In order to determine where ESL modules should be located on the

formal-functional continuum it is useful to distinguish between three approaches to second language teaching which are currently receiving attention in the literature. In the fairly recent past, there was a tendency to assume a simple two-way contrast between structural 'skill-getting' approaches and functional 'skill-using' approaches to language curriculum design (Rivers, 1968). Thus, in the same year that Wilkins' influential Notional Syllabuses appeared, C. J. Dodson was proposing two 'levels', or perspectives, on second language learning: a medium-oriented aspect where formal features of the language are the target of the learning process, and a message-oriented aspect where attention moves away from the language itself and 'where language is made use of to help the learner to satisfy his immediate needs in the process of living' (Dodson, 1976:80).

More recently, it has been suggested that, rather than confine ourselves to a discussion on two levels, we should consider the possibility of developing a more comprehensive. three-level approach, in which the principal components will correspond to (a) a structural-analytic. functional-analytic, and (c) a non-analytic, or experiential view of language (Stern, 1980; Allen, 1983). In this framework, the structural-analytic view corresponds to Dodson's medium-oriented level, and the non-analytic experiential view corresponds to his message-oriented level. functional-analytic view of language which we have adopted in ESL modules is located near the centre of the continuum and constitutes an essential link between the two extremes, since it is typically concerned with the *interaction* between language as medium and language as communication. In terms of the three-level model outlined here, the ESL module materials can be seen as representing a controlled, functional-analytic approach to communicative practice, which aims to extend and activate the student's structural knowledge, and serves as a preparation for the wholly spontaneous use of language at a later stage.

Language courses of the structural-analytic type usually concentrate on establishing a repertoire of idealised grammatical patterns which it is hoped the learner will be able to utilize in the widest possible range of circumstances. Such courses, which are often described as providing 'general' or 'common core' English, do not have to be related to any particular setting, or area of language use. A functional language course, on the other hand, has to be organised in terms of the purposes for which people are learning language. It follows that an essential first step in curriculum design is to analyse the needs of the group of students for whom the course is intended. At the high school level, for example, many ESL students need to learn English, not as an end in itself, but as a tool for attaining proficiency in another school subject. In order to define the terminal behaviour required for such students at the level of communicative language use, a functional course designer must undertake a careful study of how the target language will be deployed in furthering the ends of the students' science or social studies curriculum or whatever the specialization may be. It should be noted that the reason for doing this is to establish specific links between the language aspect of the curriculum and the content aspect. In other words, in subject-related language teaching we seek to concentrate, not on the subject-matter for its own sake, nor on the formal systems of the target language in isolation, but on the ways in which language and subject matter interrelate in meaningful communication.

General Objectives

Although in principle ESL modules could be developed for all subjects in the curriculum, from mathematics to family studies, we decided to base the first series of modules on material from the Canadian studies program. There were two reasons for this choice. First, it seemed important that ESL students learn some basic geographical and historical facts about Canada in general and particularly about the region of southern Ontario where many immigrants have settled. The second reason was of a more immediate and practical nature. In order to obtain a high school graduation diploma. students must be able to obtain credits outside the ESL program and in subjects other than those which make minimal linguistic demands, such as physical education, music and art. The history, geography or Canadian studies credit options which are available in Ontario schools are often difficult for the ESL student. Many students who might wish to enroll in these subjects are handicapped both by the amount and the advanced level of reading comprehension and by the written work required to complete assignments in the courses. They lack the specialized vocabulary and the communicative language skills required to express the complex relationships. concepts and processes that form the core of academic work in the subject areas. The language difficulties often prove to be an insurmountable obstacle for these students. ESL modules were designed to help students overcome some of the language difficulties, thereby facilitating their entry into regular subject-area classes with their native English-speaking peers.

Before attempting to design ESL modules it was necessary to have a clear idea of the learner's needs in terms of the specific language features required in the context of Canadian studies. A review of Ministry of Education course guidelines, resource documents and Ministry approved texts, as well as teacher-prepared class handouts and tests, provided an indication of the kinds of factual information, logical relationships and language forms that occur most frequently and that must be handled by the student. As a result of this review we formulated a set of general aims. We can summarize these by stating two main principles. The first principle involved the integration of content learning and language learning by basing all the materials on authentic, topic-related information, thus ensuring that each activity would contribute to the student's understanding not only of English but also of a major theme in geography, history or Canadian studies. The second principle was that, as far as possible, we would order the activities in a cycle which would begin with the manipulation of simple concepts and linguistic

features, and which would progress to a more sophisticated level of concept development involving more complex forms of expression. In this way, all the students in a class could be working on the same content material, but at different levels of language complexity, with each student able to contribute something to the classroom interaction.

In the development of the first series of ESL modules, planning has been flexible in order to accommodate a variety of topics and themes, but all the modules have followed the same basic pattern. This can be exemplified by the first module in the Canadian Studies geography series, Canada's Golden Horseshoe (CGH). This module was designed primarily for students at an intermediate to advanced level of ESL instruction. However, it was expected that native speakers who need help in improving their English would also benefit from the materials. The subject matter of CGH is concerned with the relationship between geographical features and immigration patterns in the Great Lakes Lowland region. (The title refers to the horseshoe-shaped cluster of industrial cities which lie round the southwestern edge of Lake Ontario.) Information is presented through a variety of components: two sets of student-reading booklets, 'Canada's Golden Horseshoe' and 'Toronto's changing mosaic'; a filmstrip accompanied by an oral presentation; a cassette recording entitled 'Canadians from many lands'; 30 student worksheet masters; and a teacher guide with background information, a complete text of the reading and oral comprehension passages, questions and exercises with sample student responses, suggestions for the organization of classwork, and follow-up material.

The aim of CGH, as with all modules in the series, is to combine conceptual learning and language learning in a sequence of activities designed to develop subject-related communication skills. The materials develop language skills by providing practice in grammar, vocabulary and pronunciation as well as in functional and discourse features of language related to the subject area. At the same time they develop subject-area skills by presenting relevant content information, providing opportunities for concept development, and providing practice in specialist skills such as the preparation of maps, graphs, charts and other diagrams. A detailed discussion of CGH exercise-types can be found in Allen and Howard (1981).

Syllabus Design and Methodology

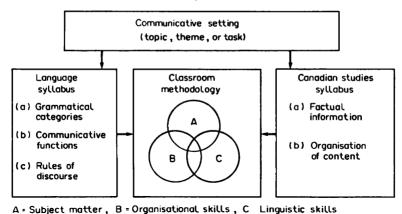
In terms of syllabus design, ESL modules are consistent with the model described in section 2, but they concentrate on a different selection of elements from the matrix. We have discussed the objectives of the FSL modules project in terms of four interrelated planning instruments: a language syllabus, a communicative activity syllabus, a culture syllabus, and a general language education syllabus. In ESL modules we have adopted a similar multi-focus approach, but one in which we emphasize the interaction between a 'central' language syllabus and a 'concurrent' Canadian studies

syllabus. When we examined Canadian studies programs in terms of both content and language it became apparent that the level of conceptual skills involved in a learning task and the degree of language complexity required for the performance of that task were closely interrelated. At the same time, it was clear that the internal structure of the language system (the medium) must be independent of the principles of organization which characterize a particular content area (the message), since many languages can be used to express a single message, and many messages can be expressed through the medium of a single language. It seemed to us, therefore, that it was useful to distinguish a 'vertical' dimension of syllabus planning where we could consider the relationship between successive time segments in an L2 teaching program, and a 'horizontal' dimension where we could consider the relationship between language as medium, and the message content in various situations and subject areas that the target language can be called upon to express (cf. McNeil, 1981).

The relationship between the vertical (medium-based) and the horizontal (message-based) dimensions of L2 curriculum can be illustrated with reference to the language syllabus and the concurrent Canadian studies syllabus of ESL modules. In developing a 'vertical' L2 syllabus it is important that we should have a theory of what language is and how it is learned. In ESL modules we have concentrated on developing three aspects of linguistic competence: (a) the learners' knowledge of grammatical categories (formal systems of lexis, morphology-syntax, and phonology); (b) their knowledge of communicative functions (semantic categories such as ordering, requesting, and instructing, which represent the different values that sentences may acquire when they are used in specific contexts); (c) their knowledge of the rules of discourse, which refer to the ways in which grammatical and functional categories are joined together in meaningful sequences.

Turning to the concurrent Canadian studies syllabus (cf. McNeil's 'horizontal' dimension), we find that knowledge of the subject area can be divided into factual information, and logical organization of content. When we analyse the content and organization of Canadian studies programs we find that we can identify a progression of conceptual skills, moving from a lower or less analytic level to a higher or more analytic level. The first-level skills are mainly descriptive and include such operations as the straightforward presentation of information and the expression of notions pertaining to simple temporal and spatial relations. Some activities appropriate to the expression of these concepts would be those which require the students to describe a process, a location or an event, to define terminology, or to state a simple comparison or contrast. The higher-level analytic skills involve more complex relationships and thought processes. For example, at this level the students may have to identify facts as opposed to personal opinion, or distinguish primary causes from secondary influences. The language work associated with explanatory analysis will be more complex than that associated with descriptive analysis. Activities appropriate at the higher level will include communicative functions such as expressing cause-effect relationships, or arguing a point of view and providing supporting evidence.

In ESL modules a distinction is made between syllabus planning, which is the level at which we compile inventories of items and establish general principles of selection and grading, and classroom methodology, which is the level at which we create texts, exercises, simulations, 'authentic' practice and other activities which provide the context within which organized teaching takes place. A major aim has been to discover ways in which different types of activities interrelate in an instructional sequence. Each module in the series represents a variation in the basic pattern whereby conceptual content. organizational skills and linguistic knowledge are integrated in a way which hopefully will lead to more efficient learning in all these areas. The particular curriculum focus of ESL modules is shown in Figure 7.2, where the two boxes represent the language syllabus and the Canadian studies syllabus, and the intersecting circles represent three focal areas of classroom methodology. The basic unit of organization is that of the communicative setting, which may be expressed in terms of topic, theme, or task. Note that the Canadian studies syllabus incorporates material which would be dealt with in terms of 'culture' and 'communicative activity' in FSL modules.



Subject matter, B. organisational street, o. Emgastic street

The above model should be interpreted in a way which allows for the maximum of flexibility in L2 materials design. This can be provided by making use of the concept of 'variable focus'. Thus the first activity in a sequence may have a primary focus on linguistic skills, with subject matter and organization in a supporting role; the second activity may have the main emphasis on organizational skills, with the other elements being, relatively speaking, out of focus; in the third activity the main concern may be subject matter, with language and organization moving to the background in their turn. The same cycle may then be repeated, with further variations on the relative degrees of emphasis accorded to linguistic, thematic, and organizational activities. The variable focus model is one expression of the

Figure 7.2: Curriculum focus in ESP modules.

current trend towards a more comprehensive language teaching methodology which would enable us to implement different approaches to classroom activity at different points in an overall program. The approach described here may be compared with other proposals for a 'balanced' or 'proportional' curriculum (Yalden, 1983), or for a 'multi-dimensional' view of course design (Johnson, 1982).

4. Conclusion

The advantage of a modular approach to L2 materials design is that it provides a set of flexible units, each one dealing with a specific aspect of language learning, which can be fitted into existing programs at various levels. In the FSL project the modular approach to curriculum has led to the concept of a 'bank' of modules. Since the proposed materials are supplementary to existing programs, a module bank provides teachers with the opportunity to select and combine a group of units on the basis of thematic content, linguistic features, or skill-building exercises and to arrange them to form a mini-program which can be introduced at suitable points within the larger framework of a previously published course. For example, teachers can select from the FSL module bank materials which introduce more detailed and up-to-date information about the target culture. which make more instrumental use of the second language, or which allow for a greater degree of integration between the horizontal and the vertical aspects of the curriculum. As more ESL modules are produced a similar bank is likely to develop, which will provide the opportunity for teachers to enrich their programs in various ways by drawing upon the content of Canadian studies.

Teachers are beginning to recognize how a module bank can help them in their work, and some attempts are now under way to use the 'bank' concept to enhance FSL program planning in Ontario. Obviously, a large number of modules is needed to do this effectively. However, teachers who use the procedures described in this paper (and in Ullmann, 1983) and who undertake to expand the presently available module bank with materials of their own may be moving in an interesting and promising new direction in second language curriculum development.

The concept of a module bank which provides the teacher with an opportunity to select units and to arrange them in different combinations raises the question of how many methodology components are necessary in order to create a complete cycle of instruction. We have already noted the need to distinguish between three basic approaches to second language teaching which have emerged during the past few decades. At the beginning of the sixties the most popular approach was the audiolingual method which was based on a technique of imitation, memorization and carefully-controlled practice, and which incorporated the hypothesis that an ability to communicate depends on having access to a previously-established

knowledge of grammar and vocabulary. The development of communicative language teaching (CLT) in the early seventies offered what appeared to be a radical challenge to the audiolingual method. Instead of assuming that the natural progression in L2 learning is to start with controlled structural practice and to lead up to spontaneous language use by easy stages, the advocates of CLT proposed a rival hypothesis according to which the efficient learning of grammar depends from the beginning on establishing a genuine motive to communicate. By the late seventies it had become necessary to distinguish between two main branches of the CLT movement: a functional-analytic approach, which defined language teaching objectives in terms of speech acts, discourse features and other categories of communicative language use, and a non-analytic, experiential, or 'natural approach. which aimed to engage learners in communication without any artificial pre-selection and arrangement of items.

The two module projects described in this paper are similar in that both aim to produce communicative teaching materials which are designed to supplement existing grammar-oriented programs. The projects differ, however, in that ESL modules are based on a communicative functional-analytic approach which aims to make explicit the nature of speech acts and to show how such acts combine to produce coherent discourse, while FSL modules do not depend on any specific framework of structural or functional analysis, but aim primarily at involving the learner in a process of spontaneous meaningful language activity. Such an objective. however, depends on a foundation of structural and functional knowledge being made available elsewhere in the program. Can we conclude that there is complementary relationship between structural, functional, experiential practice? It is indeed our belief that a fully developed L2 curriculum will include three interconnected activity components: structural practice which will be systematic and controlled at the grammatical level. functional practice which will be systematic and controlled at the discourse level, and experiential practice which will be fluency-oriented and not subject to any kind of systematic linguistic control, but which will be organized in terms of the 'real life' task being undertaken or the message being conveyed. One way of designing such a curriculum would be to produce sets of modules, each of which would have a primary emphasis on structural, functional, or experiential practice. The combination of three types of modules in different patterns would allow for a great deal of variation in the organization of classroom activities, without losing sight of the basic principles which are common to all second language teaching programs.

Curriculum decision-making must be subject to some form of evaluation, in order to check that the results of our decisions are meeting their stated objectives, and so that knowledge about curriculum processes can accumulate in a systematic and objectively verifiable way. The two module-making projects we have described are similar in that they both make a

distinction between formative evaluation, which is an integral part of the development process, and summative evaluation, which is carried out after the materials have been published and when they are in use in the schools. In both projects formative evaluation includes pilot-testing, interviews with teachers and consultants, and validation of the subject-area content. These are procedures which were discussed in section 2.

Formative evaluation has been part of both projects from the beginning, but summative evaluation is still at the development stage. Many problems remain to be solved in this area. For example, summative evaluation may include the provision of tests which have to be administered to groups of students before and after they have used the module. However, the construction of suitable pre-tests and post-tests will depend on our concept of what constitutes L2 proficiency in an integrated curriculum where linguistic and conceptual skills are developing concurrently. Whereas most previous testing instruments have stressed the students' knowledge of grammar and vocabulary as ends in themselves, a functional approach to language teaching requires the development of tests which check the students' ability to use language as an instrument of communication within a specific context. In other words, in our pre-tests and post-tests we have to assess not only the students' knowledge of formal aspects of language, but also their ability to use this knowledge for different communicative purposes, and the degree to which they control the oral and written discourse patterns which are characteristic of the target language culture and of the various content areas in the school curriculum.

Our experience so far suggests that the most effective approach to summative evaluation is a combination of testing, interviews, questionnaires, and classroom observation (see Papers 9 and 10). This approach involves a wide variety of instruments and raises the question of how we view the relationship between quantitative research methods, with their emphasis on numerical data and rigorous experimental designs, and ethnomethodological or qualitative methods, which emphasize more subjective procedures such as case studies, participant observation, and the analysis of naturalistic school and community data. Our experience in both module-making projects has led us to believe that quantitative and qualitative methods are not mutually exclusive, but throw useful light on one another when they are used concurrently in the same study. The essential point, which has always been emphasized in the Modern Language Centre, is that any research in syllabus planning and materials design must include a systematic evaluation component, if the resulting publications are to be of maximum benefit in the classroom.

8. INITIAL LITERACY IN TWO ESL PROGRAMS

BARBARA BURNABY

1. Introduction

As theories about the best way to teach a second language have changed, so has the relative degree of emphasis on the four skills of listening, speaking, reading, and writing. In the traditional grammar translation method, reading and writing occupied most of the time as students read sentences and passages, analysed them in terms of grammatical rules, and did written exercises to show that they could apply the rules productively. The audiolingual method was developed in the belief that second language learning mainly involved the establishment of oral language habits and that reading and writing skills were merely a reflection of oral skills in a different medium. In this method students were expected to spend most of their time doing oral language drills. Reading and writing were usually delayed until students had developed considerable oral skill. This delay was provided so that students would not be distracted from learning pronunciation and grammatical patterns by the task of learning the mechanics of the writing system.

Recently, another approach to second language teaching has been developed which shifts the focus from an emphasis on the production of grammatically correct language to a more general focus on the ability of the students to get their message across in a socially as well as grammatically appropriate way. This shift in emphasis has several implications for the relationship among the four skills in second language teaching. One implication of this new communicative approach is that reading and writing are not seen as just the direct reflection of spoken language. Language teachers are encouraged to help students understand how written language is used in communication in the culture of the target language group. For example, is one expected to write a thank-you note to a hostess after a party, is a telephone call appropriate or, indeed, is one expected to make any special effort to thank the hostess apart from saying something as one leaves the party? Teachers are also encouraged to help students learn how written language differs from spoken language in grammar, vocabulary, formality. and style. Not only are there general differences between all forms of written as opposed to spoken language, but there are also differences in the language forms required for specific kinds of written material. For example, one might sign a personal letter 'Bill' but a formal letter would require 'W. J. Thompson' and an application form would need 'Thompson, William J.' Another example is the difference between the reduced language used in instructions ('Turn handle right') in comparison with fuller written versions ('You should turn the handle to the right.'). Such differences may seem obvious and trivial to literates from western European traditions, but they present daily problems to immigrants from countries where names and titles are handled in other ways, and to non-literates of any background.

A second implication for the role of reading and writing in the communicative approach is that there is an emphasis in course design on analysing the communicative needs of the students and then on teaching directly to those needs. For example, a group of students might consist of businessmen in Japan who want to learn English so that they can write business correspondence to clients in Britain. A course for them would focus not just on reading and writing in general, but on the reading and writing specifically of business letters and documents. Among other things, the teacher might show how business English in Britain differs from that of North America or Australia; for example, general vocabulary differences (ring up/phone), trade-specific vocabulary differences (terms for parts of a car-bonnet/hood) and differences in sentence structure (Do call again/Please call again). On the other hand, a course for Canadian students who were interested in learning Italian because they expected to go to Italy as tourists would focus on oral skills with reading restricted perhaps to the reading of menus and signs, and with writing skills not practised at all. In communicative second language teaching, then, the balance between the four skills in a teaching program is determined on the basis of student need rather than on a set concept of the way in which the skills should relate to each other in an 'ideal' teaching sequence suitable for all learners.

The communicative approach places a good deal of responsibility on individual teachers to design courses of study and to select and create learning materials. In the audiolingual and grammar-translation approaches it is acceptable to create a general program which is considered suitable for a wide range of students and which a teacher could follow step by step. Many textbooks were published in the 1960s and 1970s which were intended to provide virtually all the activities and content for courses suited to the needs of large ESL student populations (for example, ESL for immigrant adults in the United States, ESL for immigrant children in grades 3 to 8 in North America, or EFL for high school students in Spanish-speaking countries). As the communicative approach has gained acceptance in second language teaching, course designers and publishers have been turning more to the production of modular materials which can be fitted into a variety of teaching situations (for example, books on using newspaper articles or role play in second language teaching) or they produce programs suited to the needs of specific groups of students (for example, industrial workers, secretaries, or students of various university subjects).

Even with this variety of materials becoming available, teachers using a communicative approach still have the responsibility of finding appropriate

material, co-ordinating it into a balanced whole to suit student needs, and developing new material where none is available ready made. Of course, for groups of students who have relatively unusual needs, teachers are likely to find little prepackaged material available and thus are forced to do a great deal of original work and adaptation. It is for teachers of two such types of students that two materials development projects have been undertaken in the Modern Language Centre. The two projects are called Reading in English for Native Children (hereafter called Native Reading) and ESL Literacy Materials. The aim of the Native reading project is to create classroom materials for Native children at kindergarten to grade 2 levels, while the ESI. Literacy project provides theoretical and methodological background information for teachers of adult immigrants. The following discussion will show how the literacy needs of two small ESL populations can be met in different ways according to the characteristics of the students, teachers, and teaching conditions involved. First the salient characteristics of the student populations will be described. Next, it will be shown how, because of their small size relative to other ESL student groups, these two populations are in need of special attention. Finally, several methodological considerations will be outlined which are designed to meet the specific needs of the teachers and students involved.

2. Native-speaking Children

The term 'Native' here refers to people who are descended from the inhabitants of North America before 1500. The group referred to in this discussion are Native children who come to school speaking only or mainly their ancestral language. The Native Reading project specifically deals with only those Native-speaking children who live in northern Ontario and adjacent provinces. These children live within a political unit which is controlled by English speakers although their home communities are almost entirely Native-speaking. Their schooling is mainly through the medium of English.

For the Native-speaking children, there are three special characteristics addressed in the Native Reading project. One has to do with the language context in which they learn English. Native-speaking children mostly come from communities in which the Native language is the medium of communication for all aspects of daily life. English radio and television broadcasts are only beginning to reach these areas. Native-speaking children are not likely to have had experience with English-speaking communities because the Native settlements in question are mainly accessible only by plane, making travel expensive. Therefore these children are learning English in a setting which is more like English as a foreign language (EFL) than like English as a second language for immigrant children in Canadian cities and towns.

Programs in English as a foreign language are not suitable for Native children for the reason, among others, that English as a foreign language is normally

taught as a subject of instruction. However, Native children must learn English more intensively than most EFL students since it is the medium of instruction in Native schools. Alternatively, English as a second language programs designed for urban immigrant children are not entirely suitable either because they take maximum advantage of the fact that immigrant children hear English all around them in the playground and in the street. Indeed, ESL programs often focus on English survival skills needed by these children in dealing with community life. Such non-classroom functions of English are virtually unknown to Native-speaking children, who hear English used only in the classroom setting. It is basic to the Native Reading project, then, that ESL must be taught intensively so as to prepare the children for English-medium education, but extensively only in that it attempts to teach the children to use the school functions of English that they will encounter in the learning of various subjects and not because they will have to use it outside of school.

The Native Reading materials are based on three instructional themes: presentation of patterns of English, language experience, and story and book awareness. All three themes are used to provide a rich English language environment for the children in a variety of contexts and instructional activities, and all three themes relate to both oral and literate language use. Specific patterns of English (sentence structures and vocabulary) are presented in meaningful contexts which provide the children with attractive opportunities to imitate and respond. The children are never 'drilled', but are given a wide range of opportunities to indicate that they understand and can produce the patterns being modelled, for example through songs, chants, dramatic play, games, and drawing. The language experience theme provides a less structured opportunity for language use through activities such as class trips, cooking, dress-up, and play with teacher-created materials. The story and book awareness theme focuses on general comprehension of story lines rather than on word-for-word comprehension or production.

The language content of the program is organized so that children will be exposed to English grammatical patterns graded for difficulty on the basis of, for example, grammatical complexity, vocabulary variety, phonological problems, length of utterances, frequency and naturalness of expression, abstractness of relationships expressed and maturational factors in child language use. Because the program must prepare the children for dealing with English as the medium of instruction in the school, functions of language use such as narration, description, giving and following instructions, categorizing, comparing, as well as negotiating meaning in personal interaction are presented. The materials are designed to be a basis for the teaching of English language arts as a subject of instruction (from 40 minutes to an hour and a half per day), but they include many opportunities for teachers to expand the material into language development specific to other areas of the curriculum such as science, social studies, art, health, and physical education. For example, one unit on the coming of winter contains

suggestions for science experiments on melting, freezing, and recording temperatures.

The second characteristic of the Native-speaking children is their cultural and physical environment. While materials produced for the general immigrant ESL population cannot address directly the cultural backgrounds of all the children, they can nevertheless focus on the common elements of the Canadian urban contexts in which the large majority of immigrant children live. For most Native-speaking children such contexts, including public transportation, parks, and even running water or electricity in the home, are as foreign as elephants or the Eiffel Tower, Language, therefore, is not the only barrier to comprehension when they use Canadian urban materials for oral or literate language development. They must learn about the culture and environment of Canadian city life before they can interpret the meaning. Also, the means by which Native people teach their children to develop physical and cognitive skills as well as to speak the Native languages are different from the socializing measures often used in majority culture Canadian society (Brooks, 1978; Philips, 1972). For example, visual or aural examples are given frequently without pressure on the children to respond until they are ready, and competition is not encouraged among children.

In response to these conditions, the Native Reading project endeavours to reflect the cultural and environmental context of isolated Native communities not only in the content of the materials and classroom activities but also in the teaching styles used. For Native content, all stories and activities reflect the normal lives of northern Native children: riding snowmobiles, going hunting or trapping with their families, attending a community feast, snaring rabbits, hearing traditional legends, etc. Most of the illustrations for the teaching materials are drawn by Native artists and the voices heard on audio tanes are Native voices. As for the teaching style, children are not singled out to perform individually before a group, co-operative games and activities are emphasized, and target language forms are modelled repeatedly by the teacher without pressure on the children to respond until they are ready. Every effort is made to support the modelling of English language patterns with visual and experiential contexts familiar to the students. Thus, the experience approach to language and literacy teaching figures strongly in the materials. Any information about 'outside' Canadian culture is introduced as new material, not just as incidental context to other activities.

The third characteristic of the Native context which the Native Reading project addresses is the fact that literacy is not extentively used as a means of communication in Native-speaking communities. It exists both in English and in Native languages but its use is generally limited in function compared with literacy use in Canadian cities. While most Native people in the communities that the Native Reading project is concerned with have some experience with literacy in the Native language, this experience does not normally extend to extracting new meaning only from print. In other words, the information

104 Barbara Burnaby

conveyed by print in Native languages is also available from oral sources. English literacy is used by non-Natives and some Native bilinguals to do certain things such as government paperwork or ordering goods from a mail order catalogue, but the social system makes it quite acceptable for people who cannot read and write themselves to enlist the aid of those who do (Burnaby and MacKenzie, 1982). Thus, the main pressure on the child to acquire English literacy comes not from the community but from the school.

The Native Reading project materials must, therefore, take into account Native children's knowledge and expectations of literacy functions. The result is that literacy functions emphasized in school must be carefully and systematically introduced to Native children with realistic, attractive examples of literate communication in order to make literacy in the school context seem reasonable according to the Native child's terms of reference. The instructional theme of story and book awareness is used in the materials for this purpose. The children are given many opportunities to hear stories read, to handle books, and to make their own books. Through these activities they come to have realistic expectations of what books will contain and how stories and informative material will be organized in books. Also, the children engage in activities which demonstrate the use of other literate forms such as labels, cartoons, charts, instructions, recipes and advertising, Personal use of literacy for self-expression, list-making, letter writing and other purposes are introduced. While these aspects of literacy instruction are common in most types of schooling for young children, they are particularly important for Native children given the fact that literacy use in their cultural environment is different from that in majority culture society.

Many ESL programs designed for immigrant children in the primary grades approach the teaching of literacy in English only incidentally. Such programs focus on oral language development and once the children have gained some fluency in English, the teacher is expected to begin teaching them to read and write English, using whatever method would normally be used in the school. Programs designed for children from grade 3 and up often assume that the children are literate in their first language and can begin to transfer these skills to English literacy. This limitation on published materials for the teaching of initial literacy skills in English to ESL children may not be accidental. It may be that these methods generally are effective with immigrant children. The rich English oral and literate environment of immigrant children may be the factor which provides them with the information they need to learn English literacy skills. However, the high failure rate of Native-speaking children in learning to read English (Burnaby, 1982) has prompted the focus on English literacy in the Native Reading project. Book and story awareness in oral activities followed later by a controlled introduction to print are carefully integrated into the language development activities so that it is certain that the children are familiar with the oral language and conceptual content of the print material they are expected to read. This does not mean that they do not have practice in reading unfamiliar material, but it requires that they are given grammatical and contextual preparation for what they will meet in print.

3. Adult ESL Literacy Learners

As far as the target population of the ESL Literacy Materials project is concerned, the characteristic that sets it apart from the rest of the adult ESL learner population is solely the need for special help in acquiring English literacy. The particular problems of this group in learning to read and write in English can be broken down into several classifications relating to previous experience not only with literacy but with formal education.

One of the classifications for such people is whether their first language has a writing system or not. For example, recently a number of Hmong people from southeast Asia have come to Canada. These people are not literate in their first language since the Hmong language has not had a writing system until very recently. A few have received some education in the spoken and written forms of other neighbouring languages. It is to be expected that people from a non-literate culture will have to learn not only how the sounds of a language can be symbolized in writing but also how societies are likely to institutionalize the use of literacy into their patterns of communication. It is probable as well that such people have not had any experience with formal education and therefore will have to learn how to be students in North American terms if they are to receive any benefit from the education system as it exists here. Literacy teaching, then, would involve the teaching of the techniques of literacy in a second language, the social functions of literacy in the new culture, and the functions of being a student in that culture as well.

A second classification relates to the degree to which the orthography of the student's first language is like that of English. The term 'non-roman alphabetics' is used for students who are literate in a language which does not use a roman alphabet system; that is, a system which uses non-roman alphabetic characters such as Arabic, syllabic characters such as Japanese, or a logographic system such as Chinese. Students from such backgrounds may be highly educated. What they need is special help in learning the relationships between the spoken language and the written form of English. While they will need direction in the ways in which literacy is used in Canadian society, the idea of a literate societal network of communication will be familiar to them. Also, they are likely to have some experience with being a student in a formal educational context, although they may need to recognize the difference between what is expected of students in their home country and what is expected in Canada.

A third classification is concerned with the degree of literacy students have attained in their home country. Even if a student's first language is one which has a roman writing system and an extensive literature—for example, Portuguese—it may be that the student comes from an area or a level in

society where literacy is not expected or encouraged. For example, in a rural community in the Azores it may be that most literacy functions are carried out by the priest or a government official. In such communities students may have had some basic literacy education in their first language (Hamilton, 1970). They may feel, however, that it is not their place to use literacy for many functions where it is normally used by North Americans. Also they may have difficulty in adjusting to the roles that are typical of student life in North America since their educational experiences in the home country may have been limited to certain types of student-teacher interaction such as rote learning.

A fourth classification, closely related to the last, is the level of functional literacy attained by the students in the target language. Many students have learned to read and write sufficiently well in English to give the impression that their literacy skills are adequate to meet the demands made on them at work or at school. Many students function well enough in ESL classes or in an employment situation until a literacy crisis develops. Such a crisis could consist of a written examination on work that had been presented in a mainly oral form, or it could be written instructions on the job. It is often difficult for a teacher or an employer to anticipate these problems since the people in question can demonstrate basic literacy skills. The point here is that such people can be severely hampered in their English classes or their job advancement if they are placed in situations which demand advanced literacy skills such as reading for exact meaning, correct spelling, or writing for business purposes.

A fifth classification, the degree of oral English skill attained by the student, cuts across all the previous categories. In the communicative approach, it is agreed that there is no necessity to delay the teaching of literacy skills until the student has attained some degree of oral fluency, as the audiolingual approach recommended (Rivers, 1983). However, it is believed that students should do all their language learning activities in meaningful contexts (Davies and Widdowson, 1974). In terms of initial literacy learning in a second language, this implies that students should learn to read and write language that they are already familiar with, and that they should not be learning to read and be expected to use their reading skills to help them learn the language at the same time.

Obviously, students from any of the literacy backgrounds outlined above may have varying degrees of fluency in oral English and require different amounts of oral language development to provide a basis on which to build English literacy skills. Teachers encounter students with special literacy needs who speak no English or very little as well as those who have been using English for a long time. Many of the latter have reached a level of partial fluency in English with 'fossilized' non-standard forms. While this level of fluency may be sufficient for their oral communicative needs, it may not be adequate to deal with the new forms of English they will encounter and will

be expected to use in written English. For example, they may never have learned to hear or pronounce the difference between 'r' and 'l'. They may have been able to make themselves understood in speaking, but they are certain to have difficulties when it comes to spelling.

One further point that must be considered is what the students hope to achieve in acquiring literacy skills. As adults they usually have strong opinions as well as the ability to choose what functions of literacy they will learn. Many ESL literacy students are anxious to learn survival skills that will help them get along in their daily lives and at work. They want to learn to fill in forms, pass a written driver's test, take telephone messages, find a number in a phone book, read instructions on packages, and the like. Others want to be able to read to their children, to help them with their homework, and to understand the messages sent home from school. Still others want to become literate enough to enter an academic upgrading course. ESL literacy teaching must be adjusted to suit these various purposes.

Thus, the need in ESL adult literacy teaching is a composite resulting from requirements which arise because of the language and literacy background of the students. The ESL literacy population has become visible because their needs are not being met in regular ESL programs or adult literacy programs for native speakers. ESL teachers are concerned that they do not know enough about the teaching of adult literacy to help their non-literate students, and literacy teachers are concerned that they do not know enough about second language teaching. Most ESL teaching in regular formal education contexts in Canada relies heavily on reading and writing both as a vehicle for teaching grammar and vocabulary and for the purpose of teaching students the mechanics and functions of written English. However, this kind of teaching presupposes that the students can transfer basic literacy skills from literacy in their first language. It is not adequate to the needs of initial literacy learners or non-roman alphabetics. Regular adult literacy teaching, on the other hand, often depends on an oral command of the language by the students. If the ESL students do not know enough English to express their ideas or predict meaning in what they read, if they have severe pronunciation problems, and/or if they have ingrained non-standard grammatical habits, literacy teachers usually do not have the training to help them develop English orally.

As pointed out above, some members of the ESL literacy population have another characteristic which sets them apart from most ESL learners. Those who have had little or no experience with formal schooling generally need a great deal of help in learning how to be a student in a formal North American education setting. Such students need to be taught on a one-to-one basis for some time, then slowly integrated into small group work. Even when they can be placed in a regular class, they may need special help. They need to learn, among other things, that regular attendance and punctuality are expected and that they will have to operate as a member of a class group.

Most importantly, they have to gain the confidence to work independently, to do assignments, and to find resources on their own, any of which may make heavy demands on the time, attention, and sensitivity of the teacher.

4. Size of ESL Adult Literacy and Nativespeaking Child Populations

Teachers of the two populations described above can expect little published material for ESL teaching that will address their particular needs. The target populations for the materials produced in both the Native Reading and ESL Literacy Materials projects are relatively small in the context of Canadian education. Since the distribution of ESL material in Canada has been dominated by British and U.S. publishers, it is not surprising that Canadian students with special needs are neglected in the published material available. The work of the two Modern Language Centre projects, then, addresses itself to two target populations whose needs are not likely to be met through ready-made materials. The reason these populations have been singled out for special attention is that they both have certain characteristics which set them apart from other ESL learners in Canada. These characteristics as described above are such that they require a special focus on literacy skills. Also, these characteristics create conditions under which normal ESL materials are not appropriate and teachers are forced to develop almost all of their classroom materials themselves. The publishers of ESL materials distributed in Canada do not perceive the markets for materials relevant to these populations to be sufficiently large to warrant the commercial development of materials to meet these needs. Thus it is important that noncommercial agencies take steps to see that such needs are filled.

The Canadian Native population is only about 1.3% of the total population of the country. About 23% of Native children come to school speaking only a Native language, and 35% speaking a Native language and English (Department of Indian Affairs and Northern Development, 1980). The target population for the Native Reading project is further reduced by the fact that it is a basic principle for these materials that they should reflect the cultural and environmental realities of the children's home communities. The project focuses on Cree- and Ojibwe-speaking children. This group, which is about a third of the total of Native-speaking children in Canada, represents in itself a range of environmental and cultural backgrounds. If the project were to aim at including other Native linguistic groups it would seriously run the risk of presenting cultural materials which were 'foreign' to the children.

The ESL Literacy Materials project also has a small target population. Most immigrants to Canada and other non-English/French-speaking residents have learned to read and write in their first language—although, because it is difficult to define levels of literacy, it is not possible to say exactly how many. In Canada's last census taken in 1981, 1.2 per cent of the respondents declared that they spoke neither English nor French—that is, 291,395 people.

In the 1976 census 88.9 per cent of those who spoke neither English nor French reported that they had less than a grade 8 education. For statistical purposes at least, the Canadian government considers those who have less than a grade 9 education to be functionally non-literate. Taking into account those who might learn to read and write in French rather than English and those who might not feel the need for further literacy training, it would still be reasonable to assume that there are between 100,000 and 150,000 people who would benefit from ESL literacy training. In addition, there are many non-literate people whose mother tongue is not English or French who would have accurately reported on the census that they spoke English. Some of these people, if they begin literacy training, may benefit from special treatment because their English language skills may not be well enough developed for them to be able to handle literacy teaching designed for mother tongue speakers of English.

The salient factor here is not the actual size of the population but its visibility in general and educational terms. Non-literacy is highly stigmatized in Canadian society, and people with limited literacy skills quickly learn to avoid situations which will expose their lack of literacy because they are likely to be ridiculed or pitied and because they might be discriminated against in employment or exploited in business. Therefore it is hard for nonliterates to present themselves for literacy training because this would amount to a public declaration of their non-literacy. Also, as pointed out above, many non-literates are not used to being students. Therefore, most standard classroom situations are not suitable for them. While some special facilities exist in school boards and private agencies, such ESL literacy provisions are not widespread or consistently funded. In fact, at the present time literacy teaching, and particularly ESL literacy teaching, has more of the status of a charity than of a normal educational service in Canadian society. The ESL Literacy Materials, then, are being produced in the Modern Language Centre because the development of such materials and provisions for teacher training on this topic are low on the priority list of publishers and educational authorities. The aim is to provide support for those offering ESL literacy training so that they can expand and improve their service to the relevant population.

5. Methods. Materials and Teachers

Both the Native Reading and the ESL Literacy Materials projects employ a number of teaching methods. Literacy and second language learning are complex personal and social developments, and individuals come to them with a wide range of personal backgrounds and learning styles. Therefore both projects operate in the belief that individuals will need to learn about English and literacy from a number of perspectives and that some learners will gain more from one method than another. As mentioned above, the Native Reading project breaks its methodological approaches into three strands, learning English patterns of speech, language experience, and

learning about the structure of books and their contents. All three strands are realized both through oral activities and experience with print. Since the school situations in which Native-speaking children learn English are fairly standard across the target area, that is, they are ordinary elementary school classrooms, and since all children in a target class are likely to have similar language, literacy, and cultural backgrounds, the Native Reading project enjoys a uniformity of student population that most curriculum development projects do not have. Thus, the three methodological approaches can be woven together to form the program, and can then be explicitly described to teachers in the form of a detailed, sequenced outline of objectives and activities for teaching. Each grade level of the materials includes an extensive teacher's guide with day-to-day lesson plans, a songbook, children's books with tapes, duplicating masters, puppets and other teaching aids. One aspect of flexibility which must be built-in relates to the fact that some of the schools are small and have multigrade classrooms. Therefore, the kindergarten materials must mesh with the grade one lessons, and so on.

Because adult students who want to learn to read and write in English can be divided into groups with a number of specific learning requirements, and because their needs are likely to be addressed in various kinds of teaching. the ESL Literacy Materials project is not attempting to design a set of materials that are tailor-made for one particular situation. Rather, the aim is to draw together theoretical background information on adult literacy and ESL teaching in general, to outline various teaching methods, to indicate methods of evaluating student needs, to show several possible teaching sequences, and to list resources. In this way it is hoped that one set of background information will be usable in many settings and for a variety of student needs. The teacher can use this information to collect or create the actual classroom materials. The ESL Literacy Materials contain explanations and examples of methods to teach the mechanics of literacy (such as orientation and shape of characters, sound analysis, and spelling rules), methods to teach and reinforce English patterns and vocabulary, and methods to show students how oral English and literacy function in the Canadian environment. The language experience approach figures strongly among the methods.

In both projects, there is an emphasis on encouraging teachers to experiment with various methods for group and individual work, rather than concentrating on one at the expense of others. Also in both projects, writing skills are addressed separately from reading skills in that different activities are given to develop each. Both projects take the position that students' writing is to be encouraged and that early attempts at writing are to be appreciated at face value rather than evaluated against the norm of mature English writing.

Both projects are producing materials for use by teachers who are not likely to have had training in all the methods employed. When an eclectic approach to methodology is advocated, the demand is placed on teachers to learn to use a variety of methods. Most teachers are not aware of the need to use a wide variety of language or literacy teaching methods. The Native Reading project is able to approach the problem of lack of teacher awareness by providing detailed lesson plans with options to allow flexibility. In this way teachers are given examples of the various methods in action. Also, the project plans to develop an in-service package that can be used to orient new teachers to the use of the materials. The ESL Literacy Materials project approaches the problem in a different way. The materials really comprise a set of in-service training materials rather than a set of classroom lessons. Teachers are given an explanation of the theories which lie behind methods. a description of the methods themselves and of the means which can be used to implement them, and a list of resources from which the teacher can draw in creating the actual classroom materials. Given the complexity of the problems the ESL Literacy Materials project attempts to address, it was felt that this in-service format was the best approach to the problem of providing help for untrained or partially trained teachers.

6. Literacy Training: First or Second Language

Finally, some mention must be made of the fact that both the projects described in this paper aim to teach initial literacy skills in English to people who do not speak English as their first language. There is a good deal of evidence that in many cases it might be more effective to teach literacy first in the students' first language and then introduce English literacy skills later, once first language literacy has been well established (Cummins, 1981c). Both projects recognize the force of this argument, and advocate the use of the 'L1 first' approach wherever feasible.

In the Native case, despite pressure for Native language medium education from some quarters (Burnaby, Nichols and Toohey, 1980), all the schools in the target area for the project are English medium. Native language interpreters are provided in most schools in the lower grades and Native literacy is often introduced as a subject of instruction at about grade 4. In the Native Reading materials, it is emphasized that children should be permitted and encouraged to use their Native language in class. Given the political and social realities of the situation, however, it was felt to be urgent, however, to produce some suitable ESL and English literacy materials to service the immediate needs.

With regard to most adult non-English speakers in Canada who are not literate, the facilities for them to acquire literacy in their first language simply do not exist. ESL classes are often comprised of students from many different language backgrounds and it is not possible to provide them with literacy teaching in their mother tongue. However, a number of the methods and resources described in the ESL Literacy Materials project would be useful for teachers in those bilingual adult classes where literacy is addressed.

112 Barbara Burnaby

For students who are non-roman alphabetics, the question does not arise since they are already literate in their first language. Also, teachers report that many non-literate ESL learners are resistant to the idea of learning to read and write in their first language since they feel that there is a more urgent need to read and write English. The ESL Literacy Materials encourage the support of mother-tongue language and literacy development where appropriate, but specific examples are not outlined.

7. Conclusion

As in most materials development projects, the process of creating materials to teach initial literacy in English to Native-speaking children and non-literate adults has largely consisted of achieving a reasonable compromise between specific student needs and objectives, and the less than perfect political and pedagogical situations in which these needs are to be addressed. Both projects attempt to maximize the foundation of literacy training in the background and needs of the students. The methods used are varied and flexible in order to respond to student differences and to provide for student access to all aspects of literacy skills. Literacy is considered not as a monolithic technique for mediating between print and spoken language, but as a complex of skills that are needed to perform various functions. The needs of teachers who are not specially trained to teach students with the special characteristics of the target groups are taken into consideration in the design of the materials.

It is hoped that the initiative in the Modern Language Centre to produce materials for two populations whose needs are often neglected will help non-English-speaking adults and Native-speaking children to become literate in English, and that as a result they will be able to play a more effective role in contemporary Canadian society.

9. APPROACHES TO OBSERVATION IN SECOND LANGUAGE CLASSES

REBECCA ULLMANN AND ESTHER GEVA

1. Using Observation as a Research Tool

Observation is a research tool used by curriculum evaluators and others as a means of gathering information about classroom processes. In educational settings observation has been used to gather information on a variety of topics such as student task orientation and achievement (Gaver and Richards, 1978-79), aspects of teacher effectiveness and characteristics of 'good' teachers (Belgard, Rosenshine and Gage, 1966; Moskowitz, 1976), the relationship between various interaction patterns in the classroom and student achievement (McEwen, 1976), and the relationship between such factors as pacing, time spent on learning and student achievement (Bloom, 1974; Sirotnik, 1982; Wiley, 1973). In addition, observation can be used as a tool for describing the process of program implementation and as a means of noting the congruence between intended and observed program outcomes (Stake, 1967).

Another important purpose for observing classrooms is to be able to specify carefully those aspects of an input (e.g., programs, teaching methods) that relate to output variables (e.g., student achievement). This is especially important since an examination of test results does not readily provide information about the degree of program implementation and the manner in which the program has been implemented (Evertson, Anderson and Brophy, 1978; Stake, 1967).

Finally, observation can be used to determine the influence of theory on practice. The answer to this question is predicated on the observation of the ways in which theory can affect practice and the extent to which different theories are differentially reflected in practice (Allwright, 1980).

The reader may argue that less costly techniques exist for collecting information on such issues. Instead of observing interaction patterns in the classroom, it is possible to gather information by interviewing the individuals who participate in these situations. For instance, it is possible to ask teachers to describe what they do when they implement a program, to describe in detail how they manage class time, and to exemplify how they interpret and apply divergent approaches to teaching. Yet there is evidence in the literature

to suggest that such accounts, treated independently of observation, may not be completely accurate as descriptors of classroom processes (see Hook and Rosenshine, 1979). Rather than assuming that classroom observation, interviews and questionnaires are mutually exclusive, it is perhaps more reasonable to regard these techniques for information gathering as complementary in two respects. First, some evaluation and research questions may be best answered by using classroom observation (Mitchell, Parkinson and Johnstone, 1981), whereas other questions may be answered more economically by means of interviews or questionnaires (see Newfield, 1980-81). Alternatively, if the research is concerned with the validity or meaningfulness of an observation scheme one may be able to establish its convergent validity (see Campbell and Fiske, 1959) by comparing information derived from observation data with participant comments derived through interviews or questionnaires. If the conclusions based on these divergent data sources are compatible, the evaluator may conclude with more certainty that the model to describe classroom processes is valid.

2. The Conceptualization of Observation Instruments

The assumption that L2 teaching methodologies are a reflection of theoretical positions is an important departure point in the consideration of the set of variables that form an observation scheme (Long, 1980). Clearly, a single observation instrument, be it a checklist or a set of scales, cannot capture detailed information on an endless number of variables. Different observation instruments, therefore, may reflect divergent foci of interest. It follows that the observation instrument should be sensitive to the particular focus of the study.

As Long (1980) has stated so clearly, instruments which have been developed for observation in content classrooms are not appropriate for second language classrooms. For instance, Long points out that one of the ways in which second language instruction is distinguished from content subject instruction is the provision in the L2 class for 'feedback on the formal correctness rather than the truth value of speech' (p.19). In the same vein, Mitchell et al. (1981) indicate two strands of second language research where classroom observation was undertaken. One strand adapts instruments prepared for a general classroom context—such as Flanders' FIAC system (1970) — for use in a second language context (Moskowitz, 1976). The other strand bases its observation system on an independent theoretical understanding of the second language teaching and learning process (Jarvis, 1968).

The fact that available observation schemes do not generally reflect essential L2 classroom characteristics has been an impetus for the development of alternative instruments in the Modern Language Centre. These instruments, each of which forms part of a larger study concerned with the impact of teaching on second language learning, deal directly with issues germane to L2

classrooms and reflect current theoretical issues in second language pedagogy.

3. Approaches to Second Language Teaching

We agree with the position put forward by several authors which claims that an observation scheme for second language teaching, to be informative, should be grounded in the relevant theoretical constructs (see in particular Long, 1980; Mitchell et al., 1981). This position suggests that the set of variables which constitute the categories of an L2 observation scheme should reflect the teaching approaches and theoretical constructs which are considered to have had a strong influence on the development of the profession. It therefore becomes necessary to examine the similarities and differences between these teaching approaches in order to establish the most relevant set of variables for observation.

The issue of form and meaning and the relationship between the two is central to second language teaching and has given rise to a number of different treatments. For example, two influential second language teaching approaches, grammar translation/cognitive code and audiolingualism, have traditionally presented a more structural view of L2 teaching where a focus on form over message is evident. Advocates of these approaches have maintained the position that second language use should be preceded by a mastery of relevant aspects of the second language code. However, the methodologies suggested by these two approaches have differed substantially from each other. Grammar translation/cognitive code has stressed explicit grammar teaching using a variety of exercises and explanations, whereas audiolingualism has relied mainly on inductive methods to achieve its goal. Proponents of audiolingualism (e.g., Brooks, 1964) assume that second language students will implicitly come to recognize grammatical patterns through repetition. This repetition, it has been suggested, will eventually lead to automatic responses and fluency in the second language. The underlying assumption in grammar translation/cognitive code, on the other hand, is that learning is facilitated by an explicit awareness and conscious control of the phonological, grammatical and lexical patterns of the second language (Carroll, 1966).

A third L2 teaching approach which has recently gained widespread support is communicative language teaching. Unlike the two approaches previously mentioned, the major thrust of communicative language teaching lies in its emphasis on meaning over form. Advocates of this approach suggest that the use of the second language in meaningful situations leads to knowledge of the grammatical code and sociolinguistic rules of language use and, in addition, provides the necessary opportunities for the development of strategic competence (Canale and Swain, 1980). This early use of the target language for the purpose of conveying meaning is a central feature of communicative language teaching and provides a contrast to the two approaches mentioned above.

Stern (1981a,b) has pointed out that two main interpretations of communicative language teaching have emerged: a functional-analytic approach associated with the Council of Europe, and a non-analytic experiential approach exemplified by Canadian-style immersion teaching. The Council of Europe curriculum stresses the study and practice of communicative language functions such as apologizing, describing, requesting, promising and so on, in various realistic situations and contexts. By contrast, in Canadian immersion teaching the language input is less controlled and learners are motivated because they are placed in a setting which provides them with opportunities for natural, real-life communication.

It is interesting to consider the ways in which these various approaches have been reflected in school language teaching practice. In the first instance, a noticeable change has taken place in L2 materials. As classroom practice moved from grammar-translation/cognitive code toward audiolingualism, the all-purpose textbook which had been a central part of the methodology of the former approach was replaced by a diversified package of picture charts, tapes and teachers' manuals. The lists of vocabulary items, the detailed grammatical explanations and the follow-up written exercises found in traditional textbooks were replaced by oral dialogues and oral drill pattern exercises. The expectation that students would develop strong reading and writing skills and ability to translate with ease into and out of the target language gave way to an emphasis on oral proficiency. Audiolingualism looked at language in terms of the development of the four language skills and maintained the position that listening and speaking should precede reading and writing.

With the recent advent of communicative language teaching there has been a renewed concern that L2 teaching material should be meaningful and useful, especially from the point of view of the learner. As a result, serious attempts have been made to define student needs and to develop programs in which instructional content relates directly to these needs. There has also been renewed interest in the use of natural and authentic language which accurately reflects the sociolinguistic setting of the topic or lesson content under study. In addition, particular effort has been made to focus on 'task-oriented teaching' and to provide teaching contexts where the focus in not on language *per se* but rather on 'tasks to be mediated through language' (Johnson 1979).

4. Two Second Language Classroom Observation Schemes

(a) The COLT Scheme

Two projects in the Modern Language Centre are using observation as one means for describing the impact of teaching on the second language learner. One observation instrument, the Communicative Orientation of Language Teaching (COLT), aims to examine the effects of second language instruction

on the acquisition of the target language (Allen, Fröhlich and Spada, 1984). The instrument is designed to describe essential features of the second language classroom which differentiate among various approaches to L2 teaching. The researchers hope to apply the instrument to both English as a second language (ESL) and French as a second language (FSL) classes. The development of the observation categories used in the instrument was preceded by a review of the current theoretical positions concerning communicative competence and communicative language teaching, an analysis of existing observation schemes, and visits to ESL and FSL classes.

In determining the observation categories to be used in the instrument the researchers focused primarily on the characterization of the second language classroom in terms of the degree of communicative orientation. It was decided not to attempt a definition of such general concepts as 'structural language teaching' or 'communicative language teaching' but to compile a list of indicators of communication, each of which could be separately quantified. It was felt that by analysing the communicative features of the verbal interaction between interlocutors the predominant patterns of communicative orientation of a specific classroom could be established. The researchers hypothesize that different types of communication will differentially affect the development of L2 proficiency, but make no claim about what type of communicative orientation will be pedagogically most expedient.

The Structure of COLT

As indicated in Appendix A (p.124), the observation instrument is composed of two parts. Part A describes classroom activities, that is, distinct teaching/learning units as well as non-pedagogically motivated interaction units, using the following categories:

- (a) Activity Type (e.g., drill, conversation, role-play, dictation, management, etc.)
- (b) Participant Organization (e.g., whole class, group work, individual seatwork)
- (c) Content (e.g., language form: grammar, syntax, phonology, etc.; language functions; topics ranging from narrow to broad reference: the classroom, the school, the community, the world at large, etc.)
- (d) Student Modality (e.g., listening, writing, etc.)
- (e) Materials Used (e.g., type of materials, such as textbook, audio/visual materials; manner of use, i.e., highly controlled or flexible use)

Part B analyses the verbal interaction of these activities in terms of seven communicative features consisting of the following dimensions:

- (a) Use of Target Language (Is the target language or the student's L1 the predominant language of communication?)
- (b) Discourse Initiation (Do students initiate the interaction and produce 'spontaneous' unelicited discourse or do they speak only when their turns are allocated?)
- (c) Information Gap (To what extent is the information requested and/or exchanged unpredictable or not known in advance?)
- (d) Sustained Speech (Do student utterances consist of a minimal number of clauses or is their speech sustained?)
- (e) Relative Restriction of Linguistic Form (Are students expected to produce specific predetermined forms, as in drill type exercises, or do students have complete freedom of choice in their responses?)
- (f) Reaction to Message/Code (Is the emphasis on accuracy of linguistic form or on conveying meaning?)
- (g) Information of Preceding Utterances (Are the exchanges between interlocuters restricted to minimal exchange patterns or is there a continuous 'natural flow' of interaction in terms of expansion and development of previous utterances?)

Coding Procedures

118

Part A of the observation scheme is coded by two observers in the classroom during the observation period. All sessions are taped. The activities are timed and the starting times are entered in the left margin. In addition to a written description of each type of activity, observers place check marks in the appropriate column under each of five major descriptors: Activity Type, Participant Organization, Content, Student Modality, and Materials (see Appendix A, p.124). In the course of one activity several subcategories may be marked. In such cases a circle is drawn around the check mark which indicates the primary focus or predominant feature of the activity.

The communicative features (Part B) are coded subsequent to the lesson from a tape recording of the class observed. A time-sampling procedure within activities is followed. Coding starts at the beginning of each activity for one minute and is resumed after a two-minute interval. During the one-minute coding periods the frequency of occurrence of each subcategory of the communicative features is coded.

Analysing Information in COLT

The first step in the analysis of the data is the assignment of a global communicative orientation score to each activity within the period observed. For this purpose teacher and student verbal behaviour is rated on a seven-point scale to indicate the degree to which the language is communicative. Criteria for these ratings include reaction to message and not to code, high information gap and unrestricted use of form. A subsequent more detailed analysis of the distribution and combinations of the various subcategories of

communicative features will follow this preliminary macro-analysis of the data.

The COLT scheme is presently being validated in a number of different second language programs in the Toronto area.

(b) The TALOS

A second observation instrument, the Target Language Observation Scheme (TALOS) (Ullmann and Geva, 1982) has been developed as part of a large-scale formative evaluation study of an elementary school FSL program. A major aspect of this large-scale study is to discover the characteristics of, and interrelationships between, process and product variables, in order to assess the effectiveness of the program. The purpose of TALOS, therefore, is to provide information about observable classroom process variables which occur during the implementation of second language programs in the school system. At the moment, TALOS is being used in core French classroom settings.² However, it has the potential for use in other second language settings.

The development of categories in TALOS was based on a framework of essential L2 classroom features suggested by Stern (1983). Of the parameters outlined by Stern, the following categories were selected and elaborated: the formal-communicative dimension, teaching strategies, curriculum content and the use of language along the crosslingual-intralingual dimension. Other categories used in TALOS are based on more general pedagogic criteria which research suggests influence learning (Evertson and Veldman, 1981; Stevens and Rosenshine, 1981). In addition, some categories were generated on the basis of first-hand experience with second language classes.

The Structure of TALOS

TALOS consists of a specific low inference section, a global high inference section, and a general information section. The rationale for designing a low inference and high inference observation instrument is two-fold. First of all, we recognize that certain dimensions which constitute part of the global setting and which are not exclusive to L2 teaching (e.g., teacher humour and enthusiasm, student attention) influence student achievement. Second, recent studies (Shavelson and Dempsey-Atwood, 1976; Ellis and Robinson, 1981; Erlich and Shavelson, 1978) indicate that classroom information gathered via high inferencing scales tends to be more stable than information gathered through low inferencing measures. In order to be able to make statements about the validity of TALOS we have therefore decided to code the same information via objective observation and global ratings. By coding the same classroom events in two distinct ways (i.e., low inferencing and high inferencing) it should be possible to check the validity of the categories as

representing theoretical constructs observable in second language classroom practice.

The global high inference section of TALOS elicits inferential global ratings about teacher and student involvement in the L2 class, as well as global ratings about the characteristics of the program in use and the treatment of the program by the teacher. The specific low inference section of TALOS deals with observable events which indicate the linguistic and substantive content being taught, the language skill being developed and the teaching strategies in use in the L2 class. This section is divided into two parts. Teacher-initiated behaviours are coded in one part; student behaviours are coded in the other. In those areas where there is an overlap between the global and specific entries, we expect that a high correlation between the two will indicate high reliability in the coding of the low inference entries. The low inference and high inference sections of TALOS are shown in Appendix B, p.126.

The teacher part of the low inference TALOS describes teacher-directed and initiated behaviour. It is subdivided into the following categories:

- (a) To Whom reflects who is being addressed by the teacher on a continuum from large group to individuals.
- (b) What-Type of Activity refers to classroom activities initiated by the teacher to achieve pedagogical goals. These activities are arranged on a continuum from formal to functional, beginning at the formal end with 'drill' and ending with the most open-ended activity 'free communication'.
- (c) Content Focus is subdivided into linguistic content and substantive content. By linguistic content we refer to the emphasis on the formal properties of the L2, namely sound, word, phrase or discourse. By substantive content we refer to overt formal grammar teaching, the explicit development of cultural information during the lesson and the introduction and integration of other subject matter into the second language program.
- (d) Skill Focus describes the listening, speaking, reading and writing skills practised in each lesson segment. The skill focus category makes clear the skill-building intent and purpose of each activity and each teaching act undertaken by the teacher.
- (e) Teaching Medium refers to those heuristic devices which the teacher uses in order to develop the formal or functional focus of the lesson, the substantive content in the lesson or the skill-building intent of the activity.
- (f) Teaching Act refers to pedagogical verbal strategies used by the teacher to enhance learning in the students such as teaching acts that are directly related to the lesson at hand, e.g., 'explain' and 'correct' as well as teaching acts which relate to classroom management, e.g., 'routine' and 'discipline'.

(g) Language Use relates to the crosslingual-intralingual continuum and describes the language used in the classroom by students and teachers. It provides information about the relative amount of L1 and L2 used, and in conjunction with other activities, it provides information about the circumstances under which each language is being used.

The student part of the low inference section of TALOS refers to student-initiated behaviour and in addition to the To Whom and Language Use categories described above, this part includes a category for type of student response or question:

- (a) What-Type of Utterance deals with the individual student responses to teacher initiated prompts. The entries in this category may be either verbal or non-verbal. The verbal responses are arranged on an utterance size continuum starting with a single sound and ending with extended discourse. A 'no response' entry is also included in this category.
- (b) Type of Question describes student-initiated questions, e.g., cognitive questions and questions relating to classroom management and routines.

The high inference section summarizes major characteristics of the second language classroom which relate to teacher, student and program. In the teacher part the following broad dimensions appear: L2 use along the crosslingual-intralingual dimensions; teacher intent and purposefulness (e.g., clarity); teaching strategies (e.g., personalized comments, gestures and teacher traits such as humour, enthusiasm). The student part rates use of L1 and L2 on task; student activity (e.g., initiates personalized questions and comments) and student interest (e.g., attention).

The high inference section of TALOS also provides observers with the opportunity to rate the implementation of the second language program in terms of appropriateness to age and stage (e.g., linguistic and content appropriateness); emphasis on language skills (e.g., reading skills); and the degree to which a formal or functional emphasis is given to the lesson. In addition, a global rating is obtained for the degree of L2 program integration with the general school curriculum.

The low inferencing and high inferencing structure of TALOS fulfils two purposes. It establishes the validity of the instruments to measure what it purports to measure and it provides information about observable classroom process variables occurring during the implementation of a second language program in the school system.

Codina Procedures

For our purposes the low inference section of TALOS is designed to have 20 observation units to encompass a 40 minute class period (see Appendix B, p.126). Each observation 'time on' is 30 seconds in duration followed by a period of 90 seconds when no coding takes place. In this 'time off' period observers look around the class to obtain global impressions.

During the 30 seconds 'time on' observers check off the entries which reflect observable teacher and student behaviour.3 In order to avoid redundancy we have opted for multi-purpose entries in this section of TALOS. These entries are multi-purpose because different combinations of coded entries yield information about different classroom events. For example, one 30-second frame might yield the following information: teacher addresses whole class in a drill-type activity where the content focus is on language form (i.e., grammatical structures) and the intent is to develop speaking skills. The L2 is used throughout the drill activity and the students respond in sentences in the target language. No questions are initiated by the students. Another 30-second frame could yield the following different information: teacher addresses an individual in a free-communication type of activity. The content focus of the lesson is on discourse and culture and the skill focus of the lesson is on speaking. Teaching is done through discussion of the text in the target language. The teacher asks high level 'cognitive' questions and the student responds in the L2 using sentences and sentence fragments.

All entries in the high inferencing section are ranked on a 0-4 scale, where 0 stands for extremely low or no occurrence and 4 for very high occurrence. These ratings are done at the end of the lesson.

Analysing Information in TALOS

TALOS was piloted by our research team in grade 2, 4 and 8 FSL classes. Agreement among raters was over 80%. Future analyses of TALOS may involve straightforward computation of frequency of occurrence of various entries during L2 lessons, as well as the use of factor analysis and other techniques for data reduction. Additional analysis will be undertaken to determine correlations between categories of second language teaching coded in the high and low inferencing sections of TALOS. Finally, we hope to be able to relate profiles of L2 classes to measures of achievement in FSL such as listening and reading comprehension and oral communicative competence.

5. Conclusion

TALOS and COLT are two examples of the ways in which observation is used in the Modern Language Centre in the context of second language research. Both instruments aim to reflect current theoretical issues in

research on second language learning and teaching. COLT was designed to measure the relationship between indices of communicative orientation of language teaching and indices of communicative competence in second language learners. TALOS purports to relate classroom profiles to various aspects of proficiency in L2 classes. Both instruments reflect a concern with the impact of theoretical constructs on classroom practices and both are endeavouring to provide information on the relationships between process and product.

It should be noted, however, that categories in COLT represent an attempt to operationalize theories of communication and issues in L1 and L2 which have been shown to affect the development of second language proficiency. TALOS, on the other hand, purports to measure and reflect various parameters of current L2 program implementation in the context of formative evaluation. The next phases of these research projects in the Modern Language Centre should indicate whether the two instruments described in this paper can provide reliable and valid information concerning the impact of diverse L2 classroom practices on second language learning, as well as insights concerning the extent to which second language pedagogy is influenced by theoretical constructs.

Notes

- 1. In fact, by videotaping classes it should be possible to carry out repeated levels of analysis, focusing on a large number of variables and units of analysis. However, videotaping is expensive and unless sophisticated equipment is available this technique also involves an information loss.
- 2. In core French programs French is taught as a subject within a specific time frame: 20-40 minutes in elementary schools; 40-75 minutes at the secondary level.
- 3. If a change in language use or activity occurs during the 30 second 'time on' unit the new information is recorded in columns b and/or c as shown in Appendix B, p.126.

APPENDIX A COLT Observation Scheme (Part A)

			8		1		Mini Control	1	}					{	}			
			\$		Use		Semi Control											
			\$		_	\vdash	High Control										-	1
			\$		-	_					 		 					\vdash
			1	LS			Non-Pedag.											
i	ŀ			RIA			Semi-Pedag.											
			2	MATERIALS	y		Pedagogic											
İ	- 1		4	Σ̈́	Туре		lsusiV					Ĺ						
ļ	- [7				oibuA											
	1		\$			×	extended											
-	-		e l		. 1	Text	lsminim											
			25			_	Other											
ì	1		33		اح		B nitin W											
-	l		٦	Z	5		Reading											\vdash
ı			2	20	MODALITY													├
-	- 1		¥ .	S	ĭ		Speaking			نــــــا								
							Listening											
Ē.	æ		æ		ة ي		Student											
DATE	₹VE		ä		Topic Control		Teacher/Stud.											
	OBSERVER		£		. 0		Teacher											
	8		Š				Orper											
			82				T bhow											
			28			Broad	noissnigsml											
			7.			Ā	Pers./Ref.											
	- }		26 2				Abstract											
- 1	ł		25 2			-												
- 1			- 1		ខ		School T.											
			24		lopi	ited					<u> </u>							
-	- 1		23		Other Topics	Limited	Fam./Com.											
İ			22		ਠ		Rout./Soc.											
	- 1		7	CONTENT			Personal											
Į	- [ន	Ž			Other											
	- 1		2	8		Narrow	Pers/Bio.											
- 1	- {		∞_			Z.	Stereotyp.											
	- 1		2				Classroom											
·			اي				Soc. Ling.											
Ē	age .		2		98		Discourse											
GRADE(S)	LESSON (Minutes)		4		Language		Function											
3	Ö		22		Ĺa		пто-Т											
	ESS		12				Implicit											
	_		=	i	۲.	_	Discipline											
			2		Man.	-	Procedure											
	i		1	7		_			_									
}			° l	ĝ	Comb.	—	Gr/Ind.											
	- [l	∞	ZAT	ŭ		[subivibn]											
	- 1	ı	-	Ž	Group		Different											L
-	ļ		۰	PARTIC. ORGANIZATION	5		Same											
	- [~	0	_		Choral											L
		- 1	4	Ĕ	Class		o∕s − S											
	- [ļ	~	PA	_		2\/2 − T											
		- 1	ı															
	- {	- }	- 1	Ş									l					
	- [ļ	ACTIVITIES														
1	١	۱	~) I]]						
<u> </u>	IER	S		AC.									ļ					
ЗСНООГ	Ę	SUBJECT				l												<u> </u>
S	TEACHER	SU	ار	Æ														
				TIME					L					L	L	L	L	
															_			

COLT Observation scheme (Part B)

Table 1 Tabl																 		 			 		
Tacker Verbal Principle				Elaboration																			
Table Tabl		of Se		Expansion																			
Table Tabl	1 1	tion		Соттепі																			
Table Tabl		Crea		Paraphrase																			
Table Tabl	1 1	Inco S/T	-	Repetition																			
Table Tabl				No Incorp.	Н					\vdash	\vdash				_								
The control of the	_	E si		Н	Н		_	_	 	-										 \vdash			
The control of the	ģ	eactio o/Me	э																				
TEACHER VERBAL INTERACTION Target Information Total Information Tot	V	20		Onestneted	H	Н		_	-	-							_						-
TEACHER VERBAL INTERACTION Target Information Total Information Tot	TER	Str.	-			Н				-	-	\vdash	اا				 				-	_	
TEACHER VERBAL INTERACTION Target Information Total Information Tot		F. 55	ļ	-	-		 	-		-	-					 		-	-		\vdash	-	
TEACHER VERBAL INTERACTION Target Information Total Information Tot	₩.								-	-	-		\vdash								 -	_	
TEACHER VERBAL INTERACTION Target Information Total Information Tot	VE!	- 등			<u> </u>	_			├	├	-						 						
TEACHER VERBAL INTERACTION Target Information Total Information Tot	INS	Spee	<u> </u>			\vdash		<u> </u>		-	<u> </u>		<u> </u>	_							\vdash	<u> </u>	
TEACHER VERBAL INTERACTION Target Information Total Information Tot	ign		 		$ldsymbol{ldsymbol{ldsymbol{eta}}}$		_	<u> </u>	!	 _		<u> </u>	<u> </u>		L_						 		
TEACHER VERBAL INTERACTION Table 1	ST	<u>_</u>	ا ق ق			_		<u> </u>	<u> </u>	_			<u> </u>	L.									
TEACHER VERBA I INTERACTION Tables of Table of		natio ap		Pseudo	L_	<u> </u>	L_	L_	\perp	\perp_{-}	L_	L_	L_	L_	L_	 				لــــــا	 		
TEACHER VERBA I INTERACTION Tables of Table of		nfor	ring fo	Unpred.																			
TEACHER VERBAL INTERACTION Target Thormation Tower Tow			ਰ≞	Pred.						<u>.</u>													
TACHER VERBA INTERACTION Tages Tage			uo																				
TACHER VERBA INTERACTOR Tage of Langer Communication of Tage of Langer Communication of Co		get 1g.	_																				
TEACHER VERBAL INTERACTION Target Tomman Teaching Teachi		Tar		ī	Ī																		
TEACHER VERBA I Internation of Italia Information of Italia Inform																							
TEACHER VERBAL INTERACTION Targ. L. L. L. L. L. L. L. L. L. L. L. L. L. L																							
TEACHER VERBAL INTERACTION Totalia Tracher Verbal Information Tracher Verbal Inform		jo ,																					
TEACHER VERBAL INTERACTION Totalia Tracher Verbal Information Tracher Verbal Inform		ance:	Соттепі																				
TEACHER VERBAL INTERACTION Totalia Tracher Verbal Information Tracher Verbal Inform		porati	Paraphrase		1	, ,								_									
TEACHER VERBAL INTERACTION Target Information Off talk Tomation Off talk Teach Information Off talk Teach Info		<u></u>																					
TEACHER VERBAL INTERACL Target Information Gap Off talk Total Contine Contin		Incor S. U		Paraphrase																	-	1	
TEACHER VERBAL INTERACL Target Information Gap Off talk Total Contine Contin		Incor S. L	_	Repetition																			
TEACHER VERBAL INTERACL Target Information Gap Off talk Total Contine Contin				No Incorp. Repetition Paraphrase																			
TEACHER VERBAL Target Larget Larget Cofficient Direct. Direc	NO		,	Reaction No Incorp. Repetition Paraphrase																			
TEACHER VERBAL Target Larget Larget Cofficient Direct. Direc	ACTION	Reaction Co/Mes.	3	Explicit Cod Reaction No Incorp. Repetition																			
TEACHER Off talk Off talk Dippred. Di	TERACTION	Reaction Co/Mes.	,	Explicit Cod Reaction No Incorp. Repetition																			
TEACHER Off talk Off talk Dippred. Di	L INTERACTION	Reaction Co/Mes.		Minimal Sustained Explicit Cod Reaction No Incorp. Repetition																			
Mies TO T See 9. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	RBAL INTERACTION	Sust. Reaction Speech Co/Mes.		Cenuine Minimal Sustained Explicit Cod Reaction No Incorp. Repetition																			
Mies TO T See 9. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	R VERBAL INTERACTION	Sust. Reaction Speech Co/Mes.	Request Info.	Pseudo Genuine Minimal Sustained Explicit Cod Reaction No Incorp. Repetition																			
Off (all k)	CHER VERBAL INTERACTION	Sust. Reaction Speech Co/Mes.	Request Info.	Unpred. Pseudo Genuine Minimal Sustained Explicit Cod Reaction No Incorp. Repetition																			
MISS TO Off 1841	TEACHER VERBAL INTERACTION	Information Sust. Reaction Gap Speech Co/Mes.	Giving Request Info. Info.	Predict. Pseudo Genuine Minimal Sustained Explicit Cod Reaction No Incorp. Reaction																			
Communic.	TEACHER VERBAL INTERACTION	Information Sust. Reaction Gap Speech Co/Mes.	Giving Request Info. Info.	Predict. Unpred. Pseudo Genuine Minimal Sustained Explicit Cod Reaction No Incorp. Reaction																			
O D D D D D D D D D D D D D D D D D D D	TEACHER VERBAL INTERACTION	Information Sust. Reaction Gap Speech Co/Mes.	Giving Request Info. Info.	Predict. Unpred. Pseudo Genuine Winimal Sustained Explicit Cod Reaction No Incorp. Repetition																			
3 th	TEACHER VERBAL INTERACTION	Target Information Sust. Reaction Co/Mes.	Giving Request Info. Info.	Off talk Predict. Unpred. Pseudo Genuine Minimal Sustained Explicit Cod Reaction No Incorp. Reaction																			
	TEACHER VERBAL INTERACTION	Target Information Sust. Reaction Co/Mes.	Giving Request Info. Info.	Off talk Predict. Unpred. Pseudo Genuine Minimal Sustained Explicit Cod Reaction No Incorp. Reaction																			
	TEACHER VERBAL INTERACTION	Target Information Sust. Reaction Co/Mes.	Giving Request Info. Info.	Off talk Predict. Unpred. Pseudo Genuine Minimal Sustained Explicit Cod Reaction No Incorp. Reaction																			

APPENDIX B TALOS Observation Scheme (The Low Inference TALOS)

1 ~	LUS	_		ei valid			, L			••		316			• •			<u></u>															
		F	Ī			٦٦		Ē	П	***	Ī	T.		Ī		ा	T		Ī	P	1	Ī		Π	Ē			Ē		П	T	Т	\Box
			1	_182		ר'			П		\dashv	Ť	M	✝	1	*	1		\dashv	1	1	\top					П	Г		П	╛	1	\sqcap
			F	. [1		Routine Q	H		Ħ	Ħ	Ħ	=	Ħ	#	╡	#	+-	۳	\dashv	#	#	Ħ	***	1	 	=	Ħ	F		Ħ	7	₩-	Ħ
		ı	١,	히호		D M07		┪	Н		\dashv	-6	1	+	- 8	-	+-		\dashv	+	+	+	****	⊢	⊢		Н			H	+		+
		- 1	-1	9 ts		Cognitive Q		┪	Н	-	-	-8	-	+	-6	-	+-		+	+	-	╂-		┥	⊢		H	-		Н	\dashv	+	↤
			١.	Type of question	ionsani	Meta-comment and a	1	┪	Н		\dashv	- 1	**	┪	÷	-	+-	1	\dashv	+	+	╆	-	⊢	┢		Н	\vdash		H	_	+	+
			۲	101 30	20.430	No response		┪	Н		\dashv	- 1	1	╅	╅		+-	f	+	+	+	+-		⊢			Н	\vdash		H	_	-	+
			Ĺ			Non verbal		Т	Н		\dashv	T	1	十	+	7	+-		_	-	1	T		1	 		Н	_		П		7	\Box
		İ	-	ଆଧା		Extended discourse			П		\neg	1	1	_	1	1	+-	T		+	1	T	****	1	T		Н			П	\neg		\forall
		1	- .	≨¦ēl		Sentence						Ĭ		7	1	""	+-		\neg	_		Т								П	\exists		\Box
		- (١.	What - type		Sentence fragment			П				ा	Т	Т		T				T	П				16	П			П	П	\top	\prod
		۱.	.ار	된걸		brow			П		\exists		"1	┪	┪		\top		\neg	7"		T			\vdash		П			П	\Box	1	
- 1	1	Who - ctudent	: 3	اخا≲		punos	m	\vdash	Н		\dashv	-	~	+	+	ी	+-		_	-+	1	╆		1	\vdash		Н	Т		H	\dashv	+	\top
- 1	i	Įž	ž þ		_	Ofher	۳	-	H	-	=	-	₩	⇉	⇟	#	+-	-	+	┿	+	⊨	==	⊨	⊨		Ħ	H		Ħ	#	#	##
		Ŧ	3	c 1		Teacher	-	-	Н		-	-	+	+	-	**	+-	Н	-+	-	4-	+		-	├	-	Н	Н		\vdash	+	+	+
		۱	"I	<u>اة</u>		79997			Н		\dashv	+		+	-	4	+-	Н	-+	+	╙	╀┈		\vdash	\vdash	-	Н			Н	-+	+	+
1	1	9	2 `	₹				-	Н		-	-	4	+	4	4	+-	Н	-		-	Н		<u> </u>	H	-	Н	-		\vdash	\dashv	+	+
1		۱ŧ	اٍ ₹	To whom		Small	Ι.,	┞	Н		4	1	-1	4	4		+-	-	\dashv	_	4_	↓		<u> </u>	⊢		Н			\vdash	\rightarrow	-	44
l	1	Ľ	1			Lorge							_1	┚	_f.				\perp		<u> </u>				L					Ш			نــــــــــــــــــــــــــــــــــــــ
		Г	Т	0.1		۲۶					T		ा	Т	Т		Т		Ţ		1						П			П	\top		П
			- [-	ᆡ뤓		<u>.</u>	-	Н	Н	Н	+	+		+	+	+	+	┥	+	+	+	Н		-	Н		\vdash	\vdash		-+	+	-	+
	İ		F				-	\vdash	ш		_	4	4	4	_	1	+	Ы	_		1	\sqcup		L	Ш	_	Ш			\perp	4	_	$oldsymbol{\sqcup}$
		1				DiscipLine					J	$_{ m I}$	$ lab{T}$	T	T	T	$\prod_{i=1}^{n}$		_T	floor	\mathbf{I}^{-}									ĽΤ	\Box T		\Box
ē		1				Routine					\Box			J	\Box		\mathbf{I}				1												\square
Grade	Date	1				9310îni9A					J	\Box	Ι	I	\Box	1	I			\perp	Ι											\perp	\Box
ō	ŏ	1		1		Correct					J	\Box	I	$oldsymbol{\mathbb{I}}$	\perp	Ι	\perp		$oldsymbol{\mathbb{I}}$	\perp	\Box									\Box	\Box		
ı		ı	Ι.	뜅		Low Level questions			Ц		_			\perp			L					Ш									\perp	\perp	Ш
		- 1				Cognitive questions		Ц			4		1	_			1		\perp			Li			Ш					\dashv	\bot	\perp	Ш
	1	ı	.	Suc Suc	questio	Meta-comments and		Щ	_		4	_	4	4	4	4	┸		4	٠.		Ц		L.	Ш		Ш	_	_	4	4		Ш
- 1		i	- 13	8		19wsnA		-	Н		-		-	+	-	1	4-	Н	-	-	4	Н		Ш	-		Н			-+	-	+	+-
	- 1		- +	<u>•</u>		Compare	-	\vdash	Н		-	- F	4	+	-		+-	-	+	-	1	Н		-	Н		Н			\dashv	+	+	\dashv
- 1						Discuss	ш	-	Н		4		4	4	-	4	+-	Н	-+	4	4	Н		Ш	Ш		\vdash			-	-	-	+
		- 1				Explain		_	Н			Щ,		4	_	4	4-	Ш	-	٠.	4	Н			Н	L	Н	_		\dashv	4		\sqcup
						Morrate		Ш	Ш				ી			à.	⊥_										Ш	┙		Ц	Ц.		
i	1	ı	L			סרוֹת										1	I_{-}					Ш											
- 1		1	F	<u>- </u>		gore playing		П						Ŧ	7		\top		Ŧ		1						П	\neg		Ŧ	Ŧ	\top	\sqcap
		1	1.	medium medium		ambo		\vdash	Н		_	- 1	**	+	+		+-	Н	_		+	П			Н		H		_	\top	十	\top	T
1			- [3	<u> </u>		buos			П			_	ी	7	1		+-		ヿ	-	1	П		_			П	T		T	す		П
			-	Ē		Poem								1			\top					П					\Box			T	\top		
		1		leaching		MD1Q					\Box								\Box		\mathbf{I}									\Box	\Box	I	\square
l			- -	<u>Ē</u>]	s	Authentic material					\Box			Т		3				\perp	1									\Box	\perp	\perp	\square
- 1	1	-		ğ		.V.A					\Box		31	\perp			T		_		1									\Box		\perp	
		-	Ľ	=		Text		Ш			4		1	1	_		4_		\perp	4	┩-	Ш					Ц			4	_	1	Ш
			Г			et n W								\mathbf{I}		Ţ				Τ	Γ									\Box	\Box		\square
i		1	.	الا اب		Read					\Box			T							I									I	\sqsupset	\perp	\square
- 1		ļ		focus		Speak					\Box	20.40	Š							- 20										\Box	\perp		Ш
	1	1	1	,, -		heden				ା	_Ţ		ø	_[_[П	$_{ m I}$		1	LΙ						_ I	ી	_ [_1		\perp \perp
	'	l.	F	1. m		Integrated subject matter		П			┪	-	7	Ŧ	1	***	T	П	丁	-	3	П	ᅦ				Ħ	\dashv	7	Ŧ	₹	7	肀
ı	French teacher's name			Content focus Linguistic Subst- antive		Culture		Н	\vdash		\dashv	-	1	+	+	+	+-	Н	+	+-	+	Н	┪	Н	\vdash		⊢╂	\dashv	-	+	+	+	+1
ಠ	ยฐ.	ı	1.	S 55		Grammar		Н	\dashv		7		1	+	+	+	+-	Н	\dashv	+-	+-	Н		Н			H	\dashv	-1	\dashv	十	+	Н
School	E S E	-	Ι.	ن اید		Discourse					\dashv	- 1	7	+	+	7	+	П	$^{+}$	-	1	П					\vdash			\dashv	_	1	П
Ϋ́	됴 함 S		П	ist le		Phrose					┪	-		+	+	+	+-	П	\dashv		1	Н				1 72	П	\neg	1	\dashv	t		Н
			П	[]		Word			╗		\exists	-	1	+	1	"	+-		_	1	1	П					П			\dashv	1	<u> </u>	Ħ
		ı	19	ات ات		punos					\dashv	T	1	+	1		\top	П	_		1	П					П	\neg		⇉	7		\Box
			F			cation					\exists	=#	ैं	╅	T	-	1	7	Ŧ	-	1	П					Ħ	\exists		\exists	₹	Ŧ	Ħ
		ı	1,	6		Free communi-		_		4	4	→.	4	4	4	4	↓-	Ш	4	4	4_	Ш		Щ			Н	_		Н	4	4	₩
				삐ㅋ		Paraphrasing		_	_	4	-	_f;	+	+	-		4-		+	-	4_	Н	-	Щ	Н		Н	_	-1	4	4	4	₩
		ı	Ι.	회치 : [Translation		щ	-	-	4	-4:	4	+	₽	4	+-	Ш	-		4	Н		Н	Щ		Н	-		\dashv	-	-	+
		}	١,	What - type of activity Formal- functional		Frame Spelling		Н	-		\dashv	-#	#	+	-	+	+-	H	+	- 100	1	Н		Н	Н		⊢	-		+	+	-	+-
			[]	텕마투호	5	Dialogue	-	Н	\dashv	₩	\dashv	-	1	+	+	#	+-	H	+	-8	1	\vdash	-	Н	Н	**	⊢╂	\dashv	┈┤	\vdash	+	+	┿
		8	; ;	≱ <u>©</u> ≱	ğ	סיינו	m	Н	\dashv	╗	\dashv	-#	1	+	-6		+-	m	\dashv	-	1	Н		Н	Н	**	┝┤	-		\vdash	╁	-	┰
		1	? =			Other	m	\dashv	\dashv	₩	7	+	*	+	Ŧ	*	+-	Ħ	+	#	+	Ħ	₩	Ħ	Ħ		Ħ	=		一	#	₩-	Ħ
		1		εi		Individual		Н	\dashv	7	+	-#	**	+		20	+-	M	+	-	4	H	***	Н	Н	-	⊢╂	\dashv		_	-6	#	+
		2	١!	2		Jome	m	Н	-	H	+	-6	#	+	-8	34 31	+-	H	+	- 1	1	Н	***	Н	Н		┝┥	-	₩	+	- 8	-	┿┤
	Who - teacher			N NOM				Н	-	₩	+	- 18	4	+	-6	#	+	M	+	-	4	Н		Н	Н		⊢┥	-	H	\dashv	-#	-	+
		[1	<u> </u>		Large		Ш					Ø.	1							1	Ш		Ш			\sqcup			┙	8		ш
		F	_		٠.	Observation un	_	q	3	z	a	3	٤	q	5 1	b (1 2	ç	٩	3 9	q	5	7	q	2	8	a	٥	6	q	ه و	01 9	1
					+!	Opening	Ľij	ا ت_ا		ا'_	۱۳_	٦	'ا_	1	۲۱'	۱,	ľ	"	٦	٦١٤	Ί,	ا ً ا	-			•		_ [ا'_	[]			Ľ
			_	_			_	_	_	_	_		_	_	_	_	_	_	_	_		_	_	_	_	_		_	_		_	_	_

TALOS Observation Scheme (The High Inference TALOS)

				_	_
			1		
	low				high
	шe				ä
	extremely	≩	.⊨	high	extremely
TEACHER	(a)	low	fair	Ħ	ုံ
Use of L1	0	1	2	3	4
Use of L2	0	1	2	3	4
teacher talk time	0	1	2	3	4
explicit lesson structure	0	1	2	3	4
task orientation	0	1	2	3	4
clarity	0	1	2	3	4
initiate problem solving	0	1	2	3	4
personalized questions and comments	0	1	2	3	4
positive reinforcement	0	1	2	3	4
negative reinforcement	0	1	2	3	4
corrections	0	1	2	3	4
pacing	0	1	2	3	4
use of audio-visual aids	0	1	2	3	4
gestures	0	1	2	3	4
humour	0	1	2	3	4
enthusiasm	0	1	2	3	4
					П
STUDENTS					Ш
Use of L1 on task	0	1	2	3	4
Use of L2 on task	0	1	2	3	4
student talk time on task	0	1	2	3	4
initiate problem solving	0	1	2	3	4
comprehension	0	1	2	3	4
attention	0	1	2	3	4
participation	0	1	2	3	4
personalized questions and comments	0	1	2	3	4
positive affect	0	1	2	3	4
negative affect	0	1	2	3	4
S to S interaction on task	0	1	2	3	4
	Г				П
PROGRAM	Ш	L			Ц
linguistic appropriateness	0	1	2	3	4
content appropriateness	0	1	2	3	4
depth	0	1	2	3	4
variety	0	1	2	3	4
listening skill focus	0	1	2	3	4
speaking skill focus	0	1	2	3	4
reading skill focus	0	1	2	3	4
writing skill focus	0	1	2	3	4
formal properties	0	1	2	3	4
functional properties	0	1	2	3	4
integration with general curriculum	0	1	2	3	4

TALOS Observation Scheme (General Information)

1.	Observer							
2.	Date							
3.	School							
4.	Name of French teacher					·	· · · · · ·	
5.	Name of home-room teacher							
6.	Grade							
7.	Observation (circle one)	lst		2nd		3rd	4th	
8.	Lesson start							
9.	Lesson end			.——				
10.	French room (circle one)		yes		'no			
11.	Teacher French displays?		yes		no			
12.	Student French displays?		yes		no			
13.	Francophone French teacher?		yes		no			

10. COMMUNICATIVE LANGUAGE TEST DEVELOPMENT

DAINA Z. GREEN AND SHARON LAPKIN

1. Introduction

The Modern Language Centre has been involved in communicative second language testing since 1970. In that year, the need to evaluate the newly-instituted French immersion experiment in Ontario resulted in the establishment of the ten-year Bilingual Education Project to assess the developing L2 skills of English-speaking students enrolled in French immersion programs. A principal factor motivating the development of assessment instruments in the early stages was the scarcity of existing tests appropriate for the immersion group. Standard French achievement measures, especially those designed for the upper grades, could be borrowed from tests developed for Francophone students. However, in the early seventies, tests of listening and reading comprehension had not been designed with the immersion population in mind, and tests of oral production for immersion students were non-existent.

One objective stated clearly by school boards offering immersion programs was to develop high-level listening comprehension skills in French in the initial years. The skill of listening is not generally tested in the first language, so it was necessary to create completely new instruments. The two tests developed by the Bilingual Education Project were the French Comprehension Tests (FCT) for use in primary grades and the Tests de Compréhension Auditive (TCA) for upper elementary and high school students aged about 11-15. While the FCT was not based on a communicative approach, and used isolated sentences and short textbook-type comprehension passages, the TCA was innovative in its use of 'real' language, mostly recorded from a wide range of French-language radio broadcasts complete with background static. The clips are extracted from a radio phone-in, a serialized novel, an interview and a news bulletin, among others. The FCT (Barik, 1975, 1976) is still used to measure listening comprehension up to the grade 3 level.

The TCA has been instrumental in demonstrating that students from grade 6 and above have no more trouble in making sense of material presented aurally than do Francophone students at comparable grade levels. But it has presented two problems. First, OISE was not able to obtain copyright clearance on the taped broadcast material. Paradoxically, it was the authenticity of the material which blocked its use as a test for wide distribution. Second, the overwhelming majority of immersion students develop native-like listening skills in French by the end of grade 2. Therefore,

in the TCA, listening comprehension became confounded with such factors as memory, attention, and certain cognitive and inferential skills. As further work in the area has shown us, this is not a failure of the test. It strengthens the hypothesis that immersion students acquire and continue to develop receptive skills at age-appropriate levels.

The development of reading comprehension tests followed a similar pattern. The first tests developed were traditional in focus, containing contrived, textbook facsimiles (Barik and Swain, 1979), whereas those developed later emphasized the use of authentic, meaningful language from a variety of reading domains. Thus the Test de Compréhension de l'Écrit (TCE) includes a cartoon, a recipe, a newspaper article, an advertisement, and so on.

Success in testing the so-called receptive skills led to a shift in test development toward the designing of measures of oral and written production with a communicative emphasis. Here we encountered new problems. Whereas the listening and reading tests could be scored easily, many productive tests required new and often complex scoring criteria to overcome arbitrariness and capture those features most related to communicative proficiency in oral and written modes.

One of the first types of productive test used in the Bilingual Education Project battery was the cloze test. A major advantage of this procedure is that it is relatively easy to score. The cloze passages were taken from a variety of age-appropriate French-language magazines, and every seventh word was deleted from a part of the article presented in its original form. Studies by Swain, Lapkin and Barik (1976) and Lapkin and Swain (1977) indicated a high correlation between scores obtained by the 'exact' method of scoring (only the omitted word counted correct for each blank) and those obtained by the 'acceptable' method (accepting as correct any word in the blank which makes sense). Correlations found between cloze and other measures of second language achievement were high (0.77 or higher as reported in Swain, Lapkin and Barik, 1976), indicating that the cloze test could serve as a good predictor of overall second language proficiency.

The cloze is considered an integrative test. It has been used successfully from the grade 3 level on (see the description of the Saskatchewan Test Development Project below). While success on the cloze requires the ability to read for meaning, its main application is as a test of written production and overall second language proficiency, as it requires students to supply missing elements representing a variety of linguistic functions (conjugated verbs in proper sequence, lexical items, logical connectors, etc.) in a written context.

Immersion students participating in the Bilingual Education Project were also given compositions to write in French in each annual testing program. These were analysed linguistically at grade 3 (Swain, 1975), primarily for the purpose of comparing students' second language writing skills with their

writing skills in their first language. In subsequent projects writing tasks have been designed to elicit specific aspects of written performance, and performance by immersion students has been compared with data from native French-speaking students.

The key to the next phase in test development was the identification of the critical features of receptive and productive language, and their placement in a conceptual framework. Work on communicative proficiency as a testable goal of language teaching took a major step forward with the introduction of a position paper by Canale and Swain (1980) entitled 'Communicative approaches to second language teaching and testing' (see also Canale, 1983). The paper described communicative competence in terms of different domains, namely, grammatical, sociolinguistic, discourse, and strategic. The framework assumes that learners can develop competence in any of these areas relatively independently, and that learners and native speakers may differ in their mastery of these skills. It is also assumed that, depending on the task, certain skills may be involved to a greater or lesser degree.

Grammatical competence refers to knowledge of the language code itself. including the rules of word formation, vocabulary, pronunciation, spelling and sentence formation. Knowledge of the code is framed in terms of understanding the literal meaning of utterances. Sociolinguistic competence addresses the extent to which utterances are produced and understood appropriately in different sociolinguistic contexts depending on such factors as topic, status of participants and purposes of the interaction. The notion of sociolinguistic appropriateness applies to meaning as well as form. Discourse competence refers to the rules and conventions of combining grammatical forms and meanings to achieve unified spoken or written texts in different genres, such as narratives, business letters, recipes, or scientific reports. This unity of text is achieved through cohesion in form and coherence in meaning. Cohesive devices include pronouns, synonyms, conjunctions and parallel structures which help to link individual utterances and show the logical or chronological relations among a series of utterances. Coherence refers to the logical sequencing of the ideas in a text. Strategic competence relates to the mastery of communication strategies invoked by a speaker, either to enhance the effectiveness of communication or to repair breakdowns in communication. These breakdowns may result from insufficient competence in one or more of the other components, or they may be attributed to limitations of the actual communicative event (for example, having to speak loudly or repeat oneself when a telephone connection is poor).

These components have formed the theoretical framework guiding the development of a variety of scoring and evaluation procedures. We will now look at the work done in the context of five projects in the MLC: (a) The Ontario Assessment Instrument Pool, French as a Second Language, Junior and Intermediate Divisions (Ontario Ministry of Education 1980); (b) The York Region Core French Evaluation Project (Ullmann, 1982a); (c)

Linguistic Interdependence among Japanese and Vietnamese Immigrant Students (Cummins, Swain, Nakajima, Handscombe, Green and Tran, in press); (d) Second Language Maintenance at the Secondary School Level (Lapkin and Swain, 1983) working in conjunction with the Saskatchewan Test Development Project (Lapkin, Swain and Cummins, 1983); and (e) Development of Bilingual Proficiency (Allen, Cummins, Mougeon and Swain, 1983). The five projects will be examined in detail with particular attention to the communicative testing or assessment components of each one.

2. The Ontario Assessment Instrument Pool (OAIP)

The project originated when the Ontario Ministry of Education perceived a need for a pool of assessment instruments to be used throughout the province for the evaluation of different subject areas, including mathematics, science, and English and French as first and second languages. The instruments were to be designed to correspond to various 'objectives stated or implied' in the Ministry's curriculum guidelines. The items contained in the French as a second language (FSL) instrument pool were designed for students in grades 6 and 10 with a widely varying amount of exposure to the teaching of French. The levels were assigned in terms of the total number of instructional hours in FSL accumulated by the student. For example, by the end of grade 6, some students had completed 180 hours while others had completed 540 hours. In grade 10 the levels ranged from 360 hours to 720 hours. Levels depended on the length of the teaching period, number of classes per week, and the grade at which French was introduced into the curriculum. Some items were targeted on the basis of age level, while for other items, number of instructional hours in French was the operative factor in determining the appropriate target level.

The items covered not only the usual modes (reading, speaking, listening, writing) but also the components of the Canale and Swain (1980) framework. The framework includes an outline, or domain description (Canale and Swain, 1979), detailing the relationship between the competence areas (grammatical, sociolinguistic, etc.) and the communicative functions (requesting, apologizing, persuading, etc.). Each item was targeted for one or more of the points in the domain description. Some examples of reading instruments, each containing several items, are given in Figures 10.1, 10.2, and 10.3. Coded information (omitted here) is provided at the top of each instrument, indicating the precise points of the domain description addressed by the items. This key also indicates the grade levels and instruction-hour levels for which the instrument is considered most suitable, and the difficulty rating observed in pilot testing for each level.

Each of the OAIP instruments is discrete, and there is no sequence of items, although there are instruments designated for each of a variety of levels. Some instruments consist of a single stimulus and a response elicitation,

READING: Grammatical, Strategic.

You see the following ad in Ouébec-Rock:

Un groupe de rock-disco cherche un clavicriste. Aucune expérience de groupe nécessaire. PIERRE à Cornwall. 677-3082.

When you try to find claviériste in the dictionary, here is what you find:

clavicule [klavikyl] clavier [klavie]

n.f. clavicle n.m. keyboard (of piano, typewriter, etc.)

clef, clé [kle] n.f. key

From this, you conclude that the people in the ad are looking for:

- (a) a keyboard instrument.
- (b) a piano tuner.
- (c) a keyboard player.
- (d) a secretary-typist.

Circle the letter beside the correct answer above.

FIGURE 10.1: Sample OAIP reading item 1.

while others may contain one or more stimuli and a series of questions or exercises. The same stimulus (e.g., reading passage, taped dialogue) may be accompanied by separate questions or sets of questions, thus forming the basis for several items of different types with different linguistic targets. For each item, the stimulus provides a context, which is often reinforced by visual aids or taped accompaniment. The questions are never presented without some sort of context being established. This is required because of the communicative focus of the majority of the items.

Because the items are discrete, and not sequenced, they are more limited in their ability to create true communicative demands and situations than instruments making use of a unified context for a series of exercises or questions. That is, a genuinely communicative situation is at best suggested by these instruments. They are all relatively short and unconnected. The time required to complete a single instrument generally does not exceed fifteen minutes. Since they are intended for scoring by classroom teachers, whose available time for scoring is generally quite limited, multiple choice and short answer questions are the rule. The package of instruments contains a disproportionate number of reading items, and relatively few speaking and writing tasks. Except for the oral production items, they can all be administered to a whole class at once. The procedures for scoring the productive items are described briefly in the administration manual without examples to guide teachers in using such scaling procedures and criteria. In retrospect, it would have been advantageous to provide a detailed scoring guide explaining and exemplifying all the procedures developed by the project team.

Nonetheless, the process of pioneering the rating scales and scoring

READING: Grammatical, Discourse,

Read the following column from a newspaper and the questions below. Then circle the letter beside the correct answer for each one.

LES PETITES ANNONCES

Je cherche un prof de piano qui demeure près de chez moi ou qui pourrait venir à la maison. J'habite (centre ville) Hawkesbury. Danielle Beaulieu. 731-1431.

Je donnerais des cours de guitare ou de piano le soir. Pour plus de renseignements: Michel à 270-3187 entre 19h00 et 22h00.

Vendrais disques usagés en très bonne condition, pas cher: Harmonium, Maneige, Beau Dommage, Robert Paquette, beaucoup d'autres. Jocelyne à 273-1415.

Cherche violon usagé (de 15 à 20 ans au moins). Serais prète à payer \$100 à \$150. Chantal Nolin à 277-2163 (soir seulement).

- 1. What does Chantal want?
 - (a) to buy a new violin
 - (b) to buy a violin at least 15 years old
 - (c) to sell her violin for at least \$100
- 2. Who has something to sell?
 - (a) Danielle
 - (b) Jocelyne
 - (c) Chantal
- 3. Who is trying to buy something?
 - (a) Michel
 - (b) Jocelyne
 - (c) Chantal
- 4. Who gives music lessons?
 - (a) Danielle
 - (b) Michel
 - (c) Chantal

FIGURE 10.2: Sample OAIP reading item 2

procedures was ultimately of benefit to subsequent testing projects carried out in the MLC. As a first step, each item was pilot tested on at least 60 students from each of a series of 'hour levels' and from each grade where it appeared appropriate. Administration was carried out by classroom teachers. The researchers examined a random selection of responses from each group, which formed the basis for the points of the rating scales, and provided a frame of reference. The remaining responses were scored according to the procedures developed on the subsample. The question of criteria and standards was raised and resolved in an ad hoc way. This issue

READING: Grammatical, Sociolinguistic,

Read the following passages, taken from magazine advertisements, and identify the product that is being promoted. For each one, circle the letter beside the correct answer on this page.

- 1. "Pour photographier dans presque toutes les lumières. utilisez
 - l'Accumat."
 (a) TV set

(c) copying machine

(b) camera

- (d) projector
- 2. "Pour Arrow, faire des copies parfaites (de très nombreuses copies) en quelques minutes. c'est de la routine."
 - (a) camera

(c) typewriter

(b) motorcycle

- (d) copying machine
- 3. "Regardez la meilleure télé-couleur dans l'histoire de Miracouleur."
 - (a) TV set

(c) projector

(b) car

(d) copying machine

FIGURE 10.3: Sample OAIP reading item 3

has continued to plague us in every subsequent project. For the purposes of the OAIP, it was understood that only extensive field trials would permit the interpretation of results on a statistical basis. Thus, the instrument package is as yet technically incomplete.

Developing the rating scales on the basis of obtained performance by the target groups provided heuristic criterion levels (suitable for the sample observed but not assumed to fit all possible target groups). It also avoided the problem of developing criteria abstractly which were not sensitive to the real limitations of FSL students in the observed sample. The method was successful in that scales developed from the subsample of student responses were appropriate when applied to the remaining pilot test data.

3. The York Region Core French Evaluation Project

In 1981, the York Region Board of Education in Ontario decided to evaluate its core French program. This Board had instituted a new program in 1977-78, and wanted to determine whether it was meeting its own objectives as well as those set out in the Ministry of Education guidelines. The MLC was contracted to undertake this assessment, including a critical review of the curriculum and surveys of teacher and administrator attitudes, and the assessment of student performance. To this end, the project adapted a number of existing tests and instruments, including items from the Ontario Assessment Instrument Pool discussed above. As well, a number of new instruments were created.

The test instruments used by the project to assess student performance in grades 2, 4 and 8 were of three types. The first consisted of measures of

listening comprehension, adapted from a variety of existing instruments. A second set of measures was developed to assess student ability to handle connected discourse in reading. The students at grade 8 with the highest level of cumulative instruction hours were given a passage in a straight cloze presentation (no choices). Students at grades 2 and 4 were presented with the same cloze passage in a modified, multiple choice format. For each blank, four choices were offered. The passages resembled those found in textbooks, and were specifically constructed for the purpose of this assessment. The four choices were selected to represent four conditions, ranging from semantically and grammatically correct to semantically and grammatically incorrect, with two possibilities for one feature correct and one incorrect in between. The students' answers were therefore weighted in relation to the number of features correct (0, 1 or 2). This approach to the cloze procedure allows for a more diagnostic interpretation of students' errors.

The third type of instrument used in the project were tests of oral communication skills. Randomly selected students at the three grade levels were tested individually. Grade 2 students were given a picture-retelling task. Grade 4 and 8 students were asked to make up a story in French from a sequence of pictures. The responses to these tests were transcribed for detailed linguistic analysis.

4. Linguistic Interdependence among Japanese and Vietnamese Immigrant Students

The study was undertaken to clarify certain issues relating to the differential acquisition of language proficiency skills, namely, those required for basic social interaction such as informal conversation and those related to cognitive/academic success such as literacy activities. The study also addressed the relationships among language learning, the age of immigration, and the length of time spent in the host country. Cummins et al. (in press) had hypothesized that immigrant children acquire ageappropriate levels of face-to-face interpersonal linguistic skills more rapidly than they acquire age-appropriate levels of cognitive/academic language proficiency. This hypothesis was in part based on teacher reports that children often begin to sound like native speakers conversing with apparent ease and with a good accent after only a year or two in their new country. However, the children's reading and writing skills may take much longer to reach age-appropriate norms. In addition, Cummins (1981a) hypothesized that older children who had had the opportunity to become literate in their first language would make relatively more rapid progress in acquiring cognitive academic skills than younger children whose literacy skills were undeveloped at the time of immigration.

The study had two groups of subjects: a group of Japanese students aged 7 to 11, and a group of Vietnamese mother-tongue students aged 8 to 16. The groups were dissimilar in many ways. The Japanese students were mainly

temporary immigrants whose fathers had accepted limited-term positions in Canada. They tended to be of relatively high socio-economic status and the children had had uninterrupted and enriched educational careers, with Japanese studies supplementing a full program of study in Canadian schools. By contrast, most of the Vietnamese students anticipated permanent residence in Canada, and had experienced much trauma in reaching their host country. All Vietnamese children had been in Canada between six months and two years. Most children had been without school for a year or more, and a few had had virtually no schooling before arriving in Canada. They were older as a group, and their socio-economic status prior to arrival in Canada varied. In Canada, however, all of them were living in poor economic conditions. Since they were recent immigrants, there was no network of support from within the community itself.

In total, the constellation of conditions presented by these groups provided fertile ground for the investigation of Cummins' hypotheses. Although the number of subjects grouped by age on arrival and length of residence was too small for extensive statistical inference, the sample presented an excellent opportunity to look at the factors suggested by the hypotheses.

In order to test these hypotheses, it was necessary to develop special procedures to tap social interaction skills, as well as to test cognitive academic skills. Social interaction skills were probed through a modified oral interview which included a number of structured tasks. The procedure for the Japanese subjects was as follows. Each interview session lasted less than half an hour and was carried out in the students' homes. The first task was a 'warm-up' informal conversation which lasted for up to ten minutes; this was followed by a series of role-playing situations involving a toy telephone. This task was included to tap the children's use of sociolinguistically appropriate forms. The telephone tasks included receiving a call and taking a message for an absent father, responding to a wrong number, and requesting information about the hours of a public sports facility or a movie. The third task of the session required children to order a series of pictures and to tell the resulting story. This was included principally to provide opportunities for observing children's use of cohesive devices, a major aspect of discourse competence in the Canale and Swain framework. The fourth and final task was a picture description activity. The target picture contained several ambiguous or uncommon objects intended to elicit communication strategies on the part of the children. Following or preceding their interviews in English, the students were also interviewed in Japanese using a similar format, although in a slightly abbreviated form.

The scoring and analysis of the data from the Japanese interviews were performed prior to the interviewing phase with the Vietnamese subjects. This allowed the researchers to make some modifications in the interview procedure. The telephone tasks, although rich in the sociolinguistic information they provided, were discontinued. This decision was based on

the realization that information about students' proficiency in telephone conversations is not normally available to teachers, and thus does not influence a teacher's judgment of social competence in recently arrived immigrant students. Therefore, it was outside the scope of the study, which was concerned with the types of behaviour that lead teachers to treat such students as if they were native speakers of English, or to judge their interaction as native-like. The telephone tasks might be useful in answering other questions, however, such as what skills students master in their new language outside of their school experience.

All interviews were carried out one-to-one. (In families with two siblings in the project, the interviews were sequential.) The interviews were taped, and the rating scales were developed in such a way that an entire session could be scored on a single listen-through of the tape. (Occasionally, of course, it was necessary to listen to some part of the interview more than once.) The raters listened to 25 per cent of the interviews and together developed the categories and scales which could be most reliably scored. The targets of the rating scales included pronunciation, richness of information communicated, grammatical inflections, use of articles, level of syntactic sophistication, question formation, use of receptive and communicative strategies and use of connectors for cohesion. Some of these rating scales were applied to two or more of the tasks of the session, while others were global ratings based on all language produced in the session, and some were specific to a given task. Each of these features was measured on a linear scale having three to five points, depending on the range of responses obtained in the interviews and the number of useful gradations.

The interviews with the Vietnamese students had fewer components and were therefore shorter. Because there was less language produced in each session it was more difficult to rate oral production on the basis of listening to the tape once. For this reason, the students' responses to the storytelling task (based on a sequence of photos depicting situations more appropriate for older subjects than those used with the younger Japanese subjects) were transcribed and scored from transcription. In retrospect, it would seem better to provide for interviews of equal length for both groups and to continue the live-scoring procedure.

As far as cognitive/academic skills are concerned, these were tested for both the Japanese and Vietnamese students using standardized reading and vocabulary tests in English. Standardized Japanese achievement tests were used with the Japanese students, all of whom were enrolled in a Japanese school in Toronto intended to maintain the academic level of these temporary immigrant children relative to their peers in Japan. No equivalent test was available for use with the Vietnamese-speaking children, so measures of Vietnamese cognitive/academic skills were developed by project staff.

The scores on the cognitive/academic test measures and the interview ratings

for the group of Japanese subjects were subjected to statistical analyses. The results indicated strong support for the hypothesis that proficiency in the cognitive/academic skills in the first language is related to proficiency in these skills in the second language. It was concluded that the construct of proficiency is not a unitary one and that distinctions related to the context in which the language is elicited may be fundamental to predicting the success of the learner in carrying out a given task. That is, students may be expected to perform better given a situation which is relatively more contextualized and interactive such as a conversation or a discussion based on concrete materials placed before the child, than on a task which is relatively contextreduced (such as an orally-administered antonyms test). The findings of the study showed a strong correlation between interactional style in the two languages. That is, a child who tended to provide detailed and elaborated responses when questioned in Japanese tended to manifest the same tendencies in English. The findings also suggest that older immigrant students maintain and develop their first language skills better than students who immigrate at a vounger age (see also Paper 3).

Although the testing-interview procedures were administered by a trained researcher, the types of questions and the rating scales could ultimately be useful for teacher evaluation of students' proficiency. In fact, the rating scales used in this research project served as a basis for many of the scoring scales used in the Saskatchewan and Second Language Maintenance projects, which will ultimately yield a scoring scheme for teachers to use in assessing the communicative performance of their classes.

5. Saskatchewan Test Development Project and Second Language Maintenance Project

These are two concurrent projects sharing resources. The purposes of the two projects are quite different, but both required the development of integrated instruments to assess communicative performance. It was the Saskatchewan Department of Education which initially commissioned the assessment package. The Department was interested in having evaluation units which would allow school personnel to evaluate the linguistic outcomes—especially in the productive skills of speaking and writing—of two programs throughout the province: minority francophone educational programs, and French immersion programs. The programs were to be evaluated at the end of grades 3, 6 and 9, and the tests were to measure the collective communicative competence of the whole group, rather than individual achievement. Therefore, only a representative sample of students in a class is selected for testing.

The second project drawing on some of these same resources is entitled Second Language Maintenance at the Secondary School Level. Its purpose is to compare the effects of certain follow-up programs at the high school level for students who began their schooling in a French immersion program (early immersion), and had a two-year immersion experience after grade 6 (late immersion), or who entered a program at grade 7 of intensive instruction in French, including the teaching of some content subjects in French (late-extended). Recently, the presumed advantage of early immersion programs has been called into question by the apparently successful mastery of French by students in the late immersion programs (e.g. Adiv, 1980). The Second Language Maintenance Project is designed to measure the French oral and written skills of students in the various programs twice: once early in the grade 9 year, and once later in the grade 10 year, using small representative groups from each program. The linguistic analysis is a highly qualitative one, based on a range of tasks performed by each student, and a set of highly detailed scoring and rating scales for each task.

Both projects required testing materials which would elicit oral and written production from students at the high school level, and both required that the materials be as sensitive as possible to the range of linguistic proficiency (native and non-native) of the testees in each of the components of communicative competence proposed (Canale and Swain, 1980; see also Canale, 1983). Accordingly, the format chosen for the evaluation units included many open-ended tasks, where there was no single right answer. A student with a higher degree of linguistic sophistication in French would be expected to perform at a level reflecting that proficiency on the tasks included in the unit.

A unique feature of the three evaluation units (grades 3, 6 and 9) is that they are theme-related and interactional. The students spend up to five class periods throughout the week of the testing engaged with the materials, and the information included in the units is intended to be stimulating and interesting to the students. In fact, all three units were developed in consultation with target-aged students. These students seem to have been good predictors of their peers' interests since the units have been well received in classroom pilot-testing. Capturing the interest of students was considered to be an important factor in making the instruments truly interactive. By providing information on a topic of interest, more authentic participation is elicited from the students using the instruments.

The grade 9 unit which was to be used in both projects was the first one completed. It includes a student booklet, task sheets and a teacher's manual (a guide to test administration and scoring). The materials for the unit were developed in three overlapping stages: collecting input from students and relevant information in order to write the booklet, called 'A vous la parole'; setting the oral and written tasks to be required of students; and constructing scoring procedures which would provide assessment data about the skills tapped by the exercises.

The first task facing the research team was to determine which communicative functions to measure. It was agreed that the materials should

draw on students' ability to carry out such activities as talking to peers in an informal setting as well as conducting oneself in a semi-formal interview with an adult; and the ability to write in both formal and informal styles, depending on the intended audience and the purpose. By working from goal to method, the functions to be tested and scored were defined in terms of the hypothesized components of language proficiency, and the types of tasks requiring such functions were constructed accordingly. The theme chosen for the grade 9 package related to fictitious summer employment projects for youths across Canada fifteen years and older in two francophone communities in Canada. The title 'A vous la parole' was taken from a letter by a young Montrealer included in the booklet in which he claims that youths face discrimination in the job market and suggests that it is time for adults to 'let us have our say' in decision-making that affects youth. The two employment opportunities relate to different interest areas. (For more details see Swain, 1983a and Green, in press).

The first analysis of the data gathered through the pilot-testing of the grade 9 materials have been as detailed as possible, and have been carried out primarily for the benefit of the Second Language Maintenance Project, focusing on program differences. The development of the detailed scoring critera began with the view that each task, while offering information about all components of communicative language proficiency (grammatical. sociolinguistic, discourse, and strategic aspects of language use), could most profitably be scored for a limited number of features. Thus, the scoring schemes developed reflect the most salient aspects of each task response. The scales involved a mixture of objective counts and subjective ratings. The total number of nouns, range of nouns, points of information and preposition errors, for example, could be counted objectively. Additionally, judgments were made on a three-point scale about such features as appropriate use of paragraphing, tense sequence, and the use of opening and closing formulation and turn-taking (i.e., in the oral group conversation among four students).

For purposes of large scale program evaluation, the intention was to identify a small number of features to be scored for each task on the basis of the analysis of the pilot data, and to define these scales through examples and explanation so that teachers can become familiar enough with them to be able to score the performance of the groups of students representing the class in the program evaluation.

The grade 6 package deals with the theme of summer camp ('Bienvenue au camp de la gélinotte'). The illustrated booklet which constitutes the basis of the unit depicts an imaginary camp near Prince Albert National Park in northern Saskatchewan. The booklet offers basic information about camp activities, and informs students about the National Park and some of its features. The written tasks include a short-answer exercise focusing on preposition use, a factual cloze passage related to bears in the park, a writing

exercise requiring students to transform information about camp activities from point form into prose, and a short composition in which students describe from photographs a friend they met at camp. The unit has two oral tasks: retelling a taped story from pictures depicting a fish that got away, and a spooky campfire tale which has four students continuing the story a sentence at a time, round-robin style. Results from the first round of pilot testing indicated general success with the unit and pointed to certain modifications to improve the tasks.

The grade 3 unit consists of a slide show with a soundtrack on cassette. The items include a story-retelling task based on selected pictures from the slide show, five short-answer questions, a composition starter and a cloze task. There is also a sentence repetition task with 20 sentences containing such constructions as reflexive verbs, object pronouns, prepositional phrases and impersonal constructions (il faut, il y a). All of the tasks are based on the slide show, which tells the story of a French-Canadian boy visiting his cousin's school and having a tense moment involving a runaway guinea pig. The development of scoring procedures for this package is now complete.

6. Development of Bilingual Proficiency Project

This project is undoubtedly the most ambitious undertaking of the MLC to date. While other projects have contributed to the progress of various aspects of test development in the field of second language learning, previous research attempts have been exploratory and isolated. The current study, then, represents an attempt to undertake a long-term, co-ordinated, multi-disciplinary approach to several unresolved issues, within a coherent theoretical framework.

The basis of the proficiency studies is a matrix which identifies the skills that underlie language proficiency and are responsible for language use in a variety of contexts. It is the relationship among these skills which is hypothesized to be the basis of language proficiency. Three skills, or 'traits' are posited: grammatical, discourse, and sociolinguistic competence. It is hypothesized that learners and native speakers will differ in their relative mastery of these skills.

Following Bachman and Palmer (1982), a multi-method, multi-trait design was adopted to sort out the relationship among the three traits and the three methods used to test them (oral production, multiple-choice, and written production). All the tests used in the study were developed or adapted by the research team according to the specifications of the model (see Figure 10.4).

The nine aspects of bilingual competence currently being explored in the research design are not comprehensive: it was understood from the outset that the scope of a single research project, even one designed on a large scale,

	Traits		
Methods	Grammatical	Discourse	Sociolinguistic
Oral production	1.1 Interview	1.2 Movie retelling and discussion	1.3 Slide-tape situations
Multiple choice	2.1 Test de grammaire	2.2 Discours à choix multiple	2.3 Sociolinguistique
Written production	3.1 Rédaction française Narrative: Au secours Letter: La bicyclette	3.2 Rédaction française Narrative: Aux voleurs Letter: Le chien	3.3 Ecrire en française

_ .

FIGURE 10.4: Matrix of traits and methods and test used to assess each (Allen et al., 1983)

would not be able to test all aspects of communicative competence in all possible testing modes.

The rationale for the restriction of the research design to the model of three traits by three testing modes related to the need to set up parallelism among 'cells'. That is, the same aspects of communicative performance were to be scored across all three types of tests (which might not be possible with every kind of test currently in use) and had to be adaptable to test each of the three traits. Obviously, with every new condition added, the scope of the model grows dramatically, whether by addition of a communicative trait (such as strategic competence), or a different sort of test (such as short-answer or scrambled sentence). The selection of the modes and traits to be studied in the first stage of the present research was based on the practicality of fitting the required parallels into the model.

A number of tests were developed in both English and French. French items were pilot-tested with grade 6 students. Changes were made to the items on the basis of the pilot testing. The tests are described below.

(1) Grammatical Competence

(a) Oral production. The format is a structured interview containing 36 standardized questions in a conversation, based on concrete and familiar topics such as the child's activities, interests and experiences. Although the conversation is allowed to develop naturally to keep the student feeling at ease, only the answers to the 36 questions are scored. The questions tap knowledge of the verb system, prepositions, and syntax.

(b) Multiple choice. The test contains 45 items which assess knowledge of syntax, prepositions, personal pronouns, verb use and agreement. (c) Written production. Students have fifteen minutes to complete each of two open-ended tasks: a narrative and a letter. The topics, which are given, are designed to elicit the use of present and past verb forms (narrative) and future or conditional verb forms (letter).

(2) Discourse

(a) Oral production. The day following the viewing of a short film, each child tells the story to an interviewer who has not seen the film. To reduce memory problems, students are shown some pictures noting key events from the film. After the narration, the child is asked to answer a series of questions calling for the expression and defence of an opinion. The interview takes 15 to 20 minutes.

(b) Multiple choice. This is a 29-item written test using connected sentences. Each item consists of 2-5 sentences with one sentence omitted. The students must select the appropriate completion from a set of three alternatives based on the logical coherence of the passage.

(c) Written production. The test involves writing a narrative and a letter, and is similar to its grammatical competence counterpart except that it uses different topics. The letter requires students to support a request with reasoned arguments.

(3) Sociolinquistic Competence

(a) Oral production. Students view a set of slides representing 18 different situations, each a combination of a function (request, suggestion, complaint) a level of formality (low, medium, high) and an environmental condition (people and physical surroundings, people only). After receiving an explanation of the way different registers of speech may be used in different situations, the students listen to a recorded description synchronized with the slides. Then each student is asked to respond to each situation in the most appropriate way, as if addressing the person shown in the slide. The order of presentation of the slides is controlled.

(b) Multiple choice. This test of 28 items is designed to test the ability of the student to place an utterance in its proper sociolinguistic context. Each item describes a sociocultural situation and the students must select the best of three possible ways to express an idea in that situation. The items reflect both written and spoken registers. They include such written forms as proverbs, encyclopedia entries and public notices. The responses are scored for appropriateness on a scale of 0 to 3, based on data from native speakers.

(c) Written production. The test consists of three different writing tasks involving the use of directives and varying in level of formality: a formal request letter from a grade 6 student to a public organization

and two informal notes in which the student takes the role of an adult addressing a grade 6 student.

The initial phase of the project involved a testing program in French with 198 students, most of whom were grade 6 students in an early French immersion program. The remaining students were native speakers of French at the same grade level, and their responses served as a check of the appropriateness and level of difficulty of the tests. The oral production items were administered to about one-third of the immersion sample, chosen at random, but excluding any children who spoke French at home.

Aside from the three multiple choice tests, special scoring procedures were developed for the six open-ended written and oral production tests. The scales used are closely related to those designed for use in scoring responses collected in previous and concurrent projects in the MLC, with several important modifications and innovations. An example of such an advance can be found in the discourse scoring of the narrative and letter tasks (cell 3.2 of Figure 10.4).

For both tasks, six detailed discourse scores and one global discourse score were given. Detailed scoring was completed first, using the following six categories: basic task fulfilment, identification of characters, objects, and locations, time orientation, anaphora, logical connection, and punctuation. For each of these categories a five-point rating scale was used. A more detailed explanation of the rating procedures is given in Appendix A, p. 147.

The scoring was carried out by research officers trained in linguistic analysis and scores were carefully monitored for inter-rater reliability. The scoring was labour-intensive and was not meant to yield a protocol for teacher scoring of performance by their own students, but rather to supply the most precise data possible on a relatively large sample for the purpose of confirming or invalidating the constructs of communicative competence in the model now being tested.

As the analyses of these data progress, it is expected that some light will be shed on the nature of the relationships which can be observed between the traits tapped in the testing, the various modes of elicitation, and the background learner variables.

7. Conclusion

This review of five MLC projects having a test development component reveals a movement from traditional forms of language testing to recent attempts to measure communicative language performance. Swain (1983a) has recently articulated four principles of communicative test development which reflect this new emphasis. These are: start from somewhere, concentrate on content, bias for best and work for washback.

The first principle, 'start from somewhere', refers to the need to build on existing theoretical knowledge to determine what aspects of speech and writing should be assessed. In the case of the projects described, the constituent components of communicative competence formed the basis of the design of the tasks and decisions about what each task is to be scored for.

The second principle, 'concentrate on content', refers to at least four characteristics we have striven to achieve in designing the evaluation instruments. The materials had to be motivating, substantive, integrated and interactive. For example, before deciding on the theme of the Saskatchewan grade 9 evaluation unit members of the team met with high school students over lunch to find out what interested them. The materials subsequently developed reflect students' expressed interest in travel, music, and care of animals, among other topics. We have become increasingly more attentive to the design of the materials. They are as colourful and attractive as our budget permitted, and the tasks were developed to approximate the kinds of real-life language activity students would have to engage in after leaving school. Moreover, they provide substantive information, some of which is new to the students. In this way, developing good tests is analogous to developing good curriculum materials. The choice of a unifying theme provides an integrated content, maximizing the possibility of using clues from the larger context in completing any task. The final aspect of 'concentrating on content' is the interactive nature of the materials. Again using the grade 9 materials as an example, students interact with an absent peer in the letter task, and with each other in the group discussion.

The third principle, 'bias for best', refers to an attempt to elicit the students' best performance. Thus we believe that as far as possible the testing should allow for as much time as necessary to accommodate the students' different paces in completing each task. Students can have multiple opportunities to review their work on subsequent days in order to make changes or additions. Dictionaries are made available for the written tasks, and suggestions are provided to students about how to respond to each task.

The fourth principle, 'work for washback', refers to the need to involve teachers in the testing and possibly to influence them to provide greater opportunities for productive language use in their classrooms. Several of the projects described above have involved working with an advisory committee of educators to obtain feedback on the materials. In some cases, teachers themselves carry out the testing, and even the scoring. In the process, they become informed about the purposes of the evaluation and the framework underlying the test development. Further, through the use of comprehensive scoring manuals rich in example and explanations, teachers become familiar with different approaches to scoring productive language skills. Ideally such materials will serve an in-service function, to inform teachers about the relative strengths and weaknesses in the collective communicative competence of their classes, and to encourage them to provide as many

varied contexts for language use as possible in their teaching.

Appendix A Discourse Scoring for Compositions (Allen et al., 1983)

- 1. Basic task fulfilment. This category involved an assessment of how well each composition fulfilled the basic semantic requirements of the discourse task assigned. To qualify as narratives, for example, the compositions Aux voleurs! and Au secours! needed to include a series of events. To qualify as suasion, the letters on the dog and the bicycle had to contain an exhortation to the addressee together with at least one supporting argument. In addition, each narrative was considered to require the inclusion of certain events as outlined in the instructions to the composition; e.g., in Aux voleurs! a bank robbery had to take place, and in Au secours! the cat needed to be rescued from a tree.
- 2. Identification of characters, objects, and locations. Under this category, an assessment was made of whether the composition writer identified new characters, objects, and locations sufficiently, or whether too much prior knowledge on the part of the reader was assumed. Thus all new entities had to be marked as new information (e.g. with a non-specific noun phrase), or had to be clearly related to other entities already introduced. A typical error in the letter-writing tasks, for example, was for writers to fail to identify themselves and the situation which provided the rationale for the letter.
- 3. Time orientation. This category involved a judgment as to how adequately events or situations were located in time, and, where relevant, whether the temporal relationship between events or situations was clear. Breakdowns in temporal coherence could occur for a variety of reasons: inaccurate use, or lack of use, of temporal conjunctions, time adverbials, or subordinators; inconsistent sequence of tenses and/or aspect across sentences. The following excerpts from two compositions exemplify some of these problems:
 - (a) Trois bandits sont entrés. Maintenant, ils ont demandé pour l'argent.
 - (b) Quand les pompiers arriva, il voyait 30 person endesut l'arbre et il avait mes une echelle, montes et attrape le chat.
- 4. Anaphora. Once entities such as characters, objects, and locations have been introduced in a text, further 'anaphoric' references to these entities need to be clear and accurate in order to maintain the coherence of a text. In assessing this category, the raters took account of, for example, subject pronouns, articles, possessive adjectives, and the lexical relatedness of noun phrases.
- 5. Logical connection. This category concerned the logical relationship

148

between segments of the text, whether there were non sequiturs, semantically obscure or fragmentary incidents, or logically missing steps in an argument or sequence of events. A breakdown of this kind is exemplified in the following excerpt:

Les polices on etait partout. Il(s) disaient à les voleurs de venir dehors avec les mains en l'air. Apres deux heures ils on échaper avec l'argent.

6. Punctuation. In assessing the use of punctuation, the raters took account of the extent to which the punctuation clarified the information structure of the text by indicating boundaries of information units, and whether lack of punctuation necessitated the re-reading of a passage in order to determine such boundaries.

Following the detailed scoring, the same two raters independently assigned a global discourse score to all of the compositions. Procedures for global scoring consisted of the requirement that compositions be first sorted into three categories: below average, average, and above average. The scorers were then asked to rate the compositions as relatively high or low within each of these three categories. This resulted in a six-point scale as follows:

1 2 3 4 5 6 below average average above average

The criteria for assigning a global score were not closely specified. The scorers were simply asked to keep in mind the general criterion of coherent discourse.

REFERENCES

- ADIV, E., and MORCOS, C. A comparison of three alternative French immersion programs at the grade 9 level, Montreal, Protestant School Board of Greater Montreal, 1979 (mimeo). ADIV, E. A comparison of second language performance in two alternative French immersion programs, Montreal, Protestant School Board of Greater Montreal, 1979 (mimeo).
- ADIV, E. A comparative evaluation of three French immersion programs: Grades 10 and 11. Paper presented at the Fourth Annual Convention of the Canadian Association of Immersion Teachers, November 1980 (mimeo).
- ADIV, E. An analysis of oral discourse in two types of French immersion programs, Montreal, Instructional Services Dept., Protestant School Board of Greater Montreal, 1981 (mimeo).
- AFRICA, HUGH P. Language in education in a multilingual state: a case study of the role of English in the educational system of Zambia, University of Toronto Ph.D. thesis, 1980.
- ALLEN, J. P. B. A three-level curriculum model for second language education. *The Canadian Modern Language Review*, 1983, 40(1), 23-43.
- ALLEN, J. P. B. and HOWARD, J. Subject-related ESL: an experiment in communicative language teaching. *The Canadian Modern Language Review*, 1981, 37(3), 535-550.
- ALLEN, J. P. B., CUMMINS, J., MOUGEON, R. and SWAIN, M. The development of bilingual proficiency: second year report. Toronto, Ontario Institute for Studies in Education, 1983 (mimeo).
- ALLEN, J. P. B., FRÖHLICH, M. and SPADA, N. The communicative orientation of language teaching: an observation scheme. In J. Handscombe, R. A. Orem and B. P. Taylor (eds.) On TESOL '83: The Question of Control. Washington, D.C.: TESOL, 1984.
- ALLWRIGHT, R. L. Turns, topics and tasks: patterns of participation in language learning and teaching. In D. Larsen-Freeman (ed.), *Discourse Analysis in Second Language Research*. Rowley, Mass., Newbury House, 1980.
- ANDREW, C. M., LAPKIN, S., and SWAIN, M. Report to the Elgin County Board of Education on the 1978 evaluation of the partial French immersion programs in grades 3, 6, 7 and 8, Toronto, Ontario Institute for Studies in Education, 1979 (mimeo).
- ASHWORTH, M. Recent events in English as a second language. The English Quarterly, 11(1), 1978.
- BACHMAN, L. F., and PALMER, A. S. The construct validation of some components of communicative proficiency. *TESOL Quarterly*, 1982, 16, 449-465.
- BAKER, K. A., and DE KANTER, A. A. Effectiveness of Bilingual Education: A Review of the Literature. Washington, D.C.: Office of Planning and Budget, U.S. Department of Education, 1981.
- BARIK, H. C. French Comprehension Test, Level 1 and French Comprehension Test, Primer, Toronto: Ontario Institute for Studies in Education, 1975 and 1976.
- BARIK, H. C., and SWAIN, M. Three-year evaluation of a large-scale early grade French immersion program: the Ottawa study. *Language Learning*, 1975, 25, 1-30.
- BARIK, H. C., and SWAIN, M. English-French bilingual education in the early grades: the Elgin study through grade four. *Modern Language Journal*, 1976, 60, 3-17.
- BARIK, H. C., SWAIN, M., and GAUDINO, V. A Canadian experiment in bilingual education in the senior grades: the Peel study through grade 10. *International Review of Applied Psychology*, 1976, 25, 99-113.
- BARIK, H. C., and SWAIN, M. Report to the Elgin County Board of Education re: evaluation of the 1976-77 partial French immersion program in grades 5-7. Toronto: Ontario Institute for Studies in Education, 1977 (mimeo).

- BARIK, H. C., SWAIN, M., and NWANUNOBI, E. English-French bilingual education: the Elgin study through grade five. Canadian Modern Language Review, 1977, 33, 459-475.
- BARIK, H. C., and SWAIN, M. Evaluation of a bilingual education program in Canada: the Elgin study through grade six. *Bulletin CILA*, 1978, 27, 31-58.
- BARIK, H. C., SWAIN, M. and SCHLOSS, B. Tests de Lecture: Tests of French Reading Comprehension for Grades 2-6. Toronto: Ontario Institute for Studies in Education, 1979.
- BELGARD, M., ROSENSHINE, B. and GAGE, N. L. Effectiveness in explaining: evidence on its generality and correlation with pupil ratings. In A. A. Bellack, H. M. Kliebard, R. T. Hyman and F. L. Smith (eds.), *The Language of the Classroom*. New York: Teachers College Press. 1966.
- BIALYSTOK, E. A theoretical model of second language learning. *Language Learning*, 1978, 28(1), 69-83.
- BIALYSTOK, E. On the relationship between knowing and using linguistic forms. Applied Linguistics, 1982. 3, 181-206.
- BIALYSTOK, E. Inferencing: testing the 'hypothesis-testing' hypothesis. In H. W. Seliger and M. Long (eds.), Classroom Language Acquisition and Use: New Perspectives. Rowley, Mass.: Newbury House. 1983a.
- BIALYSTOK, E. Some factors in the selection and implementation of communication strategies. In C. Faerch and G. Kasper (eds.), *Strategies in Interlanguage Communication*. London: Longman. 1983b.
- BIALYSTOK, E. and FRÖHLICH, M. Oral communication strategies for lexical difficulties. *Interlanguage Studies Bulletin*, 1980, 5, 3-30.
- BILINGUAL EDUCATION PROJECT. Test de compréhension aurale, niveaux A and B. Toronto: Ontario Institute for Studies in Education, 1978.
- BILINGUAL EDUCATION PROJECT. Test de compréhension écrit, niveaux A and B. Toronto: Ontario Institute for Studies in Education. 1979.
- BLOOM, B. S. Time and learning. American Psychologist, 1974, 29, 682-688.
- BREEN, M. P. and CANDLIN, C. N. The essentials of a communicative curriculum in language teaching. *Applied Linguistics*, 1980, 1(2), 89-112.
- BROOKS, I. R. Teaching Native children: lessons from cognitive psychology. *The Journal of Educational Thought*, 1978, 12(1), pp. 56-67.
- BROOKS, N. Language and Language Learning. New York: Harcourt, Brace and World, 1964.
- BROWN, D. Affective variables in second language acquisition. Language Learning, 1973, 23, 231-244.
- BRUCK, M. The suitability of early French immersion programs for the language disabled child. Canadian Modern Language Review, 1978, 34, 884-887.
- BRUCK, M. Problems in early French immersion programs. In B. Mlacak and E. Isabelle (eds.), So You Want Your Child to Learn French! Ottawa: Canadian Parents for French, 1979, 42-47.
- BRUDHIPRABHA, PRAPART. The education of teachers of English as a foreign and second language in Southeast Asia: with special reference to Thailand. University of Toronto Ph.D. thesis, 1975.
- BRUMFIT, C. J., and JOHNSON, K. (eds.) The Communicative Approach to Language Teaching. Oxford: Oxford University Press, 1979.
- BURKE, M. Tensions between language needs and policy response in minority language education in Ontario. Forum lecture at the TESOL Summer Institute, Toronto, July 12, 1983. BURNABY, B. Languages and their Roles in Educating Native Children. Toronto: Ontario Institute for Studies in Education, 1980.
- BURNABY, B., NICHOLS, J. AND TOOHEY, K. Northern Native languages project: final report. Toronto: Ontario Institute for Studies in Education, 1980 (mimeo).
- BURNABY, B. Language in Education among Canadian Native Peoples. Language and Literacy Series. Toronto: Ontario Institute for Studies in Education, 1982.
- BURNABY, B. and MACKENZIE, M. Native functions of literacy: who reads and writes what in Rupert House. Conference on Native American Interaction Patterns, Edmonton, Alberta, 1982.

BURNS, G. E., and OLSON, P. Implementation and politics in French immersion. Toronto: Ontario Institute for Studies in Education, 1981.

CAMPBELL, D. T. and FISKE, D. W. Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 1959, 56, 81-105.

CANALE, M., and SWAIN, M. A domain description for core FSL: communication skills. Toronto: Ontario Institute for Studies in Education, 1979 (mimeo).

CANALE, M., and SWAIN, M. Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1980, 1(1), 1-47.

CANALE, M. From communicative competence to communicative language pedagogy. In J. Richards and R. Schmidt (eds.), Language and Communication, London: Longman, 1983.

CARROLL, J. B. The contributions of psychological theory and educational research to the teaching of foreign languages. In A. Valdman (ed.), *Trends in Language Teaching*. New York: McGraw-Hill, 1966.

CARROLL, J. B. The Teaching of French as a Foreign Language in Eight Countries. New York: John Wiley and Sons, 1975.

CARTON, A. S. Inferencing: a process in using and learning language. In P. Pimsleur and T. Quinn (eds.), *The Psychology of Second Language Learning*. Cambridge: Cambridge University Press, 1971.

CHAMBERS, J. K. (ed.) The Languages of Canada. Ottawa: Didier, 1979.

COHEN, A. D., and SWAIN, M. Bilingual education: the immersion model in the North American context. In J. E. Alatis and K. Twaddell (eds.), *English as a Second Language in Bilingual Education*. Washington, D.C.: TESOL, 1976.

COOK, V. J. The comparison of language development in native children and foreign adults. *International Review of Applied Linguistics*, 1973, 11, 13-28.

COOKE, D. A. Teach or teach about? Canadian Modern Language Review, 1974, 30(4), 320-324.

CORDER, S. P. The significance of learners' errors. *International Review of Applied Linguistics*, 1967, 5, 161-169.

CUMMINS, J. The cognitive development of children in immersion programs. *The Canadian Modern Language Review*, 1978, 34, 855-883.

CUMMINS, J. Linguistic interdependence and the educational development of bilingual children. Review of Educational Research, 1979, 49, 222-251.

CUMMINS, J. The cross-lingual dimensions of language proficiency: implications for bilingual education and the optimal age issue. TESOL Ouarterly, 1980a, 14, 175-187.

CUMMINS, J. The construct of language proficiency in bilingual education. In J. E. Alatis (ed.) Georgetown Round Table on Languages and Linguistics. Washington: Georgetown Round Table on Languages and Linguistics. Washington: Georgetown University Press, 1980b.

CUMMINS, J. Age on arrival and immigrant second language learning in Canada: a reassessment. *Applied Linguistics*, 1981a, 2, 132-149.

CUMMINS, J. The role of primary language development in promoting educational success for language minority students. In California State Department of Education, Schooling and Language Minority Students: A Theoretical Framework. Los Angeles: Evaluation, Dissemination and Assessment Center, 1981b.

CUMMINS, J. Bilingualism and Minority-Language Children. Language and Literacy Series. Toronto: Ontario Institute for Studies in Education, 1981c.

CUMMINS, J. Heritage Language Education: A Literature Review. Toronto: Ontario Ministry of Education, 1983.

CUMMINS, J., SWAIN, M., NAKAJIMA, K., HANDSCOMBE, J., GREEN, D., and TRAN, C. Linguistic Interdependence among Japanese and Vietnamese Immigrant Students. Toronto: National Heritage Language Resource Unit, in press.

CZIKO, G. A. The effects of language sequencing on the development of bilingual reading skills. Canadian Modern Language Review, 1976, 32, 534-539.

CZIKO, G. A., LAMBERT, W. E., SIDOTI, N., and TUCKER, G. R. Graduates of early immersion: retrospective views of grade 11 students and their parents. Montreal: McGill University, 1978 (mimeo).

CZIKO, G. E., LAMBERT, W. E., and GUTTER, R. French immersion programs and students' social attitudes: a multidimensional investigation. *Working Papers on Bilingualism*, 1979, 19, 13–28.

DAVIES, ALAN and WIDDOWSON, H. G. Reading and writing. In J. P. B. ALLEN and S. PIT CORDER (eds.), *Techniques in Applied Linguistics*. Edinburgh Course in Applied Linguistics, Vol. 3. London: Oxford University Press, 1974.

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT. Indian Conditions: A Survey. Ottawa, 1980.

DILLER, K. C. (ed.) Individual Differences and Universals in Language Learning Aptitude. Rowley, Mass.: Newbury House, 1981.

DODSON, C. J. Foreign language teaching and bilingualism. In *Bilingualism and British Education: The Dimensions of Diversity*. CILT Reports and Papers 14. London: Centre for Information on Language Teaching and Research, 1976

DONALDSON, M. Children's Minds. Glasgow: Collins, 1978.

DUNTON, A. D., LAURENDEAU, A. et al. Report of the Royal Commission on Bilingualism and Biculturalism, 6 vols. Ottawa: Queen's Printer, 1967-70.

EDELSKY, C., HUDELSON, S., FLORES, B., BARKIN, F., ALTWERGER, B., and JILBERT, K. Semilingualism and language deficit. *Applied Linguistics*, 1983, 4, 1-22.

EDMONTON PUBLIC SCHOOLS. Implementation of bilingual (English-French) programs third year 1979-80. Edmonton: Curriculum Department, Edmonton Public Schools, 1980 (mimeo).

EDWARDS, H. P. and CASSERLY, M. C. Research and Evaluation of Second Language (French) Programs. Toronto: Ontario Ministry of Education, 1976.

EDWARDS, H. P., McCARREY, H. A., and FU, L. Evaluation of second language program extensions offered in grades 3, 4, and 5: final report, 1979-80. Ottawa: Ottawa Roman Catholic Separate School Board, 1980 (mimeo).

EK VAN, J. A. The Threshold Level. Strasbourg: Council of Europe, 1975.

ELLIS, R., and ROBINSON, B. A reassessment of lesson evaluation in ELT. System, 1981, 9(1), 5-9.

EPSTEIN, N. Language, Ethnicity and the Schools. Washington, D.C.: Institute for Educational Leadership, 1977.

ERLICH, O., and SHAVELSON, R. J. The search for correlations between measures of teacher behaviour and student achievement: measurement problem, conceptualization problem, or both? *Journal of Educational Measurement*, 1978, 15(2), 77-89.

ERVIN-TRIPP, S. Is second language learning like the first? TESOL QUARTERLY, 1974, 8, 111-127.

EUROPEAN COMMISSION. Activities for the education and vocational training of migrant workers and their families in the European Community. Contribution to the Standing Conference of European Ministers of Education, 1978.

EVERTSON, C. M., ANDERSON, L. M., and BROPHY, J. E. Process-outcome relationships in the Texas Junior High School Study: Compendium, Center for Teacher Education. The University of Texas at Austin, and Michigan State University. R. &. D. Report No. 4064, 1978.

EVERTSON, C. M., and VELDMAN, D. J. Changes over time in process measures of classroom behaviour. *Journal of Educational Psychology*, 1981, 73(2), 156-163.

FATHMAN, A. The value of morpheme order studies for second language learning. Working Papers on Bilingualism, 1979, 18, 179–199.

FLANDERS, N. A. Analysing Teaching Behaviour. Reading, Mass.: Addison-Wesley, 1970. FRÖHLICH, MARIA. Case studies of second language learning. University of Toronto M.A. thesis, 1976.

GARDNER, R. C., SMYTHE, P. C., CLÉMENT, R., and GILKSMAN, L. Second language learning: a social psychological perspective. *Canadian Modern Language Review*, 1976, 32 198-213.

GAVER, D., and RICHARDS, H. C. Dimensions of naturalistic observation for the prediction of academic success. *Journal of Educational Research*, 1978-79, 72, 123-127.

GENESEE, F. An evaluation of the English writing skills of students in French immersion programs. Montreal: Protestant School Board of Greater Montreal, 1974 (mimeo).

- GENESEE, F., TUCKER, G. R., and LAMBERT, W. E. Communication skills of bilingual children. *Child Development*, 1975, 46, 1010-1014.
- GENESEE, F. Addendum to the evaluation of the 1975-76 grade 11 French immersion class. Montreal: Protestant School Board of Greater Montreal, 1976a (mimeo).
- GENESEE, F. The role of intelligence in second language learning. Language Learning, 1976b, 26, 267-280.
- GENESEE, F., POLICH, E., and STANLEY, M. H. An experimental French immersion program at the secondary school level: 1969–1974. *Canadian Modern Language Review*, 1977, 33, 318–332.
- GENESEE, F. A longitudinal evaluation of an early immersion school program. *Canadian Journal of Education*, 1978a, 3(4), 31-50.
- GENESEE, F. Second language learning and language attitudes. Working Papers on Bilingualism, 1978b, 16, 19-42.
- GENESEE, F. Is there an optimal age for starting second language instruction? McGill Journal of Education, 1978c, 13, 145-154.
- GENESEE, F. A comparison of early and late second language learning. Canadian Journal of Behavioral Sciences, 1981, 13(2), 115-128.
- GENESEE, F. and LAMBERT, W. E. Trilingual education for majority language children. *Child development*, 1983, 54, 105-114.
- GLOBE and MAIL. A dispute flares within suburb on the trend to French classes. Toronto, Jan. 9, 1982.
- GREEN, D. Developing measures of communicative proficiency: a test for immersion students in grades 9-10. In P. Hauptman, R. Leblanc and M. Wesche (eds.), *Testing Second Language Performance*, Ottawa: University of Ottawa Press, in press.
- HAMILTON, JON. Portuguese in Transition. Toronto: Research Department, Toronto Board of Education, 1970.
- HANDSCOMBE, J. Models of English as a second language program organisation. *The English Quarterly*, 1978, 11(2), 115-121.
- HANNA, G., SMITH, A. H., McLEAN, L. D., and STERN, H. H. Contact and Communication: An Evaluation of Bilingual Student Exchange Programs. Toronto: Ontario Institute for Studies in Education. 1980.
- HARLEY, B., and SWAIN, M. An analysis of verb form and function in the speech of French immersion pupils. *Working Papers on Bilingualism*, 1977, 14, 31-46.
- HARLEY, B., and SWAIN, M. An analysis of the verb system used by young learners of French. *Interlanguage Studies Bulletin*, 1978, 3, 35-79.
- HARLEY, B. French gender 'rules' in the speech of English-dominant, French-dominant and monolingual French-speaking children. *Working Papers on Bilingualism*, 1979, 19, 129-156. HARLEY, B. Interlanguage units and their relations. *Interlanguage Studies Bulletin*, 1980, 5, 3-30.
- HARLEY, B. Age-related differences in the acquisition of the French verb system by anglophone students in French immersion programs. University of Toronto Ph.D. thesis, 1982.
- HOOK, C. M., and ROSENSHINE, B. V. Accuracy of teacher reports of their classroom behavior. *Review of Educational Research*, 1979, 49, 1-11.
- HOSENFELD, C. Learning about learning: discovering our students' strategies. Foreign Language Annals, 1976, 9, 117-129.
- HUEBNER, T. Order-of-acquisition vs. dynamic paradigm: a comparison of method in interlanguage research. TESOL Quarterly, 1979, 13, 21-28.
- ITUEN, STEPHEN. Societal needs and expectations for the teaching of international languages: a case study of French in Nigeria and English in the Ivory Coast. University of Toronto Ph.D. thesis, 1980.
- JARVIS, G. A. A behavioural observation system for classroom FL skill acquisition activities. *Modern Language Journal*, 1968, 52(6), 335-340.
- JOHNSON, K. Communicative approaches and communicative processes. In C. J. Brumfit and K. Johnson (eds.), *The Communicative Approach to Language Teaching*. Oxford: Oxford University Press, 1979.
- JOHNSON, K. Communicative Syllabus Design and Methodology. Oxford: Pergamon Press, 1982.

KING, IRMA. Foreign language teacher education in Guyana: theory and practice. University of Toronto Ph.D. thesis, 1982.

KRASHEN, S. D., and SELIGER, H. W. The essential contributions of formal instruction in second language learning. *TESOL Quarterly*, 1975, 9, 173–183.

KRASHEN, S. D. Formal and informal linguistic environments in language acquisition and language learning. *TESOL Quarterly*, 1976, 10, 157-168.

KRASHEN, S. D., LONG, M., and SCARCELLA, R. C. Age, rate and eventual attainment in second language acquisition. TESOL Ouarterly, 1979, 13, 573-582.

KRASHEN, S. D. Principles and Practice in Second Language Acquisition. Oxford: Pergamon Press, 1982.

LAMBERT, W. E., and TUCKER, G. R. Bilingual Education of Children. Rowley, Mass.: Newbury House. 1972.

LAPKIN, S., and SWAIN, M. The use of English and French cloze tests in a bilingual education program evaluation: validity and error analysis. *Language Learning*, 1977, 27(2), 279-314.

LAPKIN, S. The English writing skills of French immersion pupils at grade five. Canadian Modern Language Review, 1982, 39(1), 24-33.

LAPKIN, S., and SWAIN, M. Second language maintenance at the secondary school level: final report for Year 2. Toronto: Ontario Institute for Studies in Education, 1983 (mimeo). LAPKIN, S., SWAIN, M., and CUMMINS, J. Final report on the development of evaluation packages for use in French immersion and French minority language classrooms. Toronto: Ontario Institute for Studies in Education, 1983.

LAPKIN, S., SWAIN, M., KAMIN, J., and HANNA, G. Late immersion in perspective: the Peel Study. Canadian Modern Language Review, 1983, 39, 182-206.

LEPICQ, D. Aspects théoriques et empiriques de l'acceptabilité linguistique: le cas du français des élèves des classes d'immersion au Canada. University of Toronto Ph.D. thesis, 1980.

LEVENSTON, E. Aspects of testing oral proficiency of adult immigrants to Canada. In L. Palmer and B. Spolsky (eds.), *Papers on Language Testing*: 1967-1974. Washington, D.C. TESOL, 1975.

LEWIS, HELOISE. A study of errors caused by language transfer in a diglossic situation with special reference to Jamaican pupils learning Spanish. University of Toronto Ph.D. thesis, 1974.

LEWY, A. (ed.) Handbook of Curriculum Evaluation. New York: Longman, Paris: UNESCO. 1977.

LONG, M. H. Inside the 'black box': methodological issues in classroom research on language learning. Language Learning, 1980, 30(1), 1-42.

MAZZONE, E. Current trends in the assessment of language minority students in Massachusetts. In J. E. Alatis (ed.) 31st Annual Georgetown University Round Table on Languages and Linguistics. Washington, D.C.: Georgetown University Press, 1980.

McEACHERN, W. Parental decision for French Immersion: a look at some influencing factors. Canadian Modern Language Review, 1980, 38, 238-246.

McEWEN, N. A multidimensional category system for teacher-student verbal interaction in second language learning. Paper presented at the Annual Conference of the Canadian Educational Researchers Association, Quebec, Quebec, June 204, 1976.

McNEIL, JOHN D. Curriculum: A Comprehensive Introduction. Boston: Little, Brown and Co. (2nd edition), 1981.

MERCER, J. Labelling the Mentally Retarded. Berkeley: University of California Press. 1973.

MITCHELL, R., PARKINSON, B., and JOHNSTONE, R. The foreign language classroom: an observational study. Stirling Educational Monographs, No. 9, 1981.

MORRISON, F., BONYUN, R., PAWLEY, C., and WALSH, M. French proficiency status of Ottawa and Carleton students in alternative programs: evaluation of the second language learning (French) programs in the schools of the Ottawa and Carleton Board of Education. Sixth Annual Report. Toronto: Ontario Ministry of Education, 1979.

MOSKOWITZ, G. The classroom interaction of outstanding foreign language teachers. Foreign Language Annals, 1976, 9, 135-157.

NAIMAN, N., FRÖHLICH, M., STERN, H. H., and TODESCO, A. The Good Language Learner. Toronto: Ontario Institute for Studies in Education. 1978.

NATIONAL INDIAN BROTHERHOOD. Indian Control of Indian Education. Ottawa: National Indian Brotherhood, 1972.

NATIVIDAD, PABLO. The nature of pedagogical grammar with special reference to teaching an aspect of Pilipino as a second language. University of Toronto Ph.D. thesis, 1975. NEMETZ-ROBINSON, G. L. Issues in Second Language and Cross-Cultural Education. Boston. Mass.: Heinle. 1981.

NEMSER, W. Approximative systems of foreign language learners. *International Review of Applied Linguistics*, 1971, 9(2), 115-123.

NEWFIELD, J. Accuracy of teacher reports: reports and observations of specific classroom behaviours. *Journal of Educational Psychology*, 1980-81, 74, 78-79.

OLLER, J. W. Jr. Language Tests at School: A Pragmatic Approach. New York: Longman, 1979.

ONTARIO MINISTRY OF EDUCATION. Report of the ministerial committee on the teaching of French. Toronto: Ontario Ministry of Education, 1974.

ONTARIO MINISTRY OF EDUCATION. The Ontario Assessment Instrument Pool: French as a Second Language. Toronto: The Minister of Education, Ontario, 1980.

PARIBAKHT, T. The relationship between the use of communication strategies and aspects of target language proficiency: a study of Persian ESL students. University of Toronto Ph.D. thesis, 1982.

PARIBAKHT, T. Communication strategies and target language proficiency. Paper presented at the 17th annual TESOL Convention, Toronto, March 1983.

PAULSTON, C. B. Ethnic relations and bilingual education: accounting for contradictory data. In J. Alatis and K. Twaddell (eds.), *English as a Second Language in Bilingual Education*. Washington, D.C.: TESOL, 1976.

PHILIPS, SUSAN U. Participant structures and communicative competence: Warm Springs children in community and classroom. In Courtney B. Cazden, Vera P. John and Dell Hymes (eds.), Functions of Language in the Classroom. Teachers College Press, 1972, 370-394.

PROTESTANT SCHOOL BOARD OF GREATER MONTREAL. Report on the 1971-72 Roslyn French immersion results, 1972 (mimeo).

RIVERA, C. (ed.) Language Proficiency and Academic Achievement. Clevedon, England: Multilingual Matters, 1983.

RIVERS, WILGA M. Teaching Foreign-Language Skills. Chicago: University of Chicago Press, 1968.

RIVERS, WILGA M. Individualized instruction and cooperative learning: some theoretical considerations. In Communicating Naturally in a Second Language: Theory and Practice in Language Teaching. New York: Cambridge University Press, 1983.

RUBIN, J. What the 'good language learner' can teach us. *TESOL Quarterly*, 1975, 9, 41-51. SCHACHTER, J. An error in error analysis. *Language Learning*, 1974, 24, 205-214.

SCHLOSS, BRIGITTE. The uneasy status of literature in second language teaching at the school level: an historical perspective. University of Toronto, Ph.D. thesis, 1980.

SELINKER, L. Interlanguage. International Review of Applied Linguistics, 1972, 10, 209-231.

SELINKER, L., SWAIN, M., and DUMAS, G. The interlanguage hypothesis extended to children. *Language Learning*, 1975, 25, 139-152.

SESHADRI, C. K. Second language planning for a multilingual country: English language instruction in India. University of Toronto Ph.D. thesis, 1978.

SHAVELSON, R. J. and DEMPSEY-ATWOOD, N. Generalizability of measures of teaching behavior. Review of Educational Research, 1976, 46, 553-611.

SIRONTNIK, K. A. The contextual correlates of the relative expenditures of classroom time on instruction and behaviour: an exploratory study of secondary schools and classes. *American Education Research Journal*, 1982, 19(2), 275-292.

SKUTNABB-KANGAS, T. and TOUKOMAA, P. Teaching migrant children's mother tongue and learning the language of the host country in the context of the socio-cultural

- situation of the migrant family. Helsinki: The Finnish National Commission for UNESCO, 1976.
- SNOW, C. E., and HOEFNAGEL-HÖHLE, M. The critical period for language acquisition: evidence from second language learning. *Child Development*, 1978, 49, 1114–1128.
- SPILKA, I. V. Assessment of second language performance in immersion programs. Canadian Modern Language Review, 1976, 32, 543-561.
- STAKE, R. The countenance of educational evaluation. *Teachers College Record*, 1967, 68, 523-540.
- STATISTICS CANADA. 1976 Census. Population: Demographic Characteristics, Mother Tongue. Ottawa: Minister of Supply and Services, 1978.
- STATISTICS CANADA. 1981 Census. *Population: Mother Tongue*. Ottawa: Minister of Supply and Services, 1982.
- STERN, H. H. A Modern Language Centre: Scope, Activities and Plans. Toronto: Ontario Institute for Studies in Education, 1968.
- STERN, H. H. Language centres today and a new modern language centre at OISE. Canadian Modern Language Review, 1969, 25(2), 9-21.
- STERN, H. H. Perspectives on Second Language Teaching. Toronto: Ontario Institute for Studies in Education, 1970.
- STERN, H. H. Directions in language teaching theory and research. In J. Qvistgard, H. Schwarz and H. Spang-Hanssen, *Applied Linguistics: Problems and Solutions*. Vol. 3 of the Proceedings of the Third AILA Congress, Copenhagen, 1972. Heidelberg: Julius Groos Verlag, 1974.
- STERN, H. H. What can we learn from the good language learner? Canadian Modern Language Review, 1975, 31(4), 304-318.
- STERN, H. H., SWAIN, M., McLEAN, L. D., FRIEDMAN, R. J., HARLEY, B., and LAPKIN, S. *Three Approaches to Teaching French*. Toronto: Ontario Ministry of Education, 1976.
- STERN, H. H., WESCHE, M. B., and HARLEY, B. The impact of the language sciences on second-language education. In P. Suppes (ed), *Impact of Research on Education: Some Case Studies*. Washington, D.C.: National Academy of Education, 1978.
- STERN, H. H. Some approaches to communicative language teaching in Canada. In K. E. Muller (ed.), *The Foreign Language Syllabus and Communicative Approaches to Teaching*. Special issue, *Studies in Second Language Acquisition*, 1980, 3(1), 57-63.
- STERN, H. H. Ullmann, R., Balchunas, M., Hanna, G., Schneiderman, E. and Argue, V. Module Making: A Study in the Development and Evaluation of Learning materials for French as a Second Language. Toronto: Ontario Ministry of Education, 1980.
- STERN, H. H. Communicative language teaching and learning: toward a synthesis. In J. E. Alatis, H. B. Altman and P. H. Alatis (eds.), *The Second Language Classroom: Directions for the 1980s*. New York: Oxford University Press, 1981(a) 131-148.
- STERN, H. H. The formal-function distinction in language pedagogy: a perceptual clarification. In J. G. Savard and L. Laforge (eds.), *Proceedings of the fifth congress of L'Association Internationale de la Linguistique Appliquée*. Quebec: La Presse de l'Université Laval, 1981 (b), 425-455.
- STERN, H. H. and CUMMINS, J. Language teaching/learning research: a Canadian perspective on status and direction. In Phillips, J. K. (ed.) Action for the 80s: A Political, Professional, and Public Program for Foreign Language Education. Skokie, Ill.: National Textbook Co., 1981.
- STERN, H. H. French core programs across Canada: How can we improve them? The Canadian Modern Language Review, 1982, 39(1), 34-47.
- STERN, H. H. Fundamental Concepts of Language Teaching. Oxford: Oxford University Press, 1983.
- STEVENS, S., and ROSENSHINE, B. Advances in the research on teaching. *Exceptional Education Quarterly*, 1981, 2, 1-9.
- SWAIN, M. French immersion programs across Canada: research findings. *The Canadian Modern Language Review*, 1974, 31, 117-129.
- SWAIN, M. Writing skills of grade three French immersion pupils. Working Papers on Bilingualism, 1975a, 7, 1-38.

- SWAIN. M. More about primary French immersion classes. Orbit, 1975b, 27, 13-15.
- SWAIN, M. Changes in errors: random or systematic? In G. Nickel (ed.) *Proceedings of the Fourth International Congress of Applied Linguistics*, Vol. 2, Stuttgart: Hochschulverlag, 1976.
- SWAIN, M., and BURNABY, B. Personality characteristics and second language learning in young children: a pilot study. Working Papers on Bilingualism, 1976, 11, 115-128.
- SWAIN, M., LAPKIN, S., and BARIK, H. C. The cloze test as a measure of second language proficiency. Working Papers on Bilingualism, 1976, 11, 32-42.
- SWAIN, M. School reform through bilingual education: problems and some solutions in evaluating programs. In J. Simmons and R. G. Paulston (eds.), *Comparative Education Review*, 1978a, 420-433.
- SWAIN, M. Bilingual education for the English-Canadian. In J. E. Alatis (ed.), *International Dimensions of Bilingual Education. Georgetown University Round Table on Languages and Linguistics 1978.* Washington, D.C.: Georgetown University Press, 1978b, 141-154.
- SWAIN, M. Home-school language switching. In J. Richards (ed.), *Understanding Second and Foreign Language Learning: Issues and Approaches*. Rowley, Mass.: Newbury House, 1978c, 238-251.
- SWAIN, M. Bilingual education: research and its implications. In C.A. Yorio, K. Perkins and J. Schachter (eds.). On TESOL '79: The Learners in Focus. Washington, D.C.: TESOL, 1979. SWAIN, M. French immersion programs in Canada. Multiculturalism, 1980, 4(2), 3-6.
- SWAIN, M. Bilingual education for majority and minority language children. Studia Linguistica, 1981a, 35, 15-32.
- SWAIN, M. Time and timing in bilingual education. Language Learning, 198lb, 31, 1-15.
- SWAIN, M., and LAPKIN, S. Bilingual Education in Ontario: A Decade of Research. Toronto: Ontario Ministry of Education, 1981.
- SWAIN, M., LAPKIN, S., and ANDREW, C. M. Early French immersion later on. *Journal of Multilingual and Multicultural Development*, 1981, 2, 1-23.
- SWAIN, M., and LAPKIN, S. Evaluating Bilingual Education: A Canadian Case Study. Clevedon, England: Multilingual Matters, 1982.
- SWAIN, M. Large scale communicative language testing: a case study. Language Learning and Communication, 1983a, 2(2), 133-147.
- SWAIN, M. Bilingualism without tears. In M. A. Clarke and J. Handscombe (eds.). On TESOL'82: Pacific Perspectives on Language Learning and Teaching, 1983b, 35-46.
- SZAMOSI, M., SWAIN, M., and LAPKIN, S. Do early immersion pupils 'know' French? Orbit, 1979, 49, 20-23.
- TARONE, E. Conscious communication strategies in interlanguage: a progress report. In D. H. Brown, C. A. Yorio and R. H. Crymes (eds.), *On TESOL '77*. Washington, D.C.: TESOL, 1977.
- TESL CANADA ACTION COMMITTEE. The provision of English as a second language training to adult newcomers: six principles toward a national policy. Montreal: TESL Canada, 1981 (mimeo).
- TRAN, T. C. Error analysis, contrastive analysis, and student's perception: a study of difficulty in second-language learning. *International Review of Applied Linguistics*, 1975, 13(2), 119-143.
- TRIM, J. L. M., RICHTERICH, R., VAN EK, J. A., and WILKINS, D. A. Systems Development in Adult Language Learning. Oxford: Pergamon Press, 1980.
- TUCKER, G. R. The acquisition of knowledge by children educated bilingually. Georgetown Round Table on Languages and Linguistics, 1975, 267-277.
- TUCKER, G. R., HAMAYAN, E., and GENESEE, F. Affective, cognitive and social factors in second language acquisition. *Canadian Modern Language Review*, 1976, 32, 214–226.
- TUCKER, G. R. The linguistic perspective. In *Bilingual education: Current perspectives, Vol. 2. Linguistics*. Arlington, Va.: Center for Applied Linguistics, 1977.
- ULLMANN, R. Pilot study to evaluate the French language Program in the York Region Board of Education: interim summary report. Toronto: Ontario Institute for Studies in Education, 1982a (mimeo).
- ULLMANN, R. A broadened curriculum framework for second languages. *English Language Teaching Journal*, 1982b, **36**(4), 255-262.

ULLMANN, R. The Module Making Project and Communicative Language Teaching in the Core French Program. Toronto: Ontario Institute for Studies in Education, 1983.

ULLMANN, R., and GEVA, E. The target language observation scheme (TALOS): handbook. Toronto: Ontario Institute for Studies in Education, 1982 (mimeo).

ULLMANN, R., GEVA, E., MACKAY, L. and STERN, H. H. The York Region Core French Evaluation Project. Toronto: Ontario Institute for Studies in Education, 1983.

WEINRIB, ALICE. What's new in second-language teaching? Canadian Modern Language Review, 1981, 38(1), 111-114.

WEINRIB, ALICE. Communicative Language Teaching Materials for ESL. Toronto: Ontario Ministry of Citizenship and Culture, 1982.

WEINSTOCK, RACHEL. A functional study of discourse structure in conversational English. University of Toronto Ph.D. thesis, 1980.

WELLS, G. Learning through Interaction: The Study of Language Development. Cambridge: Cambridge University Press, 1981.

WESCHE, M. B. The good adult language learner: a study of learning strategies and personality factors in an intensive course. University of Toronto Ph.D. thesis, 1975.

WILEY, D. E. Another hour, another day: quantity of schooling, a potent path for policy. Studies of Educative Processes, No. 3, University of Chicago, 1973.

WILKINS, D. A. Notional Syllabuses. London: Oxford University Press, 1976.

WILKINS, D. A. Notional syllabuses revisited. Applied Linguistics, 1981, 2(1), 83-89.

WRIGHT, E. N., and RAMSE?, C. A. Students of non-Canadian origin: age on arrival, academic achievement and ability. Research report No. 88, Toronto Board of Education, 1970.

WRIGHT, GRACE E. Models of language teaching and the teaching of English in Jamaica. University of Toronto M.A. thesis, 1969.

YALDEN, J. M. The Communicative Syllabus: Evolution, Design and Implementation. Oxford: Pergamon Press, 1983.

BIOGRAPHICAL NOTES

Patrick Allen is an associate professor in the Modern Language Centre. Before coming to Canada in 1976 he taught ESL and applied linguistics in eight countries. His interests include general linguistics, sociolinguistics, and all aspects of English language teaching. He has written, edited or contributed to numerous books, including Chomsky: Selected Readings and the Edinburgh Course in Applied Linguistics.

Barbara Burnaby, a research associate in the Modern Language Centre, has worked in the field of ESL since 1965. She has trained teachers and developed curricula for English and Native languages in Saskatchewan, Alberta and Ontario, and she is currently developing material in ESL for Native children and adult non-literates. She has published a number of books and articles on Native education, ESL literacy, and second language teaching.

Jim Cummins is an associate professor in the Modern Language Centre. His research interests include minority group achievement, bilingualism, and reading disability. He is the author of numerous books and articles, including *Bilingualism and Minority Language Children* and *Heritage Language Education*.

Maria Fröhlich has been a research officer in the Modern Language Centre since 1974. She has worked on several projects examining aspects of second language teaching and learning, and is a co-author of *The Good Language Learner*. At present she is working on classroom observation in the context of the Development of Bilingual Proficiency project.

Esther Geva is a research officer in the Modern Language Centre. She completed her Ph.D. on metatextual notions and reading comprehension at the University of Toronto in 1980. She is a principal investigator on a project dealing with second language program evaluation, and she is also conducting research into psycholinguistic development.

Daina Z. Green has been a research officer at OISE since 1978. Her work has been mainly in the areas of test and materials development, bilingual education, and English as a second language. She is interested in the way Canadian society deals with immigrants, especially through the educational system and in the workplace. She also freelances as a translator and interpreter in Spanish and French, and is an active trade unionist.

Birgit Harley has been a member of the research staff in the Modern Language Centre since 1975. She completed her Ph.D. on age differences in immersion students' acquisition of French in 1982. She is currently co-ordinator of a project investigating the development of bilingual proficiency in various social contexts. Her interests include theoretical linguistics, language acquisition and bilingual education.

Joan Howard has been a research officer in the Modern Language Centre since 1971. She is a principal investigator on the ESL Modules project. She has taught English as a foreign language in France and Switzerland, and has worked on materials development projects in both French and English as a second language, and second language acquisition research.

Sharon Lapkin is an assistant professor in the Modern Language Centre. Most of her research has been concerned with the evaluation of bilingual education programs, including the development of language tests and scoring procedures designed to reflect current theories of communicative competence. She has worked as a consultant to several provincial Departments of Education in Canada, and to the California State Department of Education.

Tahereh Paribakht completed her Ph.D. on the relationship between the use of communication strategies and target language proficiency at the University of Toronto in 1982. She teaches ESL and applied linguistics at the University of Ottawa.

H. H. (David) Stern is Professor Emeritus at the Ontario Institute for Studies in Education. He was the founding Head of the Modern Language Centre. He has written, or contributed to, a dozen books and is the author of many articles. Most of this work has been concerned with an attempt to place different aspects of language teaching into a theoretically sound and coherent framework for both teaching and learning.

160 Biographical Notes

Merrill Swain is a professor at the Ontario Institute for Studies in Education, and Head of the Modern Language Centre. She is cross-appointed to the Department of Linguistics at the University of Toronto. Her research interests include bilingual education for minority and majority children, development of bilingual proficiency, and communicative aspects of language teaching and learning, and she has published widely on these topics.

Rebecca Ullmann is a research associate in the Modern Language Centre. She is principal investigator of the Module Making project and several other projects dealing with curriculum development and program evaluation for second languages. Her work also includes professional development in-service training for teachers of second languages and heritage languages. She has been associated with OISE since 1971.

Alice Weinrib, a research associate in the Modern Language Centre, has an MA in linguistics from the University of Toronto. She is responsible for the language teaching library of the MLC, a curriculum resource for the language teaching profession in Ontario and elsewhere.

LANGUAGE ISSUES AND EDUCATION POLICIES

This volume is the first in the ELT Documents series to deal with the work of a specific centre of language studies, and will be followed in future years by others of the same type.

The volume comprises:

- (a) A collection of papers by well-known professionals covering most aspects of L2 education (of particular interest: immersion, modules, communicative test development, literacy, minority language education).
- (b) A detailed account of the work of an internationallyknown Modern Language Centre, and of its attempt to integrate the theoretical, practical, and experimental aspects of applied linguistics.
- (c) An introduction to current Canadian research in the field, presented in a way which will be useful to teachers, administrators, and other researchers in the United States, Europe, and around the world.

